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INTRODUCTION

This Handbook is written for anyone who might be interested in developing a program similar to PALS or sections of it.

What is PALS?
PALS is an educational enrichment program accepting about 38-40 teacher recommended 7th and 8th Grade students each year. During the school year, PALS is an after school program and in the summer PALS meets daily for the month of July. PALS is located on the campus of Phillips Academy, Andover, MA. In the summer, classrooms are used on the lower level of the school’s Chapel and the area outside is used for volleyball and picnics.

Who Teaches in PALS?
Teaching is by high school volunteers in the winter and by paid Interns (usually high school or early college students) in the summer, and trained by experienced teachers. These student role models do well academically. In the summer PALS graduates are selected whenever possible as Interns.

What Students are Chosen?
Since PALS is not a remedial program, PALS selects “the best and the brightest”, hopefully the future leaders of their generation. This is the group that has the least state and federal aid. In addition these children often drop out during their high school years having experienced large classes, and teaching primarily focused on the children below or on grade level. (Despite our students earning A’s there are many excellent school systems where this grade represents more knowledge.) Bright motivated children working with strong high school aged role models who are themselves doing well in school is a “win-win” situation.

Why 7th and 8th Grade?
Motivated students are still excited about school during these years. Also high school admission with its potential applications and entrance tests are issues that parents, who may not have gone this far in their own education, look to others for help. We feel we are able to fill this role.

What is Necessary to Start a PALS Program?
Two of the ingredients for a PALS like program are high school students who frequently make up a large untapped resource and a nearby public middle school composed of motivated students that will benefit from enrichment. Program support by public school administrators and teachers is essential. Ongoing funding by private individuals, local organizations and foundations is necessary for start up and for continuity. (For more details please see pages 207 to 209 of this Handbook.)
INTRODUCTION (continued)

What does PALS offer Teachers?
Great personal satisfaction is the major motivating factor why my adult staff and I have all remained in the program almost since its inception over twenty years ago.

When does PALS Meet?
During the school year, we see the children for most weeks for an hour directly after the school day is over. On Tuesday, we meet at one of the middle schools involved and on Wednesday the students come to our campus for enrichment activities. During the month of July, we meet from 9:00AM to 3:00PM Monday through Friday on our school campus.

What is the Curriculum?
Details of the curriculum are found in this Handbook. Starting with Chapter I we give an Overview of what we do. Since we are limited in time when we see the children, we have focused in PALS on what we believe are areas that are the most helpful. Interested readers may then choose pages for specific information and samples.

Final Comment
All information in this Handbook applies to what we do at our school. Of course due to many circumstances, variations of this program have already been satisfactorily developed elsewhere.

Tom Cone, PALS Director, tcone@andover.edu

Tom Cone and “Corny” the Corn Snake
Science Exploration with 7th Graders.
Counting tongue flicks to see what foods the snake is interested in eating.
A BRIEF HANDOUT

PALS

A Two Year Program for Teacher Recommended Students

PALS is a two-year program for 7th and 8th Grade students from Lawrence MA. Middle Schools who are teacher recommended as academically capable, successful in school, and self-motivated. PALS is privately funded. All children receive scholarships to attend.

The Academic Year

From September to May PALS provides individualized math and focused writing on Tuesdays and enrichment activities in science, art, music, drama, sports or computers on Wednesdays.

The Summer Component

PALS is a year-round program, which includes a required fun four-week summer program in July. Academic skills are taught in the mornings, and sports, music, special projects and field trips are offered in the afternoons.

Support of Short, Mid and Long Term Aspirations

The PALS curriculum also helps students set short, mid and long term goals and, in 8th grade, guides him or her in planning a high school program, and assists in the application process.

Interns and Teachers

Interns teach the students in the summer, guided by Master Teachers. Interns are looked up to as role models, building self-confidence, motivating them to continue doing well in school and to fulfill future aspirations.

PALS Director

Thomas (Tom) Cone has been the PALS Director since 1990. PALS began in 1988.

e-mail tcone@andover.edu

PALS on the web

http://www.andover.edu/PALS

Math meeting area in the summer

PALS Chess

PALS 8th Grade students and their math Intern
CHAPTER II
SUMMER PALS
PALS SUMMER PROGRAM OVERVIEW

For our program, the core experience of this year-round program is Summer PALS, the 4-week summer session on the Phillips Academy campus in Andover, attended by each PALS student prior to entering his or her 7th and 8th Grades at Leonard, Partum, or South East Lawrence Middle Schools. A typical day in the month of July runs from 8:50am to 3:00pm, engaging students in language arts, math and computer usage in the morning. Sports activities are followed by lunch, 7th Grade science investigations, and chess, 8th Grade career enrichment field trips, interviewer skills, and personal “girl talk” reflection. Friday afternoons are focused enrichment activities on campus.

It is important to underscore the key role of the high school and college Interns in Summer PALS, some of whom each year are PALS graduates themselves. Perceived as highly credible role models and mentors, these older students help inspire in the children self-confidence and motivation to stay in school, to study hard, to move toward fulfilling future aspirations, and to become more independent, self-sufficient adults.

Summer Interns and Their Master Teachers

Each grade is divided into two sections, which in turn are divided into “family groups” of two or three students taught by the same Intern for the entire 4-week session. This close and continuous Intern/student relationship makes individualized teaching possible. In addition the Interns and the Master Teacher for 7th and 8th Grade Language Arts and for 7th and 8th Grade Math meet daily in the four classrooms for ½ hour before the students arrive to plan, practice and discuss each student’s progress to insure a unified curriculum.
Because the investment and encouragement of families are essential to children’s growth, we try to stay in touch with parents and family members by phone and through “bus stop chats” during the summer. The PALS Director rides the bus for morning pick-up. Perfect attendance is emphasized. The Director’s presence on the bus and a knock on the door or a cell phone call to any child not at the bus stop, have resulted in 95% or better perfect attendance every summer since inception.

*Family Picnic: Two PALS students and maybe two more in the future!*
SUMMER OPENING LETTER TO
STUDENTS

June

Dear PALS student,
I am pleased that you will be joining the PALS summer program.
Classes start on _________. You or your family are welcome to visit the classrooms and campus ahead of time on ____________ from 3PM to 4PM.

I look forward to seeing you on ______ at your bus stop. The bus schedule is enclosed. Please look for your stop. I’ll be on the bus to greet you. Every day wear play clothes and sneakers. On Monday, Tuesday and Thursday’s, bring a towel and an extra change of clothing for after sports if you wish. On Wednesday’s, bring a towel and a swim suit.

A Medical Permission Form is enclosed. One parent must sign it and you should bring it on the first day. You must return it in order to start attending PALS.

Please leave jewelry, money candy and gum at home. iPods and cell phones may be used only while riding the bus.

I am glad that you will be in the PALS program this summer, and look forward to working with you! If there are any questions, you can call me at 978-470-0668.

Please remember to bring the signed Medical Permission Form.

Sincerely,

Tom Cone
PALS Director

enclosed: Medical Permission Form (see page 162 of this Handbook)
Bus Schedule
A CORNERSTONE OF THE SUMMER PROGRAM

ORIENTATION FOR INTERNS

OVERVIEW

A cornerstone of the PALS Summer Program is the two day orientation program from 9:00AM to 4:00PM before the students arrive. Since there are eighteen teaching days in July, it is important to maximize what can be accomplished with our students. To do this we strive to help the Interns to do the best job possible and to explain to them our expectations for all that can be done in this focused time.

We feel our Interns excel when they have had the same hands on experience as their students will have. In this manner they can see things through similar eyes as the children. They will have a better understanding of what needs to be done and empathize with students that don’t learn quite as fast as others. If they are teaching language arts, they work in groups writing essays on topics the children will also be assigned and then edit them as a group. If they are going to teach math or science, they do the same graphing exercises on Excel and answer questions on how to interpret the results and make possible predictions. The Interns also take the same math placement tests that will be used to decide the level of each student. The chess Interns play the exercises on the computer that will be done by students later, and music instructors experiment with the rhythm instruments.

Orientation is also an important time to instill in the Interns the importance of developing more than a casual relationship with the students. Orientation is a time for them to talk among themselves, get to know each other, and work together (making attendance charts, etc.) During a teaching day is not the time to talk about their weekend plans, etc! “Don’t chit-chat on Company time”! This maximizes the time to talk to the children and get to know them as real people. Every Intern has the same two students for each of the two periods in the morning for the entire month, so there is opportunity to get to know each other well.

An Intern with two of her students
ORIENTATION FOR INTERNS
OVERVIEW (continued)

Four weekly half-hour staff/director meetings from 8:00AM to 8:30AM on Wednesdays are an extension of orientation, to reinforce what was done in the two day orientation as well as to reflect on how things have gone and to talk about what lies ahead.

ORIENTATION DAY 1

A twenty page Orientation Guide combined with Handouts present the responsibilities, expectations and schedules for the Interns and their students.

On the first day the Director, Master Teachers and Interns meet for an hour for introductions and to review page by page the Orientation Guide. This includes the Teacher Intern assignments by grades for Language Arts and Math, Home Room student lists, Birthdays, Afternoon Activity assignments, Computer scheduling and most importantly Tips and Guidelines. (see pages 15 to 18 of this Handbook)
ORIENTATION DAY 1 (continued)

TIPS AND GUIDELINES

1. At all times you are a mentor, a role model, a teacher and a supervisor. Look for opportunities to interact with students. It’s fine to start off with superficial conversations, but it’s important to make connections beyond that with the children.

2. “Tell me about…?” is a strategy to begin a conversation (about your weekend, your family, what music you like, your favorite sports...)

3. Keep personal conversations between Interns to before 8:30AM and after 3:00 PM. COME EARLY OR STAY LATE if you want to get to know each other better!

4. There are many informal opportunities to make connections with students by sharing ideas, interests and concerns. These include times spent walking on campus to sports, to lunch, or to the Chapel as well as lunch at the Dining Hall, picnics on Wednesdays, field trips on Fridays, bus rides and after lunch open time.

5. During the academic portions of the day however, the focus is on teaching and learning specific math, language arts, computer, chess, science and interviewing materials. Students sometimes try to divert the teacher with personal topics not related to the subject at hand. It is important at these times to refocus on the specific work.
TIPS AND GUIDELINES (continued)

6. Be aware of the behavior of students in your company--- language, “put downs”, pinching, poking, hat snatching. If it is not appropriate tell them so. If it continues let the Director know.

7. PALS doesn’t allow any personal or sexist or racist or other “put downs” by teachers or students. (“you’re so short”, “he/she is stupid”, “You’re not listening”, or “you’re not trying”) Avoid labeling in general. (“You don’t listen”, “girls really like you”).

8. Avoid letting yourself get drawn into a competitive situation. If a student says I can do this faster than you, it is best to reply, “I’m glad you are so fast”, etc. When playing Chess let them be White and give them pointers that might help them win.


10. Give choices when presenting an activity. “Do you want me to read to you or would you like to read to me?” Your enthusiasm about either alternative will be contagious.

11. Empathize with the student’s situation. Tell about a similar situation when you were his or her age.

12. Listen to what the student is trying to tell you that s/he doesn’t know and be flexible.
TIPS AND GUIDELINES (continued)

13. Require repetition: this ensures understanding. Ask the same question in another way or explain the process in another way.

14. Be understanding. It’s not fun to think you’re the only one who doesn’t understand something. **Never** say: “That’s easy” or “Everyone knows that”. Sometimes students say, “I’m dumb” or words like that which shows they’re discouraged. Try something like: “You may not have learned it yet!” or “What are you having a problem with…” (try to get him/her to be specific)”… “Let’s try it together with me, or with the group”.

15. Be positive and when a student accomplishes something REVIEW WHAT HAS BEEN ACCOMPLISHED.

16. Be realistic. You only have a limited amount of time. You can make a difference but you may not accomplish all you want to do.

17. Be objective. It’s important to be supportive, but maintain a degree of detachment. If you get personally involved in a student’s situation, you can’t be effective as a teacher.

18. Teach in “digestible” bits. Too much information is the equivalent of a stomach ache.

19. Whenever possible in math use manipulatives, graph paper, whiteboards, measurement tools, money, and real life problems.
TIPS AND GUIDELINES (continued)

20. Talking with students about their goals and dreams is strongly encouraged. You may wish to give them options to make their goals reachable. (Be careful about building up this school. as a realistic option for a school to attend).

21. Feel free to talk about your interests, dreams and career goals with the students. They look up to you. Your input means a lot.

22. When using computers with your students, watch while they do the work. Keep your hands off the keyboard! Be patient.

23. No touching of the opposite sex. This applies among interns as well as between interns and students. “Hi Fives” and “Bumps” are OK!

24. Have fun. Just the fact that your students are receiving some individual attention means they will make some progress. Enjoy your time together!
For the reminder of the morning Interns are trained by the Master Teachers. **Math** Interns do all the computers graphing exercises that they will be teaching to the students and take the placement test they will administer to students. Their training includes math handouts and clear plans, many specific examples and expectations for teaching.

**Language Arts** Interns have a writing/editing teaching session with the Master Teachers. A collective essay is written and edited in order to learn first hand how to teach writing and editing. Process writing *(see page 45 of this Handbook)* is the basis for all PALS essays.. This is where it starts.

**Individual photos and a group photos** are taken by a volunteer before going to lunch. The photos are later put on posters in the front hall for students and staff to easily learn faces and names.

In the afternoon everyone meets for **Sports training**. The Tennis Head Intern models how to teach forehand, backhand, and serve so everyone teaches it the **same** way. He or she plans how to practice these with a ball machine and individually with no machine (serve against the fence, drop and hit forehand and backhand against the fence, throw the ball to them to hit forehand and backhand etc). The Tennis Head also explains warm-up routines, drills, “games” and real matches.
ORIENTATION DAY 1 (continued)

The Basketball and Floor Sports Head Intern explains warm-up routines, drills and various kinds of ball “games” the to assigned Interns.

Music orientation for each grade comprises of an hour of hands on training and handouts explaining the routines and expectations for Interns and their students. This Orientation for Music is led by a Master Teacher assisted by two Music Interns.

The remainder of the afternoon is spent making Attendance, Homework, Science, Typing, and Chess Charts, Name Tags, and a PALS Calendar to be hung in the Front Hall. Since these are seen by visitors, neatness is important. Interns are asked to use rulers or yardsticks for straight lines.

Science Center poster made during Orientation
ORIENTATION DAY 2

On Day 2 of Orientation everyone meets for an hour for general information concerning the program.

TOPICS COVERED ON DAY 2

THE 8:30 to 9:00 A.M DAILY PLANNING TIME FOR FAMILY GROUPS
This all-important time is an opportunity for Master Teachers and their Interns to get together without students to plan the goals and materials to be used for the week, to evaluate the previous day/days and to strategize and plan specific lessons for the day. This is also a time to plan bulletin boards, awards and activities that earn awards, as well as sharing understandings of student’s social and emotional needs.

Most importantly, this is a time to think about making use of the opportunity that a small group teaching situation offers: to work cooperatively rather than competitively, to foster give and take by students, with students as a focal point when possible rather than the teacher.

LESSONS PLANS
Teachers, Music Heads and Girl Talk Interns give the Director lesson plans for the first week. After that, they provide plans on Tuesdays and include a summary of what happened. This hopefully gives Interns a sense of the creative reality of teaching and may also help the Director respond to visitors’ questions without having to interrupt a teaching session.

SPORTS PROGRAM GUIDELINES
This transition time is an opportunity to chat and listen to students. Interns maintain close supervision at all times walking from the classrooms to the gym, tennis courts or Dining Hall and back to the classrooms. Good behavior is essential. Sports are usually played in clothes worn to Andover. Afterwards they may shower and change into clean clothes. Everyone, staff and students, must wear appropriate sport shoes (no sandals). Adequate warm-up for each sport is provided. In general Interns give their charges a good experience and have fun!
CHOICE OF A SPORT  All 7th Graders play tennis. Everyone is loaned a tennis racquet. 8th Graders choose between basketball and tennis. Many of the 8th Graders played tennis the previous year and hopefully they will continue with Intern encouragement. After two weeks 8th Graders may choose to switch a sport.

LUNCH TIME
Coaches walk together with students to the Dining Hall. One teacher comes early to save a block of PALS tables. It is important to have at least one adult per table and no more than two. The Intern’s goal is to keep order as well as to talk informally with the children at his or her table. If Interns run into friends or former teachers at the Dining Hall, they are asked to tell them that this is work time and that they can’t talk now.

As children finish eating they wait at the stairs for the Director to assign a teacher or Intern to walk with them back to the classrooms. Two adults are assigned to be the first to leave to provide overall supervision outside and inside until other staff arrive.
ORIENTATION DAY 2 (continued)

AFTER LUNCH
This is “free time” for children, not for Interns. Students may play outside or come inside to play chess, type, or to handle and care for the animals. Interns wishing to play chess with one another are asked do so either before 8:30 or after 3:00.

Chess in the Hallway after lunch

BATHROOM and GENERAL SUPERVISION
An adult is in the bathroom vicinity at all times following lunch to see that students don’t delay but get in and out efficiently.

TRANSITION TIME
At 1:25 Monday, Tuesday and Thursday we let students know that they have 5 minutes to end whatever they are doing (volleyball, chess, animal handling, typing, music). Interns are responsible for finding their students and going directly to the assigned rooms by 1:30.

AFTERNOON ACTIVITIES Mondays, Tuesdays and Thursdays 1:30 to 2:50
Students participate for two weeks in an assigned activity.
7th Graders have Chess and Science Explorations
8th Graders have Chess, Girl Talk and Interviewing Skills.

MUSIC for 7th and 8th Graders Wednesdays 11:30 to 12:30
Students and their Interns and Teachers meet by grade for singing and playing rhythm instruments. Clean up for Math and Language Arts starts at 11:15 to ensure a timely start. As is true each year, the enthusiastic participation of the teaching staff contributes to PALS’ musical success.
ORIENTATION DAY 2 (continued)

WEDNESDAYS: PERFECT ATTENDANCE AWARDS
When the Music period ends, Master Teachers and Interns give out weekly Perfect Attendance Awards.

WEDNESDAYS: PICNIC and SWIMMING
After the Music Period and Awards presentations, we go outside for pizza where each grade has an area of the playground for food distribution. This is a time to chat, listen to and play with the students, another opportunity to get to know them! At 1:00, we walk to the pool.

FRIDAYS at 1:00: ENRICHMENT ACTIVITIES
Friday afternoons are a time to participate in a group activity that enriches the curriculum in areas related to natural and environmental science, drama, dance, arts and crafts, world cultures, math and careers.
ORIENTATION DAY 2 (continued)

FIELD TRIP July 31st at 9:00 The 7th and 8th Graders and their Interns go by bus to the Museum of Science in Boston on the final morning of Summer PALS

KITCHEN CLEAN UP AND PLAYGROUND “SWEEP” at 3:00 The Interns from each grade are assigned this duty for a week.

MEDICAL PERMISSION FORMS A labeled packet of forms for each grade, signed by parents, is on top of the bookshelf next to the Director’s desk. This packet is taken on trips off campus and returned afterwards. If an Intern is under age 18, his or her form needs to be included. A First Aid kit is on the same shelf. Flexible ice packs are available in the kitchen refrigerator.

PALS NEWSLETTER Interns are assigned to be Summer Newsletter Editor, Assistant Editor, and Collectors of writing, science or math submittals for the Newsletter.

NEWSLETTER DEADLINES: All submittals are due 8 days before the end of PALS. Written materials are on flashdrives. Math graphs must have patterns not shades of gray. Graphs done by hand are traced over with ink. (Pencil does not show up). All materials are checked for a title, date, grade, name and spelling. Signatures must also be in ink not pencil. The summer Newsletter is distributed after the family picnic on the last day.

ATTENDANCE Attendance is checked off on Attendance Posters in each classroom. Posters are made for each grade during orientation.

TYPING Typing Instructor Deluxe© is on all computers. Awards and prizes are given for progress. Children and Interns are encouraged to join the “10’s” club, the “20’s” club etc.

CHESS Chess includes instruction and play. Every summer we have a month long tournament of six chess teams. The students are randomly selected during Orientation. Interns and Teachers are more carefully placed to keep the teams even. After a match, one team point is earned by playing and two team points are earned for winning. The “chess center” is in the Hallway. We look for breaking news on the chess bulletin board in that area!
ORIENTATION DAY 2 (continued)

**CELL PHONES** Cell phone use is limited to PALS related business. This includes text messaging.

**SCIENCE** Science Investigations focus on activities exploring human physiology and the physiology of some of the PALS animals in our Science Center. We also take one enrichment trip to explore the natural life found on campus. There is a Science Intern in charge of the afternoon science program for all 7th Graders.

**DRESS CODE** All PALS teachers are given three PALS shirts to be worn daily with appropriate shorts, pants or skirts. In general, clothing should be not too revealing, not too high for shorts, and no inappropriate slogans.

**COPY MACHINE** We have the use of a copy machine for which we are charged per copy. The machine is high tech and may break down unless loaded properly. We explain its use to small groups during orientation.
ORIENTATION DAY 2 (continued)

SUMMER CALENDAR  A four page detailed Weekly, Daily and Hourly Calendar is included in the Orientation Booklet.

The remainder of Day 2 of Orientation is spent preparing rooms, completing Language Arts and Math training, and in training meetings for Chess Interns, Science Interns, Girl Talk Interns, and Friday Afternoon Special Activities. In the final hour all grades finish classroom activities: make banners, complete posters, classroom set up, planning, and computer practice. The rooms should be ready to be shown to families who may be visiting from 3:00 to 4:00. This is a chance for Interns to introduce themselves to parents and children.
PALS QUESTIONNAIRE
(given to 7th and 8th Graders the first day of the summer program)

Your name_____________________  Your Grade ________________________

1. What 8th Grade sport do you want to sign up for? Tennis ___Basketball______

2. Have you ever played chess?    yes ____no_____

3. Can you type without looking at the keyboard?  yes____ (How many words per
   minute?______ no _____

4. Do you have a computer at home? yes ____ what kind?_____________ no _____

5. Do you play a musical instrument?  yes _____ What kind?_____________ no _____

6. Can you swim across a pool in water that is over your head? (25 Yards) yes ___no ___

7 If your mother and father work, where do they work?
   Mother:________________________________________________________________
   Father:________________________________________________________________

8. What is your home telephone?_________________________________________

9. What school are you going to next year?    ________________________________
7th Grade
Summer
Language Arts
Every morning the Language Arts Master Teacher meets with the Interns for a half-hour preparation session before the students arrive. Both a leader and a listener, the Master Teacher acknowledges the Interns’ ideas and elicits suggestions from them, adding his or her own thoughts, and planning individualized daily work. Language Arts focuses on writing, bolstered with a rich mix of grammar, vocabulary, reading aloud, spelling, and reading comprehension. The 7th Grade is divided into two classes allowing Interns to teach the same two or three students for the entire session. The Master Teacher sits with each small group daily acknowledging success and making teaching suggestions.

7th Grade students write three long essays about their homes, hobbies, and goals, a book report, and a creative writing assignment that requires them to incorporate two sentences: such as “But everything is upside down” and “Finally the rain has come.” One writing sample is published the PALS newsletter.

As students get used to editing, re-drafting, and re-reading, their writing abilities increase after each draft. A chart of banned words (was, big, very, etc.) is posted to help in editing. Students use a thesaurus to find alternative words. We take a “hands-on approach” to vocabulary, embedding new words in phrases and asking students to apply them in sentences of their own rather than memorizing definitions. Students who don’t understand the definition of a word look it up in the dictionary.

Reading of at least one book chosen from the PALS booklist is expected. Homework includes book reports of the Master Teacher’s design. These reports along with a photocopy of the front cover or a selected illustration or a drawing by the student may be hung on a bulletin board to encourage others to read the book.

7th Graders read aloud twice a week and work to enliven their expression and improve diction. “Scary Monster Stories,” read in a semi-darkened room, help students accomplish these goals!
THE LANGUAGE ARTS MASTER TEACHER
7th GRADE

Who is the Master Teacher and What does he or she do?
The Master Teacher is the “go-to-person” of the program. She or he handles any questions of both Interns and students, designs the 7th Grade Language Arts curriculum that includes: essays, homework, book presentations, keyboard exercises, fun projects, etc. The Master Teacher preps Interns about time management, how to teach, how to edit, banned words, etc. Most importantly for the program is the Master Teachers’ managing the time of the students so that Language Arts classes are productive and fun. The fundamentals of the keyboard are taught, at least one book is read, one exemplary biographical essay is written for the Newsletter and a creative writing essay is completed.

Interns fill out a progress log (this takes 5 min. at end of the day) stating what was accomplished. This helps the Master Teacher plan an individualized curriculum.

From 8:30 to 9:00 at the beginning of each day is Intern planning time with the Master Teacher to go over/pass out the homework assignment, discuss essay progress, create awards, questions/answers and teach Interns as needed. At this time the Interns inform the Master Teacher of any student difficulties/concerns

During sports time, The Master Teacher stays in the room to:

1.) Revise/edit essays
2.) Plan/photocopy homework assignments
3.) Correct book report questionnaires
4.) Update attendance/homework/keyboard charts
5.) Plan the LA curriculum

Lastly, the Master Teacher delivers a copy of next weeks’ curriculum, labeled Monday-Friday (and dated) to the Director’s desk.
Daily class begins at 9:00 with:
A large group meeting with the Master Teacher: Maximum time allotted: 20 minutes
1.) Daily attendance and homework are checked off.
2.) Homework due the next day is explained.
3.) Brief typing keyboard exercises are practiced an a paper keyboard template.
4.) If time permits there is a grammar review, homework review, book sharing or read aloud activity. These also may be done in a small group.

Then proceeds to:
Small group work with an Intern:
3 essays are to be completed by the end of the program and saved onto computer flash drives for the coming academic year. These are:
- Biography – about the student and his or her family, something interesting, goals, careers, etc.
- Book Report- See PALS Reading list and pre-prepared book report forms pages 48 to 67 of this Handbook.
- Creative topic – of the Intern’s discretion. (No violence whatsoever, no negative language)

Note: It is the Master Teacher’s responsibility to check that all written work contain positive content, correct grammar, spelling, organization, creativity, and logical sequence.
**STEPS IN WRITING**

Essays: (biographical or creative topics)

1.) Interns and students “brainstorm” for creative titles and idea and organize in a web. (see Process Writing page 45 of this Handbook)

2.) Interns “own” the first essay by suggesting, guiding and encouraging throughout the writing process.

3.) A draft is handwritten by the student and then typed up on the computer by the Intern.

5.) Interns and students check for and change any “banned” words. (see Banned Words page 47 of this Handbook)

6.) Interns and students peer edit for spelling, grammar, awkward sentences and short sentences. Several drafts are completed. (see Editing Strategies page 46 of this Handbook)

7.) The Master Teacher must read, edit and approve of all essays before they are submitted to the Director as acceptable for the Newsletter.
Replace weak words with POWER words

7th Graders with their Intern
TO DO LIST
INTERN/TEACHER ORIENTATION
LANGUAGE ARTS 7th GRADE

During the two days of Orientation, the Language Arts Master Teacher and Interns meet to assign a classroom area and individual students to each Intern. Teaching areas are stocked with supplies, week #1 plans are reviewed, homework is explained and typing methods are practiced.

The first day schedule is explained in detail

1st Day Schedule: Get to Know You
Name game
Questionnaire on Chess, Typing, Parents work etc
Computer Use for Language Arts
Language Arts/Math Program
Bathrooms
Dining Hall
Chess Teams
Chess/Science Exploration
Room Set Up and Temporary Grouping
Writing Exercise

1st Day Special Schedule: The Master Teacher assigns Interns to explain to students

Attendance (stars) _________ picks a student to do it. This student then asks each person to choose a favorite color star for adding to the poster.

Get to Know You _________ explains we will tell about ourselves. Interns and Teacher talk about themselves and what they might want to do in the future. Students say something about themselves, their families, their interests and why they wanted to join PALS.

Name Game: explained by_________ then played.

Questionnaire on Chess, Typing, and Where your family works is handed out to be filled out and returned now. Head teacher explains (have pencils ready).

7th Grade Computer use for Writing and Typing Program _________ explains.

Math / Language Arts shared time each morning 9:00 to 10:30 and 10:30 to 11:40 today _________ explains.

Bathrooms _________ explains where they are.

Chess Teams _________ explains and shows Chess Team Chart list.

Chess or Science _________explains.
INTERN/TEACHER ORIENTATION
LANGUAGE ARTS 7th GRADE (continued)

Family Groups and Room set up _______ explains.

10:30 Change Classrooms (Go to the Math Classroom) _________ explains.

11:40 Meet in the Classrooms to get to know all 7th Graders and Interns and play games. _________ explains.

12:20 Pizza ______________ explains.

1:00 Chess in the Hallways and Chess Teams ________ explains.

1:25 to 2:50 Science Explorations or Chess ________ explains.

3:00 Bus home ____________ explains.

Take Homework Folders.

T-Shirts given outside on Classrooms steps _____________ explains.

Small Groups: Students go to their assigned station with an Intern for:

- A first day writing exercise (See page 37 of this Handbook)

- First day Homework handout (after writing is completed.)

- If time remains students may decorate the front page of his or her classwork notebook. Explain that these notebooks do not go home until the last day of Summer PALS. Daily work such as today’s writing exercise goes in it.

Language Arts supplies available at every small group area.
WRITING EXERCISE

1st DAY

Pretend that I am looking for your bedroom. Describe your room in such a way that I would recognize it. You might include colors, furniture, how many windows, the window view, decorations on the walls, floor, furniture or windows. Next, describe how you feel when you are in your room.

LANGUAGE ARTS HOMEWORK OVERVIEW

VOCABULARY BUILDING
Students are asked to read a paragraph given in a handout and to use a dictionary to look up underlined words. To check for comprehension they write a different sentence for each word.

READING
Each group chooses a PALS library book to read and everyone including the Intern has a copy. Pages of the book are assigned daily as reading homework and students write a summary. (see Reading List pages 48-56 of this Handbook)

BOOK REPORT QUESTIONNAIRE
On some nights students complete a prepared Questionnaire as homework instead of reading. (see Questionnaires pages 57-67 of this Handbook)

AWARD
Students may choose a stuffed animal when the Questionnaire is completed.
LESSON PLANS – WEEK #1
LANGUAGE ARTS 7th GRADE

Day 1:
Attendance
Get-to-Know You name game
Share Interests (Interns then students)
Room set up
Today’s Schedule of activities on whiteboard explained
Get To Know You with all seventh graders and all Interns
Chess and Science Exploration start today
Small Group work: Write a first day essay
Explain homework
Decorate front page of classwork notebook
Choose a book if time permits

Day 2.
Attendance
Today’s Schedule of activities on whiteboard explained
Tennis starts today
Small Group work: Start outline/web/draft of first writing
Introduce banned words
Choose a book
Practice typing on the paper model keyboard
Check homework and give out new homework
Assign pages to read in library book

Day 3.
Attendance
Today’s Schedule of activities on whiteboard explained
Music Pizza Swimming:
Small group work: Check homework and give out new homework
Check library book progress
Continue writing assignment
Type 10 minutes on the computer if a student knows the keyboard
Otherwise practice out loud on the paper model to drill keyboard memorization

Day 4
Attendance
Today’s Schedule of activities on whiteboard explained
Small group work: Check homework
Check library book progress
Continue writing assignment

Day 5
Attendance
Today’s Schedule of activities on whiteboard explained
Friday Afternoon 7th Grade Drama Activity with Hand Puppets explained
Small group work: Check homework
Check library book progress
Continue writing assignment
7th Graders brainstorming for the first essay with their Intern

7th Graders practicing typing
8th GRADE SUMMER LANGUAGE ARTS
Each summer the 8th Grade students write their autobiographies, carefully honing paragraphs on their family/culture, plans for 8th Grade, high school options, career goals, and specifics on how they will give back to their community. We stress the use of high-level vocabulary, omitting “banned words” and focusing on complex sentence structure. The students use paperback thesauruses. We edit the work on a computer or on hard copies giving almost instant feedback due to a ratio of two or three students to one teacher. Each student writes at least a half dozen drafts. These autobiographies will be updated in the fall as a part of their secondary school application process.
In addition, the students write analyses of the themes or symbols in *To Kill A Mockingbird*, which they read and discuss each day. These discussions are in-depth and high-level. Some years they also read “*Catcher in the Rye*”. During the school year we expect the students to read at least one book per week from the PALS library. Feedback from high school admission directors tell us that reading widely is crucial to secondary school acceptance.

From the daily assignments of *To Kill A Mockingbird* come vocabulary-building exercises plus “words of the day.” The students study vocabulary at home for daily quizzes.

The students also write thank you letters to the scientists at Wyeth Pharmaceutical, Andover, whom we visit each summer. Near the end of July they write to the Director of PALS in gratitude for their PALS Summer experiences.

At the start of the summer everyone takes the Gates-MacGinitie Reading Test© to help us access their vocabulary and comprehension levels so we can better develop individualized work for each student.
CAREER and SECONDARY SCHOOL INVESTIGATIONS

For two weeks in the afternoon, 8th grade students interview PALS Interns, about their high schools, their college experiences and career plans. The main focus is on the subject’s particular high school and the admission process to the school. This helps the PALS students learn about high school options.

The students are taught interviewing process skills and write up their interviews for public viewing.

We investigate the Adelante Program that awards scholarships to successful Lawrence, MA applicants to several area private schools with school-matching aid. In order to broaden all the options that the PALS 8th Grade students have before them as they consider high school, we invite the director of the Adelante Program and the directors of admissions of several local private schools who speak about their schools’ strengths and what they require for admission.

Lastly, the Director of PALS organizes several meetings in July with parents of the PALS 8th Graders to discuss with them the various opportunities their children will have for secondary schools and for honors classes at Lawrence High School, and the scholarships that will help them attend.

We continue to expand upon the long-term fruitful relationships with local private and public high schools, including prep schools, built upon the outstanding achievements the PALS graduates have accomplished for more than two decades.
7th AND 8th
GRADES
LANGUAGE ARTS
HANDOUTS
The sequence for process writing begins with picking a central idea, brainstorming for vocabulary and making a potential vocabulary list. Students use a thesaurus and dictionary for help. Next the students brainstorm to decide on related main ideas and make a web off the central idea to represent these related ideas. They expand this brainstorming to cluster the web. Each cluster represents the ideas for one paragraph. These ideas are further organized into a logical order, from which students write a topic sentence for each paragraph. The final stage of this writing introduces the concept of elaborating with details to expand each paragraph.
EDITING STRATEGIES
FOR INTERNS

As a rule of thumb, students usually need a lot of help with these editing strategies. Once an essay is in the computer, feel free to let them use a dictionary, a Thesaurus and most importantly, you as a resource. The first two or three essays are really yours as well as theirs. You, as their teacher are needed by them: to listen, to ask questions that elicit details, and in general to draw out of them the ideas and intentions expressed sketchily in their first drafts.

Before editing talk about the process as more than a one-step job. Why?? To prepare mentally to expect multiple edits. Multiple edits are OK!! in fact necessary for a good final copy.

1) Read it aloud
Start by having your student read it aloud to you.

2) Words that are repeated
Help your students eliminate words that are repeated by substituting a more detailed explanation of what the repeated word intends to express. Draw out of the students what they mean by the repeated word and help them write it differently.

3) Words that are too general
Nice, great, interesting, (working) hard, like (something) very much, and good, are a few examples of words that are too general. Ask what they mean by the word and then help them write the more specific meaning. If they are at a loss for giving you an explanation of what they mean you could suggest two or three or four possible meanings (some could even be silly), just to show them that the word they used has many possible interpretations.

4) Verbs “to be” and “have”
Help them replace whenever possible “was”, “were”, “is”, “are”, “have”, “had”, with either action verbs, descriptive phrases, consolidation of the idea or perhaps by adding more details. If a sentence includes the verb “have” or “to be” look for alternate ways to express the idea contained in the sentence. Give them some ideas and elicit their ideas as well.

5) Change choppy sentences
Consolidate sentences when possible, perhaps by adding some details to make the merger smooth. Give them some ideas and have them give theirs as well.

6) Transitions
Is there a transition between paragraphs and sentences? Read it aloud again for this question. Talk about details that might add to a transition and add these details to make the transition clearer. Often a writer has the idea of the transition in his or her head and only needs help in saying it then writing it down.

7) Relate paragraphs to the central idea
Help students relate each paragraph to the central idea. Read it again piece by piece and draw out how in his or her mind it relates to the main idea and then help express this relationship if it is not clear.
## “BANNED WORDS”

<table>
<thead>
<tr>
<th>Good</th>
<th>Okay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad, half bad</td>
<td>Dumb</td>
</tr>
<tr>
<td>Nice, nicest</td>
<td>Thing</td>
</tr>
<tr>
<td>Cool</td>
<td>Stuff</td>
</tr>
<tr>
<td>Small, big</td>
<td>Interesting</td>
</tr>
<tr>
<td>A lot</td>
<td>Very</td>
</tr>
<tr>
<td>Great</td>
<td>Little, a little, a little bit</td>
</tr>
<tr>
<td>Fun</td>
<td></td>
</tr>
<tr>
<td>Just like</td>
<td></td>
</tr>
<tr>
<td>Pretty, ugly</td>
<td></td>
</tr>
<tr>
<td>Happy, sad, unhappy</td>
<td></td>
</tr>
<tr>
<td>Mostly</td>
<td></td>
</tr>
<tr>
<td>Enjoyable</td>
<td></td>
</tr>
<tr>
<td>Fooling around</td>
<td>Terrific</td>
</tr>
<tr>
<td>Feel, feel like</td>
<td>Super</td>
</tr>
<tr>
<td>Especially</td>
<td>Wonderful</td>
</tr>
<tr>
<td>Usually</td>
<td>Great, greatest</td>
</tr>
<tr>
<td>Often</td>
<td>Exciting</td>
</tr>
<tr>
<td>Plenty</td>
<td>Favorite</td>
</tr>
<tr>
<td>Best, worst</td>
<td>Fast</td>
</tr>
<tr>
<td>Really</td>
<td></td>
</tr>
<tr>
<td>“Bunch”</td>
<td></td>
</tr>
<tr>
<td>Fabulous</td>
<td></td>
</tr>
<tr>
<td>So</td>
<td></td>
</tr>
<tr>
<td>Half bad</td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>Awesome</td>
<td></td>
</tr>
<tr>
<td>Amazing</td>
<td></td>
</tr>
</tbody>
</table>

**Weak Verbs**

- “to like”
- “to be”
- “to have”
- “to get”
- “to want”
- “to do”
- “to say”
- “to love”
- “to enjoy”
- “to hate”
- “to ask”
PALS
READING
LIST
READING LIST

*Nothing but the Truth, A Documentary Novel* by Avi
A ninth-grader's suspension for singing "The Star-Spangled Banner" during homeroom becomes a national news story. In this remarkable Newbery Honor book, facts, people, actions, and reactions are presented in stark documentary style. The truth -- and nothing but the truth -- can be discovered by only one person: the reader.

*Are you There God? It's Me, Margaret.* by Judy Blume
Faced with the difficulties of growing up and choosing a religion, a twelve-year-old girl talks over her problems with her own private God.

*The Wish Giver, Three Tales of Coven Tree* by Bill Brittain, Andrew Glass (illus.)
The people of Coven Tree are no strangers to magic. In fact, the town's very name comes from a gnarled old tree where covens of witches used to gather. Even now, imps and fiends continue to appear, frightening the townfolk with their devilish pranks. Usually these creatures are easy to spot. They have a particular smell, sound, or way of moving that betrays their dark nature. But Thaddeus Blinn showed none of these signs when he came to Coven Tree. He was just a funny little man who drifted into town with a strange tale about being able to give people whatever they wished -- for only 50 cents. There was nothing scary about him. At least, not until the wishing began....

*Where the Lilies Bloom* by Vera Cleaver, Bill Cleaver
Mary Call has true Appalachian grit. When her dying father makes her promise to keep her brother and sisters together forever on the mountain and take no help from strangers, she is determined to keep her word -- no matter what. At first Mary Call is sure she can run the family just fine on her own. Romey and Ima Dean help her gather herbs to sell in town, using the riches of the mountains to keep the family clothed and fed. But winter sets in all too quickly. As food runs low, and the tiny house begins to cave in under the weight of the snow, Mary Call learns that the land where the lilies bloom is also a cruel and unforgiving land that deems a price for her stubborn pride.

*I Heard the Owl Call My Name* by Margaret Craven
Amid the grandeur of the remote Pacific Northwest stands Kingcome, a village so ancient that, according to Kwakiutl myth, it was founded by the two brothers left on earth after the great flood. The Native Americans who still live there call it Quee, a place of such incredible natural richness that hunting and fishing remain primary food sources. But the old culture of totems and potlatch is being replaced by a new culture of prefab housing and alcoholism. Kingcome's younger generation is disenchanted and alienated from its heritage. And now, coming upriver is a young vicar, Mark Brian, who has two years to live. Sent to this Indian parish in British Columbia, Mark embarks on a journey of discovery that can teach him -- and us -- about life, death, and the transforming power of love.

*Bud, Not Buddy* by Christopher Paul Curtis
During the Great Depression, motherless Bud sets out in search of the man he believes to be his father renowned bandleader, H.E. Calloway.

*The Midwife's Apprentice* by Karen Cushman
In medieval England, a nameless, homeless girl is taken in by a sharp-tempered midwife and in spite of obstacles and hardship, eventually gains the three things she wants most: a full belly, a contented heart, and a place in this world.
READING LIST (continued)

My Side of the Mountain by Jean Craighead George
A young boy relates his adventures during the year he spends living alone in the Catskill Mountains, including his struggle for survival, his dependence on nature, his animal friends, and his ultimate realization that he needs human companionship.

Out of the Dust by Karen Hesse
In a series of free verse poems, 15-year-old Billie Jo relates the hardships of living on her family's wheat farm in Oklahoma during the dust bowl years of the Great Depression. Powerful and moving, this Newbery Medal winner effectively depicts both a bleak historical era and one family's healing.

River Thunder by Will Hobbs
Jessie, Troy, and the rest of the crew from Downriver have returned to the Grand Canyon for adventure on the Colorado River. In the year since they last were together, each has changed; each feels more mature. But how will they interact now that they are facing new challenges -- challenges greater than anything they've had to deal with at home? For Troy, it is a chance to prove he can be a team player, someone worthy of friendship and love. For Jessie, the river is the ultimate test. Does she have what it takes to row down the mighty Colorado? The only way to find out is to get into the raft and set off to face the thundering rapids and the powerful emotions that the river unleashes.

When Zachary Beaver Came to Town by Kimberly Willis Holt
During the summer of 1971 in a small Texas town, thirteen-year-old Toby and his best friend Cal meet the star of a sideshow act, 600-pound Zachary, the fattest boy in the world. When Zachary's guardian and business partner disappears, leaving the teen alone, Toby and Cal befriend him. The boys learn about themselves and the true meaning of friendship.

1999 National Book Award For Young People's Literature

Acorn People by Ron Jones
Nonfiction
A funny, tragic, and intensely hopeful true story of a group of handicapped children and how they turn their summer camp into a learning and growing experience.

To Kill a Mockingbird by Harper Lee
"Shoot all the bluejays you want, if you can hit 'em, but remember it's a sin to kill a mockingbird." That is a lawyer's advice to his children as he defends the real mockingbird of Harper Lee's classic novel -- a black man charged with the rape of a white girl. Through the young eyes of Scout and Jem Finch, Harper Lee explores with rich humor and unswerving honesty the irrationality of adult attitudes toward race and class in the Deep South of the 1930s. The conscience of a town steeped in prejudice, violence, and hypocrisy is pricked by the stamina and quiet heroism of one man's struggle for justice. But the weight of history will only tolerate so much.

The Complete Chronicles of Narnia by C. S. Lewis, Chris Van Allsburg (illus.)
Enter the magical land of Narnia, where enchanted creatures live and battles are fought between good and evil! The seven volumes of C. S. Lewis's famed fantasy series come boxed in a hardcover case.
READING LIST (continued)
**READING LIST (continued)**

*Myst, The Book of Atrus* by Rand Miller, Robyn Miller, David Wingrove  
The ages of Myst are worlds of adventure and awe ... of mystery and beauty ... of intrigue and betrayal.  
You have seen only a glimpse of the picture. Now take a step further into the fictional legend of Myst.  
These pages are your link to the story of Atrus, son of Gehn, and the last of the race of D'Ni -- the  
masters of The Art, the craft of linking to other worlds through the descriptive art of writing. For most of  
his young life, Atrus thought the stories his grandmother told him were just strange legends. Then his  
time came to explore the magnificent underground realm.

*Island of the Blue Dolphins*. c1960 by Scott O'Dell  
Unintentionally left behind by members of her California Native American tribe, who fled a tragedy  
ridden island, young Karana spends eighteen years alone on an island off the coast of California. She  
survives on her courage and her self-reliance.

*Bridge to Terabithia* by Katherine Paterson, Donna Diamond (illus.)  
An extraordinarily powerful tribute to friendship, this Newbery Award-winning novel recounts the  
unlikely friendship of a country boy, Jess, and his neighbor, an uprooted city girl named Leslie. When  
Leslie is killed during a storm while trying to reach Terabithia, their secret hiding place, Jess must  
gather all his strength to come to terms with his loss and find a way to heal.

*Eragon* by Christopher Paolini  
A young farm boy finds a marvelous blue stone in a mystical mountain place. Before he can trade it for  
food to get his family through the hard winter, it hatches into a beautiful sapphire-blue dragon, a race  
thought to be extinct. Eragon bonds with the dragon, and when his family is killed by the marauding  
Ra’zac, he discovers that he is the last of the Dragon Riders, fated to play a decisive part in a coming  
war between the humans, dwarves, elves, the diabolical Shades and their Neanderthal Urgalls. Written  
by a 16-year-old home-schooled boy.

*Hatchet* by Gary Paulsen  
When flying in a plane going to his dad's house 13 year old Brian Robeson takes an unforgettable trip to  
a small island. With no fresh water no food and no shelter Brian must survive as long as he can until  
people start to look for him. The island that he crashed on to is in the shape of a "L." The only thing he  
has is a small hatchet that his mother gave him.

*The River* by Gary Paulsen  
In this exciting sequel to Hatchet, 15-year-old Brian Robeson, who survived alone in the wilderness for  
54 days, returns to the wilderness at the request of a government survival school. This time, however, he  
won't be alone: Derek Holtzer, a government psychologist, will accompany him to observe and take  
notes. But during a freak storm, Derek is hit by lightning and falls into a coma. Afraid that Derek will  
die of dehydration unless he can get him to a doctor, Brian's only hope is to build a raft and try to  
transport Derek a hundred miles down the river to a trading post.

*Westing Game* by Ellen Raskin  
The mysterious death of eccentric millionaire, Sam Westing, brings together an unlikely assortment of  
heirs in the old "Westing house," who must uncover the circumstances of his death before they can  
claim their inheritance.
Where the Red Fern Grows by Wilson Rawls
A young boy living in the Ozarks achieves his heart's desire when he becomes the owner of two Redbone Hounds and teaches them to be champion hunters. Together, the three of them experience danger, adventure, love, and sorrow.

Harry Potter and the Sorcerer's Stone by J. K. Rowling
Orphaned as a baby, Harry Potter has spent 11 awful years living with his mean aunt, uncle, and cousin. But everything changes for Harry when an owl delivers a mysterious letter inviting him to attend a school for wizards. At this special school, Harry finds friends, fun, and magic in everything from classes to meals, as well as a great destiny that's been waiting for him...if Harry can survive the encounter. Fans of C. S. Lewis and Roald Dahl will love this enchanting, funny book! Also recommended: Harry Potter and the Chamber of Secrets.

Roll of Thunder, Hear My Cry by Mildred D. Taylor
The Logans, a black family living in the South during the 1930s, are faced with prejudice and discrimination which their children don't understand. It takes the events of one turbulent year -- the year of the night riders and the burnings, the year a white girl humiliates Cassie in public simply because she is black -- to show Cassie that having a place of their own is the Logan family's lifeblood. It is the land that gives the Logans their courage and pride, for no matter how others may degrade them, the Logans possess something no one can take away.

The Fellowship of the Ring by J. R. R. Tolkien
In this first book of the Lord of the Rings trilogy, Frodo, a hobbit, must journey to the barren wasteland of Mordor to destroy the one ring that could rule them all. A fellowship is formed to aid him on this dangerous journey.

The Hobbit by J. R. R. Tolkien
Whisked away from his comfortable, inauspicious life in his hobbit-hole in Bag End by Gandalf the wizard and a company of dwarves, Bilbo Baggins finds himself caught up in a plot to raid the treasure hoard of Smaug the Magnificent, a large and very dangerous dragon. Although quite reluctant to take part in this quest, Bilbo surprises even himself by his resourcefulness and his skill as a burglar! Written for J.R.R. Tolkien's own children, The Hobbit met with instant success when published in 1937 and has remained a timeless classic.
**READING LIST (continued)**

*Night* by Elie Wiesel
A terrifying account of the Nazi death camp horror that turns a young Jewish boy into an agonized witness to the death of his family ... the death of his innocence...and the death of his God. Penetrating and powerful, as personal as *The Diary of Anne Frank*, *Night* awakens the shocking memory of evil at its absolute and carries with it the unforgettable message that this horror must never be allowed to happen again.

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*Stuffed animals to be earned for completion of reading a book and writing a report*
READING LIST QUESTIONNAIRES

Nothing But the Truth
By: Avi

1.) Why is this book so unusual in its format? How does the format support Avi’s claim that this book is a “documentary”?  
2.) Nothing But the Truth chronicles a disagreement between Philip Malloy, a ninth grade student, and his English teacher, Miss Narwin. What was the reason for conflict in the story? Please explain briefly.  
3.) After Philip's second visit to the office for the same offense, what choice did the principal give him to avoid suspension? Why do you think Philip refused his offer?  
4.) The incident is reported in a local paper and becomes a rallying point for the national press, as well as political candidates. The school receives hundreds of telegrams supporting Philip. Why do you think this was such a big issue for so many people?  
5.) Who was being dishonest here? What were some of the factors that might have hindered Philip from telling the truth sooner?

Are You There God? It’s me, Margaret
By: Judy Blume

1) What is the “Four PTS”? Do you think they are welcoming or manipulative? Would you join the PTS if you were Margaret?  
2) Why do you think Grandma was so unhappy that Margaret visited the Temple? What do you think of Margaret’s views of religion/Church/Temple?  
3) How do Nancy’s lies change the relationship between Margaret and Nancy, Laura, God, and other girls in the PTS, and Moose (at the end of the book)?  
4) Many adults in Margaret’s life, as well as her peers, pull her in different directions both religiously and socially. Yet Margaret finds her own path to God to achieve what she wants. Besides her obvious statement about religion and teenage physical development, what do you think Judy Blume (the author) is trying to say about the different between pre-teens (Margaret, Nancy, Philip Leroy, Laura, etc.) and adults (Margaret’s parents, grandparents, Mr. Benedict)?

The Wish Giver
By: Bill Brittain

1.) Adam wants to borrow water from the neighbor’s well instead of hauling it in from the creek. But Pa doesn’t want the family to take charity from anyone. Why does Adam feel the way he does? Why does Pa feel the way he does?  
2.) What do you think of Adam’s wish? In what way is his wish different than the wishes that Polly and Rowena made? In what way is his wish similar?  
3) How does Pa react to the catastrophe? Is this a good or bad way to react in emergency situations? Why?  
4.) When Pa finds out about Adam’s wishing he says, “I’m not angry with you. Wishing that things were better is something all people do.” What do you think of Pa’s statement? Do all people wish for things to be better?  
5.) Is wishing a good or bad thing to do? What are the good parts about wishing? What are the bad parts about wishing?  
6.) Stew Meat says, “I guess for every problem there’s a solution of some kind.” Do you agree of disagree? Why?
READING LIST QUESTIONNAIRES (continued)

Where the Lilies Bloom
By: Vera Cleaver, Bill Cleaver

1.) What impressions of the story do you get by having Mary Call tell it? How would the story
be different if another character told it (Romey, Devola, Kiser Pease)? How would it be
different if the narrator were outside the story and told about the thoughts of all the
characters?
2.) In many stories, the hero is a boy or man. Do you think Mary Call’s job would be easier if
she were a boy? Do you think the story would be very different if she were a boy?
3.) Romey is a boy. Why do you think his father doesn’t have him run the family?
4.) Mary Call is only fourteen. She isn’t the oldest of the four Luther children. How would the
story be different if Devola weren’t “cloudy minded” or if Mary Call were the oldest?
5.) What do the Luther children think of people in the town? Do you as a reader have the same
opinion of the townspeople? Are Mr. And Mrs. Connell just nosey or concerned? What is the
difference between nosiness and concern?
6.) Why is the book called “Where the Lilies Bloom”? Explain the book’s title.

I Heard The Owl Call My Name
By: Margaret Craven

1.) In chapter 1, Caleb tells Mark that Mark “knows nothing”. What does Mark not know?
2.) What is the Kwakiutl’s attitude toward material possessions? How are the Kwakiutl’s views
different from your own?
3.) One value Mark brings to appreciate in the village is service to others. What are some
examples of it?
4.) The Kwakiutl’s definition of “village” includes the weather, myths, animals, and much more.
How is this different from modern society’s concept?
There is no word for “thank you” in Kwakwala, the language of the tribe. What does this reveal
about their culture?

Bud, Not Buddy
By: Christopher Paul Curtis

1.) As a young boy, Bud Caldwell often experiences disappointment when going to a temporary
home and not feeling wanted. What are the pros and cons of placing children in foster
homes? Could Bud's experience still apply? Why or why not?
2.) After leaving home, Bud carried everything in a battered suitcase which he guards with his
life. Describe three items in the suitcase and their significance.
3.) After Bud’s mother dies, he is sent to an orphanage where he meets his first friend. Describe
their encounter and who his friend is.
4.) Bud struggles to find Herman E. Calloway, the man he believes to be his father. Why does
Bud think this man is his father? What happens when Calloway and Bud meet? Was Herman
Calloway really Bud’s father?
5.) Bud meets a character he thinks is a vampire. Why does Bud think this? What was the person
actually doing?
**READING LIST QUESTIONNAIRES (continued)**

*The Mid-Wife’s Apprentice*
By: Karen Cushman

1.) The story opens with Brat/Alyce in a dung heap. What is a dung heap? Based on this knowledge, why would someone want to be in one? What can you tell about Brat’s/Alyce’s economic background based on their decision to sleep in the dung heap.

2.) Do you think Alyce’s adoption of Purr correlates with her surge of confidence? Has there been any person and/or animal that has had such an effect on you?

3.) What happens when Alyce attempts to deliver a baby for the first time? How does she feel and act? What would you say to console or make her feel better?

4.) In the end, Alyce realizes that the occupation of midwifery is the best match for her. What made her realize that her true talents and passions lie in the midwife field? Besides being a midwife, what occupation do you think would best suit Alyce?

*My Side of the Mountain*
By: Jean Craighead George

1.) How does Sam remind himself of the reasons he ran away from home? Do you think that these reasons are legitimate enough to run away? If you were Sam, what would be your reasons?

2.) In the chapter, “I Learn to Season My Food”, Sam catches a weasel. But when the animal breaks out of the trap that Sam had set up, Sam was “too frightened to move”. Why did Sam feel this way? If you were Sam, how would you react to the animal bursting out of the trap?

3.) In the Chapter, “I find a Real Live Man”, Sam feels lonely because Bando leaves him? If you were Sam, would loneliness cause you to go home? Why or why not?

4.) How does the book end? Do you think that this resolves Sam’s previous concerns? If you were Sam, would you be happy in your new situation?

*Out of the Dust*
By: Karen Hesse

1.) Explain what was happening in Oklahoma in the mid 1930’s. How does the setting affect the mood of the story?

2.) What made Billie Jo feel guilty? Do you think this is a valid reason for running away from home?

3.) The book is written in the first-person, poetic, stanza form, in which Billie Jo narrates. “No rain” is the refrain that occurs again and again throughout the book. How are water, heat and dust used to symbolize Billie’s emotions? Is this useful to the reader?

4.) How does Billie Jo’s father react to his wife and son’s death?

5.) Explain this passage: “And I know now that all the time I was trying to get out of the dust, the fact is, what I am, I am because of the dust. And what I am is good enough. Even for me.”
READING LIST QUESTIONNAIRES (continued)
READING LIST QUESTIONNAIRES (continued)

River Thunder
By: Will Hobbs
1.) When most people hear of a flood, they would be nervous. However, for Jessie this was her “dream come true”. Why was Jessie so happy about the flood? What does she want to do?
2.) What is the reason that Troy came along on the trip? Do you think this is a valid reason? What had he done in the past to “trick” his friends?
3.) How do Heather and Jessie approach their obstacles differently? Use their past experiences to justify your answer.
4.) What are the qualities of a hero? Who do you think is the hero of the story? Why?
5.) Troy remains convinced that girls are inherently the “weaker” sex. Although Jessie’s strength may not be as great as Troy’s, she knows that brute strength is not what is required for their success. How is Jessie just as capable as Troy?

When Zachary Beaver Came to Town
By: Kimberly Willis Holt
1.) Describe the town of Antler, Texas. What kind of town is it? (Include the people, their personalities, culture, and size.) What is it like for Toby to live there?
2.) What factors did Toby's mother consider when making her decision to leave Antler to pursue her dream? How do you feel about this decision?
3.) What is it like for Zachary to live inside the trailer? How does he deal with this lifestyle?
4.) What are Scarlet's feelings for Toby? How are Toby's feelings for her different?
5.) Do you believe Zachary's stories? Why do you think he tells stories about his life?
6.) The friends successfully baptize Zachary in the river. What does this symbolize?

The Acorn People
By: Ron Jones
1.) Camp Wiggins had no medically sanitized facilities, safety rails, or strict activity schedules, despite the fact it was a camp for the handicapped. Why do you think this was done?
2.) The kids in Ron Jones’ group were very unique. They all had their different disability as well as a particular strength. For example, even though Martin was blind he was the most active in the group. Describe two other individuals who did not let their disabilities hinder them.
3.) In this story, Ron Jones, the camp counselor of the boy scouts, is able to see these teens work together and accomplish great things. Name three instances where their teamwork helped them to achieve a common goal.
4.) Why is Spider’s ability to be a great swimmer so surprising? How does he do it despite his disability?
5.) How did the book get its title, The Acorn People? How does this relate to Ron’s early struggle at the camp?
READING LIST QUESTIONNAIRES (continued)

To Kill a Mockingbird
By: Harper Lee

1.) What is Scout’s real name? How did she get her nickname?
2.) Atticus tells Jem that it is a sin to kill a mockingbird. What analogy is he making here? Why do you think Harper Lee decided to name the book, “To Kill a Mockingbird”
3.) What does Scout first find in the knot-hole? Who uses the knot-hole to leave presents for Scout and Jem?
4.) In chapter 3 Atticus gives Scout the crucial piece of moral advice: “You never really understand a person until you consider things from his point of view . . . until you climb into his skin and walk around in it.” What is the significance of this quotation and Scout’s perspective of Boo Radley?
5.) Scout’s actions lead Mr. Cunningham to disperse the lynch mob. What is a Lynch mob? Briefly explain what happened.

The Complete Chronicles of Narnia
By: C.S. Lewis

1.) What happens when Edmund goes through the wardrobe? Why do Lucy, Susan and Peter go to find Aslan?
2.) Why did Aslan agree with the witch to die on the stone table? What does this tell you about Aslan’s character?
3.) What does the White Witch plan to do to the children when she finds out that Aslan has returned? Why does she plan this?
4.) Why can’t the White Witch reach the Stone Table before the children?
5.) What was the prophecy that the beaver talked about? Does the prophecy come true?

Myst, The Book of Atrus
By: Rand Miller, Robyn Miller

1.) Why does Gehn leave the desert and head for the volcano to an underground city known as D’ni? With whom does he entrust the care of his unnamed baby?
2.) Describe the city of D’ni. How is it different from our kind of city? Why did Anna and Gehn leave the city 11 years before?
3.) Atrus asks Anna about the one bundle that moved and that seemed to have disappeared. Anna laughs and reveals a golden kitten with great green eyes. Anna tells Atrus his name is Pahket. What does it mean? However, Atrus renames the kitten, Flame. Why?
4.) Atrus keeps a journal and carefully records his observations of his natural world. What does he write in his journal? Why do you think he does this?
5.) Following diagrams from a D’ni book, Atrus constructed a battery in an attempt to harness energy from the volcano. Describe what the battery is made of and what it looks like. How does Atrus carry out his experiment? Is it successful?
Island of the Blue Dolphins
By: Scot O’Dell
1.) Karana goes through various stages of loneliness during her time on Ghalas-at. What is different about each of these stages? What is the same? What conclusions can you draw from these similarities and differences?
2.) Why does Karana hunt sea elephants? What happens when she goes out to hunt them?
3.) Who is Tutok? What does she give Karana?
4.) At the beginning of the book, Karana’s beliefs and attitudes are consistent with those of her people. By the end, however, she developed a moral code somewhat different from that held by the former inhabitants of Ghalas-at. Discuss how and why this change occurs.
READING LIST QUESTIONNAIRES (continued)

Bridge to Terabithia
By: Katherine Paterson
1.) Discuss Jesse and Leslie’s friendship. In what ways do they balance each other?
2.) How does religion affect the way Jess thinks of Leslie? How does religion affect their relationship?
3.) What happens to Leslie at the end of the book and how does Jesse react?
4.) How has Leslie helped Jesse grow into a young man by the end of the book?

Who is the new queen of Terabithia?

Eragon
By: Christopher Paolini
1.) How old is Eragon in the beginning of the story? What is the name of the Dragon Rider’s blade Eragon is given?
2.) How does Eragon discover the dragon’s egg? What does Eragon think the dragon egg is at first? Why?
3.) Who are the Varden? What is their relevance to the plot of the story?
4.) While wandering through the streets of Dras-Leona, Eragon hears shouting. When he gets to the source he is horrified by what he witnesses. What is it? Why did he decide to do nothing?
5.) A.) What bone(s) in Angela’s fortune telling signify betrayal from within Eragon’s family?
    B.) Later, Angela explains that the rose blossom and the crescent moon mean that there will be an epic romance in his future with one of noble birth. Does her prophesy come true?

The River
By: Gary Paulsen
1.) Why does Brian return to the wilderness? What makes this trip different from his first trip?
2.) Before the lightening strike, how would you describe Brian and Derek’s relationship? Use examples to the two interacting.
3.) What steps did Brian take to ensure Derek’s safety?
4.) What happens at the end of the book? What did you think of the ending?

Hatchet
By: Gary Paulsen
1.) How does Brian react to the plane crash? Do you think he handles the situation well? How do you think you would react to a situation like that?
2.) What does the visit from the porcupine teach Brian about survival?
3.) How does Brian use his hatchet to survive? What is another reason for the title of the book to be named “Hatchet”?
4.) Brian records the passing of the days, but he says that he measures time more closely by events such as “First Meat”. Why are those events more real to Brian? What events in your life make an impact like this?
5.) What is Brian’s reaction to the items in the survival pack?
6.) What does Brian see in his swim to the hull of the plane?
7.) Imagine that Brian was not rescued and had to face a winter in the Canadian wilderness? Do you think he could survive? What new challenges would he face in the winter?
READING LIST QUESTIONNAIRES (continued)

The Westing Game
By: Ellen Raskin

1.) Judge J.J. Ford is mystified that E.J. Plum has been hired to handle such an important man’s estate? Why was Plum hired?
2.) Look at the newspaper column that announces Sam Westing’s death and tells about his life. How many clues to the mystery can you find in the column?
3.) Why does Crow want to do something good for Angela? What does she do?
4.) Why does Sam Westing make up the Westing game? He appears to have motivations involving his family, the people who knew him before the accident, and his future. Try to decide what are his intentions in his will.
5.) Angela is the character with whom Raskin said she identified most, although most people think of Turtle as the main character and the one Raskin’s own talent for finance and the stock market. Explain how the Westing game is important for Angela.

Where The Red Fern Grows
By: Wilson Rawls

1.) What makes Old Dan and Little Ann different from most hounds?
2.) In what ways does Billy show determination?
3.) How does Papa change the way he treats Billy over the course of the novel? What does Billy do that makes his father respect him more?
4.) What does the red fern symbolize?

Harry Potter and the Sorcerer’s Stone
By: J.K. Rowling

1.) How does the Hogwarts world compare with the Muggle world? (Hint: The real difference between the two worlds is not their appearances or social structures but in their attitudes toward human potential and human difference. Explain.)
2.) Who/what decides where the children will be housed at Hogwarts?
3.) Harry has no personal contact with Dumbledore until he is caught in the forbidden room where the Mirror of Erised stands. What happens then? Is the situation more important than just a routine rule violation by a naughty student? If so, how?
4.) How does Harry first learn that he is a wizard?
5.) At the end of Chapter 7, Harry dreams of various suspicious Hogwarts figures involved in the mysterious plot he has uncovered, including Quirrell and Snape. Why do you think Malfoy appears in the dream as well?
READING LIST QUESTIONNAIRES (continued)

Roll of Thunder Hear my Cry
By: Mildred Taylor

1.) The Logan Children are upset with the way their school system treats black students such as themselves. Analyze two instances (The old schoolbook argument and digging a hole to stop the bus) illustrate this. Compare the Logan children’s disputes with the disagreements that you have had with people at school. How justified was your anger in contrast to Cassie or Little Mans? Did you handle it better than they did?

2.) Ma and Uncle Hammer have very different ways of treating the kids how to react to racism when Stacey gets into a fight at the Wallace store and Cassie is taunted by Lillian Jean. If you were a Logan parent, how would you resolve Stacey and Cassie’s conflicts? Like Ma or Uncle Hammer?

3.) Why do the Logans finally decide to boycott the Wallace store? How does Mr. Jamison help the trade in Vicksburg and how does Harlan Granger try to stop them? Contrast the role of the white man’s racism in this story- the differences between Mr. Jamison and Wallace/Granger.

4.) Why does Papa set the fire at the end of the novel and what does this event symbolize? What do you think the Logan children as well as you, the reader, have learned about racism from this book?

The Fellowship of the Ring
By: J.R.R. Tolken

1.) Towards the beginning of the story, Frodo Baggins attends Bilbo’s 111th birthday. How are these two characters related?

2.) In the Fellowship of the Ring, Frodo Baggins proceeds on a quest to destroy the ring. Why must the ring be destroyed? What effect does Bilbo’s ring have on its wearer?

3.) The group headed out to Moria, which was once an ancient realm for the dwarves. However, upon arrival, they realized the place was deserted and that the dwarves have been killed. Who killed the dwarves and why?

4.) Gandolf ultimately sacrifices himself for the group within the caves of Moria. What did he do? What were Gandalf’s final words before he falls into the chasm?

5.) Why does Galadriel refuse the Ring when Frodo offers it?

The Hobbit
By: J.R.R. Tolken

1.) Describe what the trolls look like. What happens to trolls when they are exposed to daylight?

2.) Briefly explain who Gollum is and his association with the ring. What does this tell you about the powers of the ring? What is Gollum's name for his ring?

3.) What does Bilbo name his sword? What creature did he ultimately slay with the sword?

4.) Is Thorin in any sense a heroic leader? Do his actions in the novel make him deserving of his death at the end?

5.) Briefly explain the meaning of this quotation and its significance in the book: “Where do humans fit in among the other races of Middle-Earth? Are humans a “good race?”
Night
By: Elie Wiesel

1.) Who is Mosche the Beadle and what do people think of him that makes the rest of the story seem ironic?
2.) Who is Idek and what does he do to Eliezer’s teeth at Buna? Reflect on the general treatment of Eliezer in Buna in contrast with Auschwitz.
3.) Describe the relationship between Eliezer and his father. In what ways is their relationship strong? Where in the book does it exhibit doubt?
4.) How has Eliezer been transformed from the day of his imprisonment to the day he is liberated? Name at least 3 events that have changed him.

PALS bear earned for completion of reading a book and writing a report
7th AND 8th GRADES
SUMMER SCHOOL
MATH
SUMMER SCHOOL MATH OVERVIEW
7th and 8th GRADES

The math program is an integral part of summer PALS. Our students are recommended by their teachers, but even top students have significant gaps in their math preparation. The fundamental goal of our math program is to fill in learning gaps, reinforce skills and expand on what students have already been taught in school.

Specifically, we aim to develop “strategy thinking” and skills that give students a positive attitude about their ability to do math which is essential for the future when we will not be around. Critical to this success is learning how to approach and complete word problems. Each day during the summer we follow and practice the following steps:

- Read the problem aloud twice
- What are the key words?
- What is given?
- What is asked?
- How will you solve it?
- Solve the problem
- Check your work
- Does your answer make sense?

Another major goal is to support and instruct our High School and College Interns in how to teach. We do so intensively during the two day orientation period before the students arrive and daily before classes.

Intern Assignments
The summer begins with an informal assessment test consisting of questions relating to key concepts we have selected. It covers decimals, fractions, ratios, graphs, algebra, and percentages as appropriate for students who have just finished 6th or 7th Grade. From the results of this assessment, students are divided by knowledge into small groups of two or three. One Intern is assigned to each group for the entire month. In this way, the Intern is primarily responsible for certain students, and the students get to know one teacher well. Within the small group, the Intern gives individual attention to address the needs of each student.

Intern Training
The morning starts at 8:30 AM with the Interns meeting with a 7th Grade or 8th Grade Master Teacher. For the half hour before students arrive for class, Interns review what work will be taught, how it will be done, and what type of homework will be given for that night. Individual progress of students is also discussed at this important time.

7th Grade Math Content, Methods, and Materials
At 9:00, half the students go to math and the other half go to language arts. Mid-morning they switch subjects. Math begins with a group session where everyone meets together for attendance, review of the day’s schedule and announcements. Small Group time follows. This an ideal time to review, practice and drill recently acquired material. We feel that drilling is an integral part of learning the basics of math. Interns lead their small groups in memorization of the Percent, Decimal, Fraction Equivalent Chart facts. (see page 88 of this Handbook) This is also a time for students and Interns to review the homework due for that day.
SUMMER SCHOOL MATH OVERVIEW
7th and 8th GRADES (continued)

Following homework and review time, students work on the individualized material of the day. The Master Teacher moves among the small groups, facilitating learning, observing, and supporting the teaching interns. Whenever appropriate, the Interns use manipulative materials such as hand calculators, dice, graph paper, money, tape measures, etc. to give the material further meaning. Each Intern has a large whiteboard for teaching math concepts and each student has his or her own small whiteboard to figure out problems or to explain something to the others in the group.

In 7th Grade all students complete an Arithmetic handout, a Ratio Handout, three Percentage Problems handouts and a Pre-Algebra handout. Those who score well in math basics usually complete the handouts the first two weeks. They then follow a program that gives them practice in solving SSAT problems. (The SSAT is given in the 8th Grade for entry to independent schools. It aims to assess how well a student will do in high school. Many PALS students will take this test or the similar Catholic School Admissions test.) The other students complete the handouts taking time to fill gaps in their skills. They start SSAT problems during the academic year.

In 8th Grade all students complete SSAT problems, review the Equivalents Chart, review Percentage Problems and work on handouts adapted from Saxon Homeschool Pre-Algebra and Algebra.

Graphing
In the 7th and 8th Grade small groups, 7th Grade students learn bar, line and pie graphing on Excel while 8th Graders learn more complicated graphing using weekly Math Computer Activities, on the computers we rent for the summer. (see Graphing Explorations pages 97 to 109 in this Handbook)

Resources
Excel
Saxon Math Homeschool Pre-Algebra © (7th Graders)
Saxon Math Homeschool Pre-Algebra and Algebra ½© (8th Graders)
SSAT word problems (for advanced students)

Successes
The intense drilling and strategies learned in math pay off. Almost all our students rise to the top of their math classes in high school, and over 50% receive scholarships to attend private and parochial schools. But beyond these standard markers of success, we see students enjoying math. As more than one visitor has remarked, when PALS students are asked if they like math in summer school, they respond: “School?”
MATH MASTER TEACHERS GUIDELINES

-Most importantly, the Math Master Teachers plan appropriate math activities for the students and guide the Interns daily on ways to teach the assigned work. (just because an Intern gets an A in calculus doesn’t mean he or she can automatically teach a 7th or 8th grader!)
-On a regular basis Master Teachers sit in to observe, contribute, “quality control”, and support Interns
-Remember to ask “is the pace good?”
-Administer the Math Assessment Survey. Depending on how each student does, create individual curriculums to fill in gaps.
-“Catch Interns doing things right” and let them know. If appropriate, make suggestions and/or model how to teach. Don’t watch them struggle to figure out what to do.
-In PALS we would like to see students learn a standard strategy for evaluating and solving word problems. Teach this strategy to the Interns.

During the 8:30 – 9:00 Preparation Time
Write the daily schedule on the board before your 8:30 starting time.

Type up and hand out your agenda each day for the 8:30 to 9:00 meeting time.

The meeting should start at 8:30 promptly. Please report every instance of lateness to the Director since he will be on the bus and cannot observe it.
The meeting should use up the entire time. There is never enough time to fully know and share what you are all doing or to prepare completely for each day. Do the best you can and use up all the 8:30 to 9AM time doing it.

Have each Intern say what they did the day before, and ask them to give a suggestion that helped in teaching it and maybe even model it for the group.

There are lots of different ways to teach the Interns “teaching”. For example an Intern might be given a sample problem to teach. Then the Interns and you can share observations on methodology and the appropriateness of the activity.

Teaching the Interns could be done by your going over what math concept is being introduced to a particular group and how it might be taught, followed by your asking the Interns for input and/or asking one of them to “teach” it to the group.

You might ask Interns what tip they could share that worked for them recently or ask if they might want suggestions for teaching a certain math concept.

In general, create a routine in your daily meetings that gives them, your Interns, time to plan and share with each other and with you.

Ask Interns to share information about individual students’ progress or personal needs on a regular basis.
Check that tracking sheets are up to date. (see Tracking Sheet page 96 of this handbook)

Check that homework stars are up to date.

Include time for handouts given to you from the Director etc.

Have the Interns fill out perfect attendance awards the second and third Wednesdays.

**During the 9:00 Group Time**
Take attendance. Ask a student to put stars on the chart.

Read and explain the schedule for the day.

Tell everyone any necessary information.

Go right to Small Groups.

**General**
Have the Interns keep daily tracking sheets for you to check over.

Post a computer schedule in the classroom and in the computer room for all to see (visitors, students and other teachers).

As before, 7th and 8th Grades use computers for graphing. When doing graphing exercises have students work as a group at the same speed.

You are one of the “adult” Master Teachers, therefore you are on a different level than an Intern, with greater responsibility for representing the PALS Program and maintaining teaching standards.

Teaching Tip #3 insuring that personal conversations between adults (Interns and Interns) to before 8:30AM and after 3:00PM is a major responsibility of the Master Teachers.
MATH TEACHING GUIDE
FOR INTERNS

PROBLEM SOLVING METHOD
Most students need practice in applying a consistent method for problem solving.

STRATEGY THINKING
Most students need to practice and or learn problem solving strategy thinking.

PALS Problem Solving Tips
(OVER AND OVER DO THIS WITH YOUR STUDENTS)
- Read the problem aloud at least twice.
- Key Words. Be sure your student understands each word.
- What's Given?
- What's Asked?
- Strategy!
- Solve
- Check

STRATEGY THINKING
-Ask your student what strategy can we use to figure out the answer?” Then try it out.
-Ask your student “how can we check if our answer is right?”
-Ask your student “could we solve it in more than one way? Is there another strategy that will work?”

NEATNESS
Insist on neatness.

SHORTCUTS
-Insist that all work be written out step by step, no shortcuts please!
-Why? 30% of mistakes in math are due to sloppy work.
-Why else? Teachers can’t tell where a student needs help if a shortcut is used.

PENCILS ONLY

LABEL ALL ANSWERS 10 what?
10 oranges? 10 kids? 10 degrees? 10 dollars?

TO BUILD CONFIDENCE
If your student is having trouble doing a problem, explain it, then think up an easier problem to teach the concept. Ask questions to help him or her understand the thought process. Do many versions of the same concept.

TO CHECK MASTERY
Continue with problems that are variations of the same concept until your student can do the same concept ALONE at least three times.

INTRODUCING A NEW CONCEPT
Start with an easy example. Ex: In teaching percent/fraction/decimal equivalents start with 50 percent.

USE WHITEBOARDS not paper when teaching. Whiteboards individualize work as well as helping you see immediately what your student knows and what you need to teach.
7th GRADE TEACHER/INTERN  
MATH PLANNING MEETING  
DURING ORIENTATION

Give each Intern the names of the 7th Grade students temporarily assigned to them for the 9:00AM and 10:20 AM sessions. Ask someone to type it up.

Assign a teaching area for each Intern.

Stock teaching areas
Each teaching area has a bulletin board. Cover them with colored paper then post:

a) the students assigned to the teacher in the area with the teacher’s full name, student’s full names and times for the 9AM and 10:20AM sessions. Two students are assigned to one Intern temporarily for the first day. This Intern administers the Math Assessment Test.

b) the name of the area ex: “Denny’s Den” “Joe’s Jungle” etc.

c) Problem Solving Tips  
   (see page 94 of this Handbook)

d) The Helpful Equivalent Chart  
   (see page 88 of this Handbook)

Please use pins in all four corners of your posted papers today and all summer.

On the shelves of each area put

a) A Homework Folder for each student. These go home daily.

b) A white Math Notebook for each student. Prepare this with a front page with the student’s full name label sticker on a 7th Grade Math cover page. (An Intern makes this on Word for all to use) We use these notebooks to keep daily work. They stay at school at all times. They are also saved at the end of July for the September start up of PALS.

Inside put a tracking sheet followed by “Tips for Problem Solving”

c) At the workstations put 3 or 4 pencils, a whiteboard eraser and calculator for each student and teacher, two yardsticks, rulers, a stopwatch, scissors, stapler, hole punch, a small stack of lined paper, some graph paper, and four whiteboard markers for each student and teacher.

Whiteboards are available for students and Interns in each area.

Math planning
- On the first day, students are given a Math Assessment Test. (see page 76 of this Handbook) Interns take it during orientation.

- Tracking sheets: At the end of each lesson, progress is noted by the Interns. Since students read these comments, we are positive about what is written. Stickers are available for students to choose and post beside the daily comment.

- Homework goals explained:
   The intention for homework is to check for knowledge and for gaps. Interns and students correct the Homework together the day it is due. If an Intern thinks his or her student might need homework explained the day it is handed out that’s OK but try to explain it by giving similar examples and then asking the student to complete the homework independently at home. Homework starts the first day. Homework Folders go home at 3:00
   The Homework Chart tracks completion of daily Homework

Math Computer Room scheduling
Computers are shared with 7th and 8th Grade math students. We assign a day for each group. (Ask an Intern to make and post the computer room schedule) Every student will use a computer for a graphing problem once a week.
7th GRADE TEACHER/INTERN
MATH PLANNING MEETING
DURING ORIENTATION
(continued)

9:00 and 10:20 are attendance and greeting times. Lessons and teaching follow in smaller groups. One group goes directly to the Computer Room starting Tuesday.

Signs and decorations
- Make a Word sign with the names of the 7th Grade Math Master Teacher and Interns and post in a visible place.
- Make a banner “7th Grade Math Room”

Specific First Day Plans:
Assign Interns to explain details of the schedule.

The Schedule for Week # 1
Day 1 Assessment Test
Day 2 Handouts start
Days 3, 4, 5 Regular Math Routine

TEACHING MATH IN PALS
- In PALS we use calculators and check the answers using common sense. Do not let students multiply or divide by hand. It uses up too much time.

- If it seems that your student does not know how to add, subtract, multiply or divide, please let the Master Teacher know ASAP.

- Use pencils for homework (not pens)

- In class we use the whiteboards as much as possible rather than pencils and paper.

- Expect neatness in all math work even when done on the whiteboard.

- Room neatness: Please clean up your area at the end of each day.

Week # 1 Plans and Assessment Test
Based on their skills in the Assessment Test students are assigned permanent groups although these may change as the month develops.
Correct it right away and give it to the Master Teacher to figure out the best grouping arrangement for each Intern and student. Any student who only misses one or two problems will start SSAT math after completing the Arithmetic Review Handout, Ratio Handout, the Percentage Problems Handouts #1 #2 #3 and the Pre-Algebra Handout.

Interns use their judgment in consultation with the Master Teacher as to how many of the problems in each Handout need to be completed before starting SSAT math. SSAT Math will continue in the fall.

All students have appropriate individualized math activities to supplement Handouts. Depending on readiness they may start SSAT math in the summer or in September or January.

In general all students work on problem solving skills making use of percent, decimal, fraction equivalent concepts.

All memorize the Helpful Equivalents Chart.
(see page 88 of this Handbook)

Money, objects that can be counted, rulers, stopwatches, graphs, and practical objects related to everyday life are used whenever possible.

Animals: These are maintained and supervised by the 7th Grade Interns who teach Science in the afternoons.
Name ____________________________________

This survey is to help you and your PALS Intern figure out what you know and what you need to learn. Do what you can, skip the problems you don’t know how to do. After completing all that you can do, your Intern will go over the answers with you. On a lined paper separate sheet PLEASE SHOW YOUR WORK. Use a pencil.

Basic Skills: Addition, Subtraction, Multiplication and Division

1. Add 6.7 + 0.48 ___________

2. Find $16.00 - $1.50 ___________

3. Subtract .08 from .3 ___________

4. Multiply 6.3 x 0.48 ___________

5. Change .75 to a fraction then reduce it.
   75 = _______ = _______

Percents

6. What is 25% of 100? ___________

7. What is 25% of 80? ___________

8. There are 20 kids in Stephanie’s class. If 50% of them are going camping, how many kids are going on the trip? ___________

9. Which is greater? 10% of 60 or 10% of 50? ___________

Variables

10. If n – 72 = 36, what is the value of n? ______

11. If m = 5, What is the value of 3m + 2? ___________

12. Evaluate ab – c if a=5, b=3, and c=4 ___________

Decimals and Place Value

13. In the number 123.456, what digit is in the tenths place? ___________

14. The first four finishers in the Men’s Olympic 200 meter race were Michael Johnson (19.32 seconds), Obadele Thompson (20.14 seconds), Frank Fredericks (19.68 seconds), and Ato Boldon (19.8 seconds).

Which runner finished in second place? ___________

15. What decimal number should we subtract from 1075.234 to get a whole number? ___________

16. Rewrite these numbers in order from the greatest to least.
   27.346  23.076  27.6  203.607  23.4  23.45

Order of Operation

( Please Excuse My Dear Aunt Sally )

17. In the expression (5 + 7) x (3 - 2) which operation is performed first? ___________

18. Solve for the answer ___________

Estimating Strategies

19. Keith buys two CDs that cost $9.99 each and a sweater that costs $49.99.

   What is a reasonable ESTIMATE of the total cost of the items? ______

20. How did you come up with your answer? ________________________________

Using Division

21. Allison is buying three watches that cost $29.99 each. She gives the cashier $100. About how much change should she get back? (ESTIMATE)

22. If a show sells 28,000 tickets in two weeks, an average of how many tickets are sold each day? ___________

23. Albert bought three blanks tapes for $5.95. Find the cost per tape to the nearest cent. ___________

Extras

24. Round 27,647 to the nearest thousand ___________

25. Forty percent of the thirty students in the class are boys. How many girls are in the class? ___________

26. If x is greater than 3
   is 2x greater than, less than, or equal to 6?
   2x ___________

27. 4.6 – 3.97 = ___________

28. 2.5 / 100 = ___________

29. New York City uses about one billion, three hundred million gallons of water each day. Use digits to write that number. ___________

- 76 -
Two Hard-working 7th Graders with their Intern
Study Tip: Rounding Numbers

✓ Find the digit in the place you’re rounding to.
✓ Circle it.
✓ Look at the digit to the right of the circled digit:
  • If it is a 5 or greater, add 1 to the circled digit.
  • If it is less than 5, leave the circled digit alone.
✓ Replace all of the digits to the right of the circled digit with zeros.

EXAMPLES:
Round 372 to the nearest ten.
372 becomes 370.

Round $3.72 to the nearest dollar.
$3.72 becomes $4.00.

1. The South Coast Mall covers 2,918,236 square feet of floor space. In the number 2,918,236, which digit is in the ten-thousands place?
2. What place do the 2’s occupy in 2,918,236?
   a. hundredths and millionths
   b. hundreds and millions
   c. hundreds and millionths
   d. hundreds and ten-millions
3. What is 2,918,236 rounded to the nearest thousand?
4. Tom buys a vest at the mall. Rounded to the nearest dollar, the vest cost $47. What is the lowest amount the vest could have cost?
5. What is the highest amount Tom’s vest could have cost?

6. Last year, Wal-Mart stores had total sales of over $83 billion. How many zeros are in 83 billion?
7. On a shopping trip, Libby spent $68.48, Suzanne spent $74.95, Miranda spent $59.64, and Charlene spent $83.10. Round each amount to the nearest dollar and rank the new amounts from least to greatest.
8. Which two shoppers spent more money? Suzanne and Libby or Charlene and Miranda? (This time don’t round the amounts.)
9. A sales clerk uses a calculator to find the sales tax on a $28.30 sweatshirt. The calculator’s display showed an answer of 1.7546. What is that amount rounded to the nearest cent?
The National Weather Service developed a chart showing the relationship between actual temperature, humidity and the heat index. The heat index is a measure of how hot the air outside feels because of relative humidity. Relative humidity tells us the percentage of water vapor in the air. The heat index can be very different from the actual temperature. The higher the relative humidity, the warmer the air seems to our bodies.

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1. The numbers across the top of the chart represent the actual temperature. The percentages down the side represent relative humidity. To find a heat index temperature, find the box where the temperature column and the relative humidity row meet. For example, what would be the heat index temperature if the actual temperature is 85 °F and the humidity is 70%?

2. If the relative humidity is 60% and the heat index is 100 °F, what is the actual temperature?

3. One of Billy’s hit songs is called “Oklahoma”. Oklahoma’s record-high actual temperature of 120°F was reached on July 36, 1943. What would the relative humidity have been that day if the heat index temperature was...
   a. 116 °F?
   b. 148 °F?

4. Billy lives in Hope Valley, Rhode Island. The record-high actual temperature in Rhode Island is 104 °F (August 2, 1975). What combination of actual temperature and relative humidity would create a heat index temperature of 104°F?
PALS 7th Grade Intern Checking Daily Math Homework
Give the Interns the names of the 8th Grade Students assigned to them for the 9:00 AM and 10:20 AM sessions.

Assign a teaching area for each Intern.

Stock teaching areas:
Each teaching area will have a bulletin board to cover with colored paper
Then post:
a) the group list for the area with the teacher’s full name, student’s full names and times for the 9AM and 10:20AM sessions
b) a name for each area ex: “Ellie’s Corner”, “Joe’s Jungle” etc.
c) Problem Solving Tips
d) The Helpful Equivalent Chart
Please use pins in all four corners of your posted papers.

On the shelves of each area put
○ Homework Folder for each student
○ Math folder for each student with a front page for the student’s name, tracking sheet and Tips for Problem Solving included
○ 3 or 4 pencils, two whiteboard erasers, two yardsticks, a stopwatch, scissors, stapler, hole punch, a small stack of lined paper, some scrap paper, some graph paper, some tacks, 8 magic markers, 8 whiteboard markers.

Whiteboards
-Whiteboards are available for students and Interns for each area.
-In class use the whiteboards as much as possible rather than pencils and paper. Why? When they are using paper and pencils it is harder for you see when they need help.

Math planning
-First day plans (Handout)
-Have Interns take the placement test.
-Explain tracking sheets for each math folder.
-Explain homework goals & homework chart.

Math Computer Room scheduling
Assign a day for each group and ask an Intern to make and post the schedule. Every student should use a computer for a graphing problem once a week.

9:00AM and 10:20AM are attendance and greeting times. Lessons and teaching follow in the smaller groups with one group going to the Computer Room starting Thursday.

Signs and decorations
-Make a sign with the names of the 8th Grade Math Master Teacher and Interns and post in a visible place
-Make a banner “8th Grade Math Room”

Calculators
Please use calculators and check the answers using common sense. Do not let students multiply or divide by hand. It uses up too much teaching time!

Pencils
Use pencils for homework. (not pens)

Neatness
Expect neatness in all math work even when done on the whiteboard.

Room neatness: Please clean up your area at the end of each day.
8th GRADE MATH
PLANNING MEETING
FIRST SCHOOL DAY
8:30 – 9:00

Review the daily schedule on the board. Give out name tags with elastic straps for all to wear all day and assign someone to collect them at the end of the day.

Math Folders start today.

Tracking sheets start today. After noting progress on the tracking sheet in the student’s folder, we have stickers available for daily work.

Please correct the math tests right away and give to the Master Teacher.

Have pencils ready for the test and for the questionnaire.

When we go to small groups, your students may decorate Page 1 of their folders if they have completed the test.

Math folders do not go home.

Homework Folders do go home. Give a homework assignment for tonight.

We will be greeting students on the playground when they arrive.

This is a time to introduce yourself to the students in your small group and give him or her a nametag.
LEVELS OF 8th GRADE MATH IN SUMMER PALS

8th Grade Math students are divided into three levels according to the test given the first day. Each Intern is assigned two students of the same level to teach for the entire summer. The Intern and the Master Teacher consult together daily at the 8:30 to 9:00 training meeting. The Master Teacher provides appropriate individualized curriculum to each Intern, provides suggestions on how to teach it, and sits to observe or help for a short time every day with each Intern as the Intern teaches his or her students.

Level I
SAXON HOMESCHOOL MATH ©

Level II
SAXON HOMESCHOOL MATH ©

Level III
MATH ACTIVITY HANDOUTS
#1 #2 #3 #4

Do ACTIVITY handouts in order. Take as much time as needed to complete each activity sheet. When an activity sheet is completed move on to the next one the same day.
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</tr>
<tr>
<td>73</td>
<td>79</td>
<td>83</td>
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<td>97</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
MATH PROPERTIES

Properties of Addition

Cumulative Property of Addition:
For any values of $a$ and $b$, $a + b = b + a$.
Changing the order of the addends does not change the sum.

Associative Property of Addition:
For any values of $a$, $b$ and $c$, $(a + b) + c = a + (b + c)$.
Changing the grouping of the addends does not change the sum.

Adding 0 Property:
For any value of $a$, $a + 0 = a$.
The sum of any number and 0 is that number.

Distributive Property of Addition/Subtraction:
For any number $a$, $b$, and $c$, $a(b + c) = ab + ac$.
For any number $a$, $b$, and $c$, $a(b - c) = ab - ac$.

Properties of Multiplication

Commutative Property of Multiplication:
For any values of $x$ and $y$, $xy = yx$.
Changing the order of the factors does not change the product.

Associative Property of Multiplication:
For any values of $x$, $y$ and $z$, $(xy)z = x(zy)$.
Changing the grouping of the factors does not change the product.

Multiplying by 1 Property:
For any value of $x$, $x \times 1 = x$.
The product of any number and 1 is that number.
WORKING WITH SIGNED NUMBERS

Properties of Addition

\[ + + + = + \]
\[ - - - = - \]
\[ - + + = \text{Difference and sign of the larger number} \]
\[ + + - = \text{Difference and sign of the larger number} \]

1) see which number is bigger
2) subtract the smaller number from the larger number
3) put the sign of the larger number in front of the answer (either + or -)

Properties of Multiplication and Division

\[ + \times + = + \]
\[ - \times - = + \]
\[ - \times + = - \]
\[ + \times - = - \]
\[ + \div + = + \]
\[ - \div - = + \]
\[ - \div + = - \]
\[ + \div - = - \]
### HELPFUL EQUIVALENTS

<table>
<thead>
<tr>
<th>Percent</th>
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<th>Fraction</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.05</td>
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<td>.10</td>
<td>1/10</td>
</tr>
<tr>
<td>12.5%</td>
<td>.125</td>
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</tr>
<tr>
<td>20%</td>
<td>.20</td>
<td>1/5</td>
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<tr>
<td>25%</td>
<td>.25</td>
<td>1/4</td>
</tr>
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<td>.30</td>
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</tr>
<tr>
<td>33.33%</td>
<td>.33</td>
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<td>.40</td>
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<tr>
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<td>1/2</td>
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<tr>
<td>60%</td>
<td>.60</td>
<td>3/5</td>
</tr>
<tr>
<td>66.66%</td>
<td>.66</td>
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### TEST TEMPLATES

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<tr>
<td>12 ½%</td>
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<tr>
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<tr>
<td>25%</td>
<td>.25</td>
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<tr>
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<td>.3</td>
<td>3/10</td>
</tr>
<tr>
<td>33 1/3%</td>
<td>.33</td>
<td>1/3</td>
</tr>
<tr>
<td>40%</td>
<td>.4</td>
<td>2/5</td>
</tr>
<tr>
<td>50%</td>
<td>.5</td>
<td>1/2</td>
</tr>
<tr>
<td>60%</td>
<td>.6</td>
<td>3/5</td>
</tr>
<tr>
<td>66 2/3%</td>
<td>.66</td>
<td>2/3</td>
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<tr>
<td>70%</td>
<td>.7</td>
<td>7/10</td>
</tr>
<tr>
<td>75%</td>
<td>.75</td>
<td>3/4</td>
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<tr>
<td>80%</td>
<td>.8</td>
<td>4/5</td>
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<tr>
<td>90%</td>
<td>.9</td>
<td>9/10</td>
</tr>
<tr>
<td>100%</td>
<td>1.</td>
<td>10/10</td>
</tr>
</tbody>
</table>

### Perfect Squares

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$1^2$</td>
<td>$6^2$</td>
<td>$11^2$</td>
</tr>
<tr>
<td>$2^2$</td>
<td>$7^2$</td>
<td>$12^2$</td>
</tr>
<tr>
<td>$3^2$</td>
<td>$8^2$</td>
<td>$13^2$</td>
</tr>
<tr>
<td>$4^2$</td>
<td>$9^2$</td>
<td>$14^2$</td>
</tr>
<tr>
<td>$5^2$</td>
<td>$10^2$</td>
<td>$15^2$</td>
</tr>
</tbody>
</table>

### Prime Numbers (circle the two non-prime #s)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. Area
   - Units: in², cm², ft², etc.
   - Rectangle/square: length x width
   - Triangle: \( \frac{1}{2} \times \text{length} \times \text{width} \)
   - Circle: \( \pi r^2 \) (r: radius)

2. Volume
   - Units: in³, cm³, ft³, etc.
   - Rectangle/square: length x width x height

3. Perimeters
   - Units: in, cm, ft, etc.
   - Circle (circumference): \( 2\pi r \) or \( \pi d \) (d: diameter)
   - All other figures: sum of all the sides
4. Pythagorean Theorem

- $a^2 + b^2 = c^2$
- For right triangles only
- $C$ is always opposite of the right angle (hypotenuse)

5. Order of Operations:

1. Parenthesis $(\quad)$ Please
2. Exponents $^2\sqrt{\quad}$ Excuse
3. Multiplication $\times$ My
4. Division $\div$ Dear
5. Addition $+$ Aunt
6. Subtraction $-$ Sally

6. Distance, Rate and Time Formulas

1. Distance = Rate $\times$ Time ($D = RT$)
2. Rate = Distance $\div$ Time ($R = D/T$)
3. Time = Distance $\div$ Rate ($T = D/R$)
MATH VOCABULARY

• Sum: add
  What is the sum of 4 and 3? \( 4 + 3 = 7 \)

• Difference: subtract
  What is the difference of 4 and 4? \( 4 - 3 = 1 \)
  \( \pi \) of 3?
  \( C = 2\pi r \) or \( C = \pi d \) \( \rightarrow C = 2 \times \pi \times 3 \rightarrow 6\pi \rightarrow 18.84 \)

• \( \pi \): pi, equal to approximately 3.14

• Mode: most frequently occurring number in a series
  \{4, 3, 7, 4, 3, 6, 10, 4\}, the mode is 4

• Mean: average value in a series of numbers
  \{4, 3, 7, 4, 3, 6, 10, 4\}, to calculate, find the sum and divide by the total number in the series

• Median: middle number in a series of ordered numbers
  \{4, 3, 7, 4, 3, 6, 10, 4\} \( \rightarrow \) \{3, 3, 4, 4, 4, 6, 7, 10\}, median is 4

• Right angle: an angle measuring 90° (90-degrees)

• Hypotenuse: the side of a right triangle opposite the right angle

• All triangles add up to 180°

• All four sided figures (squares, rectangles, trapezoids, etc.) add up to 360°
“Please Excuse My Dear Aunt Sally”

```
P E M D A S
A X U I D U
R P L V D B
E O T I I T
N N I S T R
T E P I I A
H N L O O C
E T I N N T
S C I
I A O
S T N
```

- 93 -
PALS Problem Solving Tips

Read

Key Words?

What’s Given?

What’s Asked?

Strategy!

Solve

Check
PALS Problem Solving Tips
Read
Key Words?
What's Given?
What's Asked?
Strategy!
Solve
Check

PALS Math Problem-Solving Poster
## TRACKING SHEET

<table>
<thead>
<tr>
<th>DATE</th>
<th>WHAT WAS DONE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Student’s Name: _______________________  Teacher’s Name _________________
GRAPHING EXPLORATIONS
Through rain, snow, sleet, or hail – the United States Postal Service delivers the mail daily. The days of the “pony express” have come and gone – and with new ways of sending information like telephones, e-mail, and instant messaging, letters are sent less frequently – but it’s always exciting to receive a letter in the mail. The following data traces the change in the price of stamps in the United States since 1885. Graph these changes on the computer.

<table>
<thead>
<tr>
<th>Effective date</th>
<th>Cost of Stamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1885</td>
<td>2¢</td>
</tr>
<tr>
<td>Nov 1917</td>
<td>3¢</td>
</tr>
<tr>
<td>Jul 1919</td>
<td>2¢</td>
</tr>
<tr>
<td>Jul 1932</td>
<td>3¢</td>
</tr>
<tr>
<td>Aug 1958</td>
<td>4¢</td>
</tr>
<tr>
<td>Jan 1963</td>
<td>5¢</td>
</tr>
<tr>
<td>Jan 1968</td>
<td>6¢</td>
</tr>
<tr>
<td>May 1971</td>
<td>8¢</td>
</tr>
<tr>
<td>Mar 1974</td>
<td>10¢</td>
</tr>
<tr>
<td>Dec 1975</td>
<td>13¢</td>
</tr>
<tr>
<td>May 1978</td>
<td>15¢</td>
</tr>
<tr>
<td>Mar 1981</td>
<td>18¢</td>
</tr>
<tr>
<td>Nov 1981</td>
<td>20¢</td>
</tr>
<tr>
<td>Feb 1985</td>
<td>22¢</td>
</tr>
<tr>
<td>Apr 1988</td>
<td>25¢</td>
</tr>
<tr>
<td>Feb 1991</td>
<td>29¢</td>
</tr>
<tr>
<td>Jan 1995</td>
<td>32¢</td>
</tr>
<tr>
<td>Jan 1999</td>
<td>33¢</td>
</tr>
<tr>
<td>Jan 2001</td>
<td>34¢</td>
</tr>
<tr>
<td>Jun 2002</td>
<td>37¢</td>
</tr>
<tr>
<td>Jan 2006</td>
<td>39¢</td>
</tr>
<tr>
<td>Proposed for 2007</td>
<td>42¢</td>
</tr>
</tbody>
</table>

-The x-axis always the data that **does not depend on the other information.** In this case, the x-axis is the year. Does the price of stamps affect the year? No. Does the year affect the price of stamps? Yes. Years go by, regardless of how much stamps cost.

Remember to label the axes and add a title to your graph.

Questions to Ponder for 8th Grade Graphing Exploration #1

1. Why would the price of stamps increase in 1917 and then decrease again in 1919?
2. How much has the price of stamps changed since 1885? Why have the prices increased so much? What changes in the way mail is processed and delivered would require higher prices?
3. How much did the price of stamps change between 1885 and 1968 (83 years)? How much did the price of stamps change between 1974 and 2006 (32 years)? Compare the number of cents and estimate the percent increase.
4. In 1983, the USPS introduced the ZIP+4 system, assigning every house in every ZIP code a unique number. The system was supposed to make mail sorting and delivery faster and more efficient. Look at the price of stamps after 1983. Do you think ZIP+4 has made an impact? Why or why not?

5. Before stamps were used, letters would be sent without postage and postage fees would be paid by the recipient. Why do you think the postal service would switch to stamps?
At the end of a long day, a great way to escape reality for a few hours is to watch a movie. Movie theatres and movie studios build up a lot of hype before big movies come out to attract big crowds. Below is a chart of the twenty movies that earned the most in their first weekend in theatres. You’ll notice that the biggest opening ever was very recent… what else can you notice? Plot the movie titles in the x-axis and the weekend gross in the y-axis. You don’t have to type in the rank, the number of theatres, or the dates – that information is context for you to answer the questions that follow.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Title</th>
<th>Opening Weekend Gross</th>
<th># of Theaters</th>
<th>Date**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pirates of the Caribbean: Dead Man's Chest</td>
<td>$132,028,000</td>
<td>4,133</td>
<td>7/7/2006</td>
</tr>
<tr>
<td>3</td>
<td>Star Wars: Episode III - Revenge of the Sith</td>
<td>$108,435,841</td>
<td>3,661</td>
<td>5/19/2005</td>
</tr>
<tr>
<td>4</td>
<td>Shrek 2</td>
<td>$108,037,878</td>
<td>4,163</td>
<td>5/19/2004</td>
</tr>
<tr>
<td>6</td>
<td>Harry Potter and the Goblet of Fire</td>
<td>$102,685,961</td>
<td>3,858</td>
<td>11/18/2005</td>
</tr>
<tr>
<td>8</td>
<td>The Matrix Reloaded</td>
<td>$91,774,413</td>
<td>3,603</td>
<td>5/15/2003</td>
</tr>
<tr>
<td>9</td>
<td>Harry Potter and the Sorcerer's Stone</td>
<td>$90,294,621</td>
<td>3,672</td>
<td>11/16/2001</td>
</tr>
<tr>
<td>10</td>
<td>Harry Potter and the Chamber of Secrets</td>
<td>$88,357,488</td>
<td>3,682</td>
<td>11/15/2002</td>
</tr>
<tr>
<td>11</td>
<td>Spider-Man 2</td>
<td>$88,156,227</td>
<td>4,152</td>
<td>6/30/2004</td>
</tr>
<tr>
<td>12</td>
<td>X2: X-Men United</td>
<td>$85,558,731</td>
<td>3,741</td>
<td>5/2/2003</td>
</tr>
<tr>
<td>14</td>
<td>Star Wars: Episode II - Attack of the Clones</td>
<td>$80,027,814</td>
<td>3,161</td>
<td>5/16/2002</td>
</tr>
<tr>
<td>15</td>
<td>The Da Vinci Code</td>
<td>$77,073,388</td>
<td>3,735</td>
<td>5/19/2006</td>
</tr>
<tr>
<td>16</td>
<td>Austin Powers in Goldmember</td>
<td>$73,071,188</td>
<td>3,613</td>
<td>7/26/2002</td>
</tr>
<tr>
<td>17</td>
<td>The Lord of the Rings: The Return of the King</td>
<td>$72,629,713</td>
<td>3,703</td>
<td>12/17/2003</td>
</tr>
<tr>
<td>18</td>
<td>The Lost World: Jurassic Park</td>
<td>$72,132,785</td>
<td>3,281</td>
<td>5/23/1997</td>
</tr>
<tr>
<td>19</td>
<td>The Incredibles</td>
<td>$70,467,623</td>
<td>3,933</td>
<td>11/5/2004</td>
</tr>
<tr>
<td>20</td>
<td>Finding Nemo</td>
<td>$70,251,710</td>
<td>3,374</td>
<td>5/30/2003</td>
</tr>
</tbody>
</table>

1. What genre dominates this list? (A genre is a kind of movie – comedy, action, fantasy, drama, documentary, etc.)
2. Look at the column on the chart of dates – what two times of year are most of these movies coming out? Why are these seasons the most popular for big releases?
3. How much did the highest grossing movie beat the lowest? How much higher was its intake than the lowest gross on this list? Why might this be the case?
4. Look at how the different movies varied in the number of theatres they were showing in during their first weekend. Which movies were successful despite being in fewer theatres?
5. Enrichment Question: Look again at the dates on the chart. What is the earliest date on the list? Why are all the movies on the list so recent?
Every four years, 32 nations compete to determine the best soccer-playing nation on the planet. The World Cup is the most popular sporting event in the world, and the 2006 tournament was no exception, drawing over 50,000 fans per match and over a billion viewers worldwide. However, there were two dubious stats in the 2006 tournament: it was the 2nd lowest scoring World Cups in history (147 goals scored, approximately 2.3 goals per game, 2nd only to 1994’s 141); and it was the most heavily punished World Cup in history (a record-shattering 345 Yellow Cards were issued, including 16 in one game between Portugal and the Netherlands!).

Look at the chart listing the 32 nations that competed in the 2006 FIFA World Cup, in order of how the ranked in the tournament. Create two circle graphs (pie charts) in Microsoft Excel – one charting the teams by how many goals they scored, and one by how many yellow cards they received (if the charts get too congested, you can use fewer teams).

Remember to include a legend and give your charts creative titles! The printers only print in black and white, so choose different patterns for each section, rather than different colors.

**Questions to Ponder 8th Grade Graphing Exploration #3**

1. Which team got the most yellow cards? How did they finish in the tournament? Which team got the fewest yellow cards? How did they finish?

2. Were there any teams with a higher number of goals scored than yellow cards received? What about the same number? How did these teams finish?

3. The teams who ranked in the bottom 16 played fewer games than the other teams on the chart. How do these teams compare to the top 16 teams in terms of goals scored? Yellow cards received?

4. How did teams like Portugal (7 goals) finish better than teams like Argentina (11 goals) or Brazil (10 goals)? What could have been different about their playing styles or strategies? (or their opponents?)
## 8th Grade Graphing Exploration #3 (continued)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Team</th>
<th>Goals Scored</th>
<th>Yellow Cards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Italy</strong></td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td><strong>France</strong></td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td><strong>Germany</strong></td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td><strong>Portugal</strong></td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td><strong>Brazil</strong></td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td><strong>Argentina</strong></td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td><strong>England</strong></td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td><strong>Ukraine</strong></td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>9</td>
<td><strong>Spain</strong></td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td><strong>Switzerland</strong></td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td><strong>Netherlands</strong></td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>12</td>
<td><strong>Ecuador</strong></td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>13</td>
<td><strong>Ghana</strong></td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>14</td>
<td><strong>Sweden</strong></td>
<td>3</td>
<td>10</td>
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<tr>
<td>15</td>
<td><strong>Mexico</strong></td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>16</td>
<td><strong>Australia</strong></td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>17</td>
<td><strong>Korea Republic</strong></td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>18</td>
<td><strong>Paraguay</strong></td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>19</td>
<td><strong>Côte d'Ivoire</strong></td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>20</td>
<td><strong>Czech Republic</strong></td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>21</td>
<td><strong>Poland</strong></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>22</td>
<td><strong>Croatia</strong></td>
<td>2</td>
<td>11</td>
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<tr>
<td>23</td>
<td><strong>Angola</strong></td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>24</td>
<td><strong>Tunisia</strong></td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>25</td>
<td><strong>Iran</strong></td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>26</td>
<td><strong>USA</strong></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>27</td>
<td><strong>Trinidad and Tobago</strong></td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>28</td>
<td><strong>Japan</strong></td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>29</td>
<td><strong>Saudi Arabia</strong></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>30</td>
<td><strong>Togo</strong></td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>31</td>
<td><strong>Costa Rica</strong></td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>32</td>
<td><strong>Serbia and Montenegro</strong></td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
</table>
In the long, cold New England winters, people need a lot of energy to heat their houses. In the summer, heaters are replaced with fans and air conditioners that require a lot of electricity. When you add in the TVs, computers, lights, stoves, microwaves… energy is vitally important to our everyday lives. Where does all this energy come from? The sun? Water? The wind? Oil? Nuclear reactions? There are several different sources of energy, each with their own advantages and disadvantages.

Five different categories of energy resources are listed on the chart below, along with the percentage of the total United States energy consumption that resource provides us with. Create a circle graph (pie chart) in Microsoft Excel to display this data.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum (oil)</td>
<td>39.9%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>23.1%</td>
</tr>
<tr>
<td>Coal</td>
<td>22.6%</td>
</tr>
<tr>
<td>Nuclear Electric</td>
<td>8.3%</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Remember to include a legend and give your charts creative titles! The printers only print in black and white, so choose different patterns for each section, rather than different colors.

Questions to Ponder 8th Grade Graphing Exploration #4

1. How are oil and coal formed? Where do we find oil, coal, and natural gas? Why do we need to find alternatives to these sources of energy? How do you think these percentages will change in the future? (More coal? More nuclear?)

2. What makes an energy source “renewable?” One example of “Renewable Energy” is hydroelectric power (water power) from rivers and waterfalls. Another is composting and the burning of trash. Can you think of others?

3. How does nuclear power work? Why does this technology contribute less of the total energy than oil and coal?

4. “Most of the earth’s energy comes from the sun.” Is solar power the only way the sun gives energy? How does the sun play into the making of coal? Oil? Wind?

5. Wind power (a renewable source) accounts for less than 1% of global energy production. What are the advantages and disadvantages of windmills?

6. What is necessary to make solar panels effective? What are the drawbacks?
Almost every 16 year-old looks forward to getting his or her driver’s permit. Permits and licenses are important in a world where driving is becoming more necessary every day. From the following data, construct a column graph that expresses how many miles are traveled in a car by an average person each year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Miles traveled in a car by one person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>3250</td>
</tr>
<tr>
<td>1980</td>
<td>3500</td>
</tr>
<tr>
<td>1984</td>
<td>3780</td>
</tr>
<tr>
<td>1988</td>
<td>4300</td>
</tr>
<tr>
<td>1992</td>
<td>4900</td>
</tr>
<tr>
<td>1996</td>
<td>5005</td>
</tr>
</tbody>
</table>

**Hint:** Plot the year in the x-axis and the miles traveled in the Y-axis

(The x-axis is always the data that does not depend on the other information. In this case, the x-axis is the year. Do the miles traveled affect the year? No. Does the year affect how many miles each person travels in his car? Yes. Years go by, regardless of how much people travel.)

Remember to add a title (suggestion: Miles Traveled in a Car by One Person Each Year) and to label the axis!

**Questions to Ponder**

1. In what year did people travel the most?
2. In what year did people travel the least?
3. Over the years, have people traveled more or less? How can you tell?
4. Do you think that the miles traveled will increase/decrease this much forever? Why or why not?
5. (Challenge) From 1976 to 1996, has the amount of miles traveled doubled? If not, how many more miles would people have to travel in 1996 to make this true?
Which country reads the most? While it’s hard for us to calculate how much everyone all over the world reads, we CAN count how much money people spend on books (why?). Which countries do you think buy the most literature every year? Make a few guesses before reading the data table below, which describes how many millions of dollars the citizens of each country spent on books in 1999. Then make a graph, and answer the following questions if you have time.

<table>
<thead>
<tr>
<th>Country</th>
<th>Amount Spent on Books ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>26,786</td>
</tr>
<tr>
<td>Denmark</td>
<td>374</td>
</tr>
<tr>
<td>Spain</td>
<td>2,411</td>
</tr>
<tr>
<td>Japan</td>
<td>9,913</td>
</tr>
<tr>
<td>China</td>
<td>2,387</td>
</tr>
<tr>
<td>Mexico</td>
<td>614</td>
</tr>
<tr>
<td>France</td>
<td>2,840</td>
</tr>
<tr>
<td>Norway</td>
<td>566</td>
</tr>
<tr>
<td>South Korea</td>
<td>1,740</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>4,611</td>
</tr>
</tbody>
</table>

Remember a title, the axes, and patterns, (your printer may not have colors). Put your name at the top and check for mistakes, especially spelling mistakes! Print your graph.

**Questions to Ponder**

Which country spent the most on books in 1999? Which country spent the least?

What are a few factors (causes) that influenced how much each country spent?

Who spent more on books, France or the United Kingdom?
Rita Book, one of Andover’s biggest bookworms, recently picked up a copy of the new Harry Potter book. She immediately began to read the book. As time progressed, the number of pages left in the book decreased. Using the data below, make a line graph of Rita’s progress through the latest Harry Potter adventure. Use “time” on the x-axis and “pages remaining” on the y-axis (why?).

<table>
<thead>
<tr>
<th>Time (minutes)</th>
<th>Number of pages left in the book</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>840</td>
</tr>
<tr>
<td>60</td>
<td>800</td>
</tr>
<tr>
<td>90</td>
<td>729</td>
</tr>
<tr>
<td>120</td>
<td>650</td>
</tr>
<tr>
<td>150</td>
<td>650</td>
</tr>
<tr>
<td>180</td>
<td>650</td>
</tr>
<tr>
<td>210</td>
<td>540</td>
</tr>
<tr>
<td>230</td>
<td>536</td>
</tr>
<tr>
<td>250</td>
<td>403</td>
</tr>
</tbody>
</table>

- Remember to add a title and to label the axes with units!
- Use patterns and 3-D options, not colors, because the printer may not print color.
- Check your graph for spelling and other errors, then print.

There are three main kinds of line graphs. They have:

- Positive correlation (for the most part, as x gets bigger, y gets bigger, so the line moves towards the upper right-hand corner of the graph).

Example: The amount of time a hamburger sits on the grill vs. how well cooked it is (As MORE time passes, the hamburger gets MORE cooking).

- Negative correlation (as x gets bigger, y gets smaller, so the line moves towards the lower right-hand corner).

Example: Amount of time spent shopping at the mall vs. money left in your pocket (As you spend MORE time shopping, LESS money remains).
7th Grade Graphing Exploration #3 (continued)

-No correlation (as x gets bigger, y gets bigger OR smaller OR both because there is no relationship between x and y).

Example: How well the Red Sox are playing vs. how much I clean my room (These two values have NOTHING TO DO WITH EACH OTHER!!!)

So…

1. What kind of correlation does this graph have if Rita plays baseball? Why?
2. Name events or phenomena that have negative, positive, and no correlation. Give an example of each.
3. What was the average reading rate for Rita? (Hint: the units are pages/minute. Therefore, you should divide the total number of pages by the total number of minutes it took her to read them, giving you pages per minute.)
As a present, I received a few shares of stock in the America Online company. The point of stock is to buy shares, or a small piece of the company (or get them free as gifts!), at a low price and sell them at a high price. That way, you make money. Imagine it this way: you go to a store and buy juice boxes for 50 cents each. Then you sell them in front of your house for a dollar. That way, you make a profit, or a gain. But what if no one will buy the juice boxes for more than 25 cents? Then you lose money. You have two choices at this point: sell the juice now before people are only willing to pay a dime, or wait until the temperature increases and customers are willing to shell out a dollar. This double-line graph exploration presents two different stocks and their approximate values over a five-year period. Using the data table below, construct a double-line graph showing the cost per share of the America Online and Disney companies and answer the questions.

<table>
<thead>
<tr>
<th>Date</th>
<th>Average price per share, Disney ($)</th>
<th>Average price per share, AOL ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>1995</td>
<td>17.9</td>
<td>6.3</td>
</tr>
<tr>
<td>1996</td>
<td>22</td>
<td>7.1</td>
</tr>
<tr>
<td>1997</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>1998</td>
<td>34.9</td>
<td>9</td>
</tr>
<tr>
<td>1999</td>
<td>30</td>
<td>79.9</td>
</tr>
<tr>
<td>2000</td>
<td>38</td>
<td>51</td>
</tr>
<tr>
<td>2001</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>2002</td>
<td>20.2</td>
<td>13</td>
</tr>
</tbody>
</table>

-Remember to add a title and to label the axes!
-Use patterns and 3-D options, not colors, because the printer may not print color.
-Check your graph for spelling and other errors, then print.

Questions to Ponder (After the graph is printed)

6. In what year was AOL the highest? The lowest? When was the best time to sell this stock? What about Disney?
7. Between which years did AOL decrease? Disney?
8. What isn’t the line straight? In other words, what factors do you think affect stock price?

Make a fraction of the change in dollars over the change in years. The units of your answer will be in dollars/year.
Have you ever seen anyone walk around with a Dunkin’ Donuts cup? How about a Styrofoam McDonald’s cup? Seattle’s Best? Starbucks? Without doubt, Americans love their coffee— we drink coffee from the cheap, fast food variety to the rich, hand-brewed sort. Not surprisingly, the United States is the number one consumer of coffee in the world. What other countries consume a lot of coffee? In this data table, we consider the top ten coffee-consuming countries as of 2003.

**Make a pie graph**

Use Values not Percent

Make a Key for the Countries. Use patterns in the key

<table>
<thead>
<tr>
<th>Country</th>
<th>Amount of Coffee Consumed (1000 tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1,121</td>
</tr>
<tr>
<td>Brazil</td>
<td>765</td>
</tr>
<tr>
<td>Germany</td>
<td>567</td>
</tr>
<tr>
<td>Netherlands</td>
<td>95</td>
</tr>
<tr>
<td>France</td>
<td>319</td>
</tr>
<tr>
<td>Italy</td>
<td>307</td>
</tr>
<tr>
<td>Spain</td>
<td>188</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>138</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>98</td>
</tr>
<tr>
<td>Japan</td>
<td>404</td>
</tr>
</tbody>
</table>

- Remember to add a title! Include your first and last name in the title.
- Check your graph for spelling and other errors, then print.
- Use the same information and make a pie graph using Percent.

**Questions to Ponder** (After the graph is printed)

1) Which country consumes the least amount of coffee?
2) Which is the third largest consumer?
3) What are a few reasons a country buys a large amount of coffee? (think: population, economy, socio-economic values…)
7th Grade Graphing Exploration #6

Name ______________  Period _________ Date ________  Pie Graph #2

Were any of you asked last week what your favorite color was? If so, here we show the results. Have you ever wondered what percent of people in PALS have the same favorite color as you? With this graph, we will see how many people liked each color, and how that data translates into the part of a whole, or a percent. Use the following data table to create a pie graph, and then start analysis!

<table>
<thead>
<tr>
<th>Color</th>
<th>Number of People Who Favor This Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>12</td>
</tr>
<tr>
<td>Red</td>
<td>4</td>
</tr>
<tr>
<td>Gold</td>
<td>1</td>
</tr>
<tr>
<td>Black</td>
<td>4</td>
</tr>
<tr>
<td>Grey</td>
<td>1</td>
</tr>
<tr>
<td>Green</td>
<td>3</td>
</tr>
<tr>
<td>Purple</td>
<td>2</td>
</tr>
<tr>
<td>Yellow</td>
<td>1</td>
</tr>
<tr>
<td>Pink</td>
<td>2</td>
</tr>
</tbody>
</table>

- Remember to add a title that includes your first and last name (for example: Favorite Colors in PALS by Jose Luis).

- Use patterns and 3-D options, not colors, because the printer may not print color (you can color the sections and the key in AFTER you return to your classrooms, if you wish).

- Check your graph for spelling and other errors, then print.
ENRICHMENT ACTIVITIES
ENRICHMENT ACTIVITIES
OVERVIEW
1:00 to 2:50 FRIDAYS

Friday afternoons are a time to participate in a group activity that enriches the curriculum in areas related to natural and environmental science, drama, dance, arts and crafts, world cultures, math and careers. Activities are led by Interns who have a special talent in the area.

**Week 1**
- 7th Grade: Drama: Hand Puppets Shows
- 8th Grade: Natural Science- An Outdoor Treasure Hunt

**Week 2**
- 7th Grade: Math/Science: Orienteering
- 8th Grade: Careers: Trip to Wyeth Pharmaceuticals in AM

**Week 3**
- 7th Grade Natural Science- An Outdoor Treasure Hunt
- 8th Grade: Math/Science: Orienteering

**Week 4**
- 7th and 8th Grades: Science- Bus to the Museum of Science in Boston
PUPPET SHOWS

Description of the Activity

The purpose of the activity is to encourage creativity in both Interns and children. The group is split up into 4 teams, with two Interns per team. Puppets are used as props to convey the stories and ideas of the teams in a brief, 4-5 minute play. Teams are allowed flexibility to choose one of the two possible suggestions below, however, no gratuitous violence, put downs, or dramatizations of actual people are allowed. (Please use good judgment).

Ideas to choose from:

- Reenactment of a favorite/significant scene from a book or movie.
  - Example 1: The scene where Harry Potter finds out he was accepted into Hogwarts.
  - Example 2: The scene in Captain America, where he attains his powers.
  - Example 3: Scene from the Jungle Book where Moguli decides to join the human village.

- Any storyline they wish, but it must be fluent and captivating. (Must be approved by Interns)
  - Example 1: Magic Koala Bear finds a shoe that gives him flying abilities.
  - Example 2: A man finds out he has invisible powers, creating a moral dilemma—should he live a life of crime or a life of selflessness?
  - Example 3: Characters are transported back in time, what will they do?

Puppet Shows Schedule

1:00-1:15: Introduction, Group Forming, Practice Area Location

1:15-2:15: Planning and Guidelines

- Everyone must have a speaking role.
- Interns may narrate
- Narration: What is the character doing?
- Setting: Where are you located?
- Back-story: How did the character get here?

- What is this story from? What movie?
- No pointless stories
- Performance must not exceed 5 minutes

- Brainstorm
- Assign roles
- Write Down scripts (Interns must do this)
- Practice

2:15-2:45: Puppet Shows
NATURAL SCIENCE
TREASURE HUNT

Your name _______________
Intern____________________
Month____________________

Upon completion of the trip around a nearby pond, ask the groups to compare what they saw. Does the time of year make a difference? Why?

Place a check after the things that you find or see.

**Birds**
- Canada Goose
- Blue Jay
- Cardinal
- Robin
- Starling
- Sparrow
- Mallard Duck

**Pond Life**
- Painted Turtle
- Catfish
- Sunfish
- Dragonflies
- Bullfrog
- Water Bugs
- Algae

**Plants**
- Cattails
- Skunk Cabbage
- Dandelion
- Clover
- Black Raspberries
- Bittersweet
- Deadly Nightshade
- Mullen
- Moss
- Poison Ivy!
- Purple Loosestrife
- Queen Anne’s Lace
- Rhododendron

**Trees**
- Elm
- Sugar Maple
- Red Oak
- Apple
- White Birch
- Red Maple
- White Pine

**Under Rotten Logs**
- Sow Bug (Pill Bug)
- Centipede
- Earthworm
- Black Beetle
- Black Ant
- Red Ant
- Snail
- Salamander

**Rocks**
- Granite
- Mica
- Quartz

**Other Insects**
- Honey Bee
- Japanese Beetle
- Wasp

**Miscellaneous**
- Pine Cone
- Mushroom
- Spider Web
- Acorn
- Indian Pipe
- Regular Bird Feather
- Down Bird Feather
- Bracket Fungi

**Write in anything not listed that you saw:**
**ORIENTEERING**

A Friday afternoon enrichment activity to do in small groups

**IN A CLASSROOM; Two or three Interns explain and review:**

1. Review that a circle is measured in degrees.

2. Divide a circle into quadrants.
   - Explain that each quadrant of a circle is 90°
   - Review arithmetic
     
     \[90° + 90° = 180°\]
     \[180° + 90° = 270°\]
     \[270° + 90° = 360°\]
   - Summary
     
     \[90° + 90° + 90° + 90° = 360°\]

3. Introduce a compass.
   - Explain that it is marked with both degrees as well as the directions North, South, East, and West.

4. Explain.
   - North is located at both 0° and 360°
   - East is located at 90°
   - South is located at 180°
   - West is located at 270°

5. Introduce the abbreviations.
   - N, NE, E, SE, S, SW, W, NW

6. Between each cardinal direction (North, East, South, and West) is a general direction, which is named after the cardinal directions that it is located between. For example, Northeast is between North and East. Specific angle ranges for each general direction are as follows:
   - 1° – 89° is Northeast (NE)
   - 91° – 179° is Southeast (SE)
   - 181° – 269° is Southwest (SW)
   - 271° – 359° is Northwest (NW)

7. Explain how to find North.
   - The red needle always points North.
   - Twist the face of the compass until the red needle is touching 0°. The compass is now facing North. If done correctly on the RED compass, the red needle should be between the two white dots on the compass’ face. If done correctly on the BLUE compass, the red needle should be directly on top of the wide blue arrow in the circle.
ORIENTEERING (continued)

8. Practice using the compass (to **find** a direction).
   - Pick a spot in the room you want to find the direction to.
   - Hold the **RED** compass so that the red arrows on the plastic base point to that spot in the room. The **BLUE** compass should be held so that the thin blue arrow on the base points to that spot in the room.
   - Twist the face of the compass so that the red needle is facing North (touching 0°). **Do NOT move the base of your compass as you are doing this.**
   - Now, still holding the **RED** compass in the same position, the clear arrow and red line in the middle of the plastic base will tell you what the degrees your spot in the room is located at. There is also a longer white line within the dial that indicates the degrees. The end of the thin blue arrow on the base of the **BLUE** compass also indicates the degrees. The **BLUE** compass also has a white line within the dial.

9. Practice using the compass (to **follow** a direction).
   - Pick a degree.
   - Align the compass so that the needle is pointing North.
   - While keeping the face of the compass stationary, twist the base of the compass until the white line within the dial is touching your example degree. On the **RED** compass the red arrows point in the direction you should go. The thin blue arrow in the **BLUE** compass also points in the direction of the degree you chose.

ORIENTEERING ACTIVITY OUTSIDE

1. You will be placed into six teams of 4 to 5 people.

2. Each team will receive a stack of cards. Each card will contain a degree and a number of steps.

3. Your team needs to follow each card which will lead them through a series of directions. After following the direction on each card, you should find a colorful post-it note. Each team will be given their own color.

4. Because each person has a different stride length, it is important for each member of the group to keep track of his or her own paces so that the team has a better chance of finding their post-it note. This also means no running because a. it is harder to keep count of your paces and b. your strides are longer while you run, so the total number of paces will be inaccurate.

5. Once you have followed all of your team’s cards, you must return to the start for a prize.

Sample cards
Starting at Point A, go 200 paces 40 degrees North to a certain point B.
From Point B, go 100 paces NW to a certain Point C
Etc…
10. Find 256° and walk 131 steps
ORIENTEERING (continued)

Orienteering final stop and Prizes!
The purpose of this yearly visit is to introduce career options, in this case, relative to the drug industry.
TENNIS

All PALS 7th Graders learn to play tennis during the Monday, Tuesday, Thursday and Friday Sports time. 8th Graders may choose to continue playing tennis their second summer or they may choose to play basketball.

**Weeks One and Two Tennis Goals for 7th Graders:**

---Learn the two important grips:

1) Continental
   “Shake hands with the racquet”.
   Useful for volleys, forehand, backhand, bounced balls inside the service line and serve

   Activities for Continental:
   a) *With a partner*, one tosses and catches, the other taps a forehand volley then a backhand volley (switch roles after ten of each).
   Which pair can do ten reps in a row without mistakes?
   b) *With a partner*, one tosses underhand, the other lets it bounce and taps a forehand chip and then a backhand chip (switch roles after ten of each).
   Which pair can do ten reps in a row without mistakes?
   c) *Pairs of hitters on opposite sides of the net*, a short ball rally with Continental off a dropped feed (which pair can keep it going longest inside their service box?)
   d) Overhand service motion and **graduating** racquet length (*everybody on the same side*) — Make the racquet turn upside down at the end of the service motion; learn this with a slow, gentle hit and VERY slow follow through after touching the ball.

2) Semi-Western
   “Pick up the racquet off the ground”.
   Useful for baseline forehands.

   Activities for Semi-Western:
   *Hitters all on one side of the court:*
   1) The Instructor drops the ball from a position further out to the forehand side. The hitter works on getting topspin, with elbow-point follow-through.
   2) The Instructor tosses the ball from the opposite side of net.
   *Pairs of hitters on opposite sides of the net*
   1) Alternate the pairs and take turns being hitters; the doubles pair on each side tries to keep the ball in play.
   2) Rallying with two on a side and a **graduating** length of swing: start from the “contact point” and just hit and follow through, then do a round with “take-back” (racquet pointing to the back fence before the stroke).
TENNIS (continued)

Weeks Three and Four Tennis Goals for 7th Graders

Present: Backhand:
One-handed drive using Eastern backhand grip.
Two-handed drive with ready position, using Continental
turn and drop both hands, putting racquet into “sword position”
turn hand on handle to “knuckles up”

1) Toss from same side, from out to the racquet side, keeping ball low and in front, two balls per
student; the student starts from contact point and hits just by following through high, with
racquet in “L” position.
2) Move students further back toward the baseline and continue tossing from close to them on
the racquet side, but this round they hit from “sword position.”

Review: forehand and backhand groundstroke grip changes

Drill: With pairs of hitters on opposite sides of the net:
1) The instructor tosses to alternating partners; the doubles pair on the other side tries to keep the
ball in play.
2) Rallying with two on a side, graduating the length of the swing: start from “contact point”
and just hit and follow through, then do a round with “take-back” (racquet pointing to back fence
before stroke).
TENNIS (continued)

Game:  
“Hero”—With two students at one baseline, spaced; toss to them, alternating hitters and giving both forehands and backhands; they try to rally with a single player on the other side; depending on his/her skill level, he or she defends the singles or doubles court. Keep track of the score, with the ball becoming live after the initial hitter gets it in.

Review:  grip changes:  Continental (serve) to Semi-Western forehand or Eastern backhand (ground-stroke) to Continental (volley/overhead)  
1) The importance of ready-position between shots.  
2) Decide where the ball is going and decide on the grip.  
3) Turn and move to the ball while making grip change.

Drill:  Serve/Groundstroke/Volley combination:  three-on-a-side lined up to take turns with the instructor feeding two balls after students serve:  forehand-then-volley or backhand-then-volley

Some tennis racquets stored until the next day
Volleyball is played by students and Interns during free time after lunch.

There is no formal instruction or rules! Many play on both sides of the net and hit the ball as many times as they wish!
Swimming is on Wednesday afternoons. All students take a swim test. Interns teach swimming to non-swimmers and better stroke production and simple diving to interested swimmers. Many also play games such as volleyball.
8\textsuperscript{th} Graders may choose to play basketball or tennis during the Monday, Tuesday, Thursday, and Friday Sports time (11:40AM - 12:20PM). Instruction is given as well as drills to practice. Informal games are frequently played.
SCIENCE INVESTIGATIONS
Science Investigations

Science Investigations for 7th Graders focus on activities exploring human physiology and the physiology of some of the PALS animals in our Science Center. Students and Interns may also take one enrichment trip to explore the natural life found on campus. The Peggy Corbett Science Intern under the guidance of the Director is in charge of the afternoon science program which meets three times a week from 1:30 to 2:50.

Interested students may handle the animals with supervision during free time from 1:00 to 1:25. Some representative animals have been mice, turtles, frogs, goldfish, a snake and a rabbit.
TEACHER GUIDELINES
Science Investigations

1. Science Investigations take place every Monday, Tuesday, and Thursday of the week.

2. Every student notebook needs a title page, a Scientific Investigation Steps” handout, and a “How to Write a Scientific Paper” handout.

3. Each student does his or her own write-up.

4. Make sure all student notebooks are up to date.

5. Stress scientific steps to students as frequently as possible. Encourage them to use words such as hypothesis, conclusion etc.

6. Stress the importance of data collections and chart format (how to effectively organize data).

7. Familiarize yourself with investigations ahead of time.

8. Plan ahead what investigation you plan on doing (before 1:30 P.M.) and let the Director know if any materials need to be gathered ahead of time.

9. At the end of the day, update the whiteboard chart on each groups progress and what is planned for the next science meeting.

10. Spread out when doing investigations, so that there is plenty of space for each group.

SCIENCE INVESTIGATION TOPICS
1. Heart Rate Recovery
2. Heart Rate and Body Size
3. Blood Pressure
4. Genes
5. Right or Left Eye?
6. Lungs Vital Capacity
7. Smell
8. Taste
9. Touch
10. Sight
11. Memory

As time permits, each group of two or three students to one Intern, will choose 3 to 4 Investigations over the course of two weeks.

*Science write-up in progress*
SCIENTIFIC INVESTIGATION STEPS

1. Make an Observation.

2. Ask a Question about the Observation.

3. Propose one or more Hypotheses (educated guesses) that might answer your Question.

4. Make a prediction “if..., then...” based on each hypothesis

5. Test the prediction made from your hypothesis. (procedure)

6. Conclusion: do the test results support the hypothesis? - yes? or no?

The Science Investigations Schedule
HOW TO WRITE A SCIENTIFIC PAPER

I. Introduction:
   What was my work about?
   What was my hypothesis?

II. Materials and Methods:
   What materials did I use?
   How did I do the experiment?

III. Results:
   Data Table and Graph(s)

IV. Discussion:
   What do the results mean or show?
   Do you support or reject the hypothesis?
   What mistakes could have been made? (experimental error)
   How could I improve the experiment?

V. Conclusion:
   In one sentence, what did the results show me?

A brief scientific paper is written after collecting data in the investigation. The paper, data tables, and graphs are added to the student’s Science Folder. Excel is used to complete graphs.

Memory Investigation
ANIMAL RULES FOR PALS

To ensure your safety and the well being of our animals, we ask for you to follow these rules:

1. If you want to handle or feed any of the animals, PLEASE ask any adult who is in charge of the animal(s) for assistance.

2. Use common sense when handling the animals. Treat them as you wish to be treated.

3. Be considerate of others who wish to handle the animals. Everyone has the right to handle the animals as you do.

4. Most importantly, HAVE FUN!!!!

A Rabbit Tasting Investigation with Vegetables

A Rabbit Tasting Investigation with Fruits
SAMPLE INVESTIGATIONS

Note: more investigations are available. If interested, please e-mail tcone@andover.edu

SAMPLE #1:
Determination of Heart Recovery Rate after Exercise

Step 1
Observation: After exercise, elevated heart rates seem to return to normal.

Question: How long does it take your heart rate to return to normal after exercise?

Hypothesis: My heart rate will recover to normal in a few minutes.

Prediction: If I sit still, then my heart rate will return to normal,

Test: Decide as a group how you will record your data. Design a way to record (Procedure) it neatly so that anyone might be able to understand what has been recorded.

Determine your heart rate at rest. Take your pulse for fifteen seconds and then multiply it times four (why?). Get an average by taking your pulse three times.

The first data on your data sheet is your average heart rate which you have now already taken.

Now go outside with your equipment. (clipboard, data sheet, calculator, stopwatch, and pencil)

Jog for one minute or run up and down stairs to get your heart rate elevated.

Measure your now elevated rate and record it as your starting minute.

Continue measuring your heart rate each minute for five more minutes. Your data should show your heart rate recovering.

Conclusion: What conclusion can you make from the hypothesis? Do you support or reject the hypothesis? Explain.

Step 2 Write a scientific paper on this experiment. Look at your How to Write a Scientific Paper handout.
SAMPLE #2: Jumping Comparison Between Frogs and People

Step 1
Materials: Frog, brown tape, graph paper, ruler, pencils, tape measure, calculator, frog muscles picture, people muscles picture

Look at pictures of muscles in legs of people and of frogs. Frogs have very similar muscles. Plan the experiment and collect data and do a graph if time permits. (You need a bull frog and a closed corridor and a person who knows how to hold frogs)

Read Aloud
Observation: Frogs jump and people run when they are frightened.

Question: Can a frog jump a greater distance compared to its body length than a person? (What do you think?)

Hypothesis: Frogs can jump a greater distance proportionally to their length, than humans. Can you define proportional? Have your Intern help if needed.

Procedure: Have one student measure the length of the frog in inches from nose to tail.

Measure your height in inches and record it.
Then layout where students will start to jump. Take a running start then jump. Have one person mark where the jump ends and another record it. Record three jumps per student and determine the average. Have the frog jump and measure each jump to find the longest one.

Compare the percent of the length of the jump to the length of the frog. (For example does the frog jump twice its’ length i.e. 200% of its’ length?) Do the same for students.

Do a Bar Graph comparing each students’ and the frog’s percent of its length that it jumps.

The frog and each person tested will be on the x-axis and the percentage comparisons to the body lengths will be on the y-axis)

Conclusion: Do your results support the hypothesis?

Step 2 Write a scientific paper on this experiment.
SAMPLE #3:
CAN SHORT TERM MEMORY BE IMPROVED?

**Step 1**
Observation: Some people have a better memory than others of things they have had just a short time to see or hear.

Question: Are people who remember more using some tricks or gimmicks to help them?

Hypothesis: Certain tricks or gimmicks will help you learn more.

Prediction: If I use a trick or gimmick, then I will remember more items I see.

Procedure: Do an experiment on people. Show some people a tray of about 15 items for one minute. Decide what items. For example a spoon, pencil, sticker, pen, button, comb, scissors, envelope, watch etc.

After one minute, ask each person to write down the items he or she saw. Record how many items they remember.

Now show the same person a second tray, but before they see it, give them tips for memorizing such as
- grouping items by color
- grouping items by the letter they begin with
- making a story or a rhyme using the objects

Decide what items you will have on the second tray.

Now let them see the second tray for one minute. Next ask them to write down the items they saw. Record how many they remember. Did they remember more this second time?

Planning: What materials will be needed?
How many people will you test?

How will you organize your data?

Conclusion: Was my hypothesis supported or not?

**STEP 2**

Write a Scientific Paper on this experiment.

In Section III Results: Do a column graph with “No Tricks” and “Tricks” on the x-axis and the average number of items remembered on the y-axis.
SAMPLE #4: COMPARISON OF PEOPLES’ LUNG VITAL CAPACITY

Step 1  Peoples’ Lung Vital Capacity
This is the amount of air you can breath in and then out with the strongest possible inhalation and then the strongest possible exhalation.
Get background Information on the lungs: See pp.108 to-111 The Human Body Explained, Drawings, Charts, Plastic handouts etc.

Question  Does everyone have the same lung vital capacity?

Hypotheses:  Capacity varies with age
Capacity varies with gender.
Capacity varies with height.
Others?

Prediction:  Test one of these hypotheses:

Test  Decide as a group how you will record your data. Design a way to record it neatly so that anyone might be able to understand what has been recorded. (Read all the directions first to figure this out.)

Gather materials: string, 4 balloons (one per person), clipboard, pencil, paper, calculator and yardstick.

Stretch a balloon several times
Take as deep a breath as possible
Exhale all the air into the balloon and pinch the balloon closed to prevent air from escaping.

Using a string provided, measure the circumference of the balloon in inches and record the data.

Deflate the balloon and repeat one time to get an average for yourself.

Repeat the same procedure with others.

From the circumference, now find the diameter of the balloons, using the formula \( C = \pi D \) and record this data

Using each diameter find the radius of each inflated balloon (divide each diameter in half to get the radius) and record this data.

Using each radius, find the volume of each sphere using the formula \( V = \frac{4}{3} \pi R \) and record this data. This volume represents the vital capacity of each person in cubic inches.

Data:  From your data graph your results using a column graph, using a column for each person.

Conclusion:  What conclusion(s) can you make from any one of your hypotheses? Do you support or reject the hypothesis?

Step 2  Write a scientific paper on this experiment.
SAMPLE #5: ANTI INVESTIGATION

Step 1
Observation: Ants find their way home.

Question: How do they do it?

Hypothesis: 1) They find their way home by following a leader.
2) They smell their way home by following a scent.
3) They use the sun as a compass for direction.
4) They learn landmarks to help them recognize the path to their home.

Prediction: For 1) If they follow the leader, then they should get lost if the ant(s) in front of them is removed.

Test
Find an ant home. Put some bread out at different distances. Investigate “do ants follow the leader?” Observe ants going home. Are they following each other? If so push one away and see if the one behind changes its path. Do this with 5 ants and record your data.

For 2) Investigate “do ants smell?” Wipe the dirt or the sidewalk in front of the returning ant with a wet rag to wash off any possible smells. Does this interfere with the ant’s travel? Do this with 5 ants and record your data as yes or no.

<table>
<thead>
<tr>
<th>Smell for Ant #</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
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<td>3</td>
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<tr>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

For 3) Investigate “do ants use the sun to go home? Does being in the shade have an effect? Put a piece of paper over an ant traveling. Do this with five ants and record if shade makes a difference, yes or no. Now use a mirror so the sunlight comes from the other side. Does this change the ant’s direction home? Record five ants, yes or no.

For 4) Investigate ”Do ants use landmarks around the home to locate it for their return?” Put pieces of cardboard in front of any landmarks and in front of the home. Do they still travel toward home? Record 5 ants, yes or no.

If there is time find another ant home with different type of ants (Larger ones or smaller ones or different colored ones)

Conclusions: Which hypotheses are supported? rejected?

Step 2
Write a scientific paper on this experiment. In III RESULTS make a column graph. Put the four methods that ants might use to return home on the x-axis, and the % of the 5 ants that appear to use each method, on the y-axis.
CHESS
CHESS OVERVIEW

How do the goals of PALS relate to chess as an educational commitment in the PALS curriculum?

Chess is a game of critical thinking, of problem solving, of planning for the future with short term, mid-term and long-term goals. Chess demands concentration and patience, skills that are an important part of doing well in school and succeeding in the working world. Developing these skills and approaches has always been a major focus of the PALS’ math and language arts curriculum. Chess strengthens these goals.

PALS emphasizes “hands on” learning with materials that pose problems, rather than provide answers. With chess, you have to figure out what your opponent is going to do and since that is always changing, chess is seen as suspenseful and exciting. Chess is an addition to the “hands on” learning that PALS emphasizes.

Telling students that they have to think before they move in chess and asking what is their strategy carries over into a general habit of strategic thinking in word attack strategy, writing strategies, math problem solving strategies and sports strategies. Students develop an awareness that strategic thinking is a practical way to approach almost anything that needs to be figured out.

PALS Team Chess minimizes competition and maximizes learning. Each team member earns one point for every game played and two points for every game won. All players of the team with the most points at the end of the month are awarded a chess set. This leads to improved chess skills, to confidence and pride in each student of his or her ability as a chess player, and to his or her contribution to team success as well as personal enjoyment in playing chess.
CHESS TEAMS

The Bishops   Opening Moves   Rowdy Rooks   The Sicilians   The Pawns   The Knights

Everyone is on a Chess Team.

CHESS ORIENTATION FOR CHESS TEACHERS

Chess boards are set up.

Meeting time Mondays, Tuesdays, and Thursdays 1:30 to 2:50
At 1:30 everyone meets at the large table in the 7th Grade LA Room.

Area assignments for Chess Teachers
Table #1 ______________________
Table # 2 ______________________
Table # 3 ______________________
Table # 4 ______________________
Hallway ______________________

At 1:30 there is a daily Handout assigning each Intern to one or two students and providing an individualized curriculum for the assigned students to follow with the Intern. Handouts for these curriculum activities are provided by the Chess Master Teacher and available on the large table.
Students have a different Intern each day to give them the opportunity to learn from and play different people.

From 1:30 to 2:40 every student will do some of the following.
   Maurice Ashley© Teaches Chess on the computer
   A solitaire game
   A sample game to follow
   An opening
   A middle game
   An end game
   Play with a teacher

At 2:40 anyone who wants to play chess on a computer or with a person may do so.
USE OF MAURICE ASHLEY©

Chess Teachers have time during Orientation to become familiar with the Maurice Ashley© program. When working with students who are using the program use the dual or triple headphone at all times and check understanding as needed. This is an opportunity to make this time an interactive learning process.

Feedback: On your daily Handout sheet, please write, in broad terms, what you did with each student, how much was learned and what you might recommend for the next chess session and return it to the Master Teacher. This is a big help in planning individualized assignments.

“OPENING PRINCIPLES”

Things to DO in the opening:
1. Control the center of the board with your pieces.
2. Castle your King early in the game.
3. Develop your Knights and Bishops quickly.
4. Use your two center Pawns (“d” and “e” Pawns) to help control the center.
5. Try to always attack.
6. Try not to make moves that your opponent will make you take back by attacking you.

Things NOT to do in the opening:
1. Do not make a lot of Pawn moves (especially the “a” and “h” Pawns) without a good reason.
2. Do not keep moving the same piece when you have not developed your other pieces.
3. Do not bring your Queen out too early (there are exceptions but not many).

SOME GUIDELINES FOR TEACHERS

-When playing with your student try not to beat them badly. Help them win sometimes!
-Give tips to help them avoid poor moves or to help them see opportunities.
-If they want to make a move (good or poor) ask them what strategy they have in mind.
-Try to help them think two or three moves ahead (both their moves and the possible moves of their opponent.)
-Do all that you can to help them to follow the opening strategies listed above.

CHESS FREE PLAY TIME 2:40 to 2:50

Clean-up at 2:50
Please leave chess boards set up for tomorrow. Everyone, students and Interns help with clean-up.

Saving of a game is OK if the players are going to return at free time the next day. In general, games may not be saved. If someone wants to “save” a game they can record it on the blank chess sheets available.
**Bug House Chess**

*Bug House Chess in action!*

**Set up**

Two boards are set up for four players as follows:

Team A Player 1
  Black

Team A Player 2
  White

Team B Player 3
  White

Team B Player 4
  Black

**Rules**

The game is played by two teams of two players each. This requires that two chess boards be placed side by side with partners sitting on the same side of the table. For each team, one player plays with white pieces and the other with black.

When a player captures a piece he or she gives it to one’s partner. The partner can “drop” the piece on any empty square at anytime instead of making a board move.
BUG HOUSE CHESS (continued)

If the captured piece is a pawn it cannot be dropped on the 1st or 8th rank.

You can talk to your partner. For example you might say “I need a Knight.”

Each side gets 5 minutes of play. Set the clocks at 5 minutes to 5 o’clock. The game starts with both blacks hitting their clocks and both whites starting to play by making a move.

Immediately after moving, whites must hit their clock with the **SAME** HAND THAT TOUCHED THE PIECE THAT WAS MOVED. Players must always hit the clock with the **SAME** hand that moved the piece.

The game is won when the other team runs out of time OR one team checkmates.

There is no rule on exactly when you must hand your partner the captured piece, it may be done before or after you hit the clock.
TEACHING STUDENTS **NEW** TO CHESS

Have your student(s) sit at a chess board. “Scramble” all the pieces in the middle of each board and be sure that they know the names of every piece. Teach them how to set up a board if needed.
Scramble the pieces again and have each student set up a board, i.e. do it twice if you have two students. Do it more times if they still need help the first time.
***Note that the piece on A-1 is the White Rook***

Explain that White always goes first.

Show your students how each piece moves than ask them to show you.

Explain the value of each piece.

HEADPHONES

Then go to a computer for Maurice Ashley© (use two headphones, one for you and one for your student). Please listen in at all times on the extra headphone so as to coach or just applaud your student.

You can skip Basics and Go to Challenges. Start Level 1 of all the Challenges: Seek and Destroy, Touch Down, Wolf, Escape, Avoid The Sack and Board Vision

When finished with Level 1 Challenges write on your assignment Handout what you did so the Chess Master Teacher can plan accordingly for the next session. At the end of each session, Interns give this assignment Handout with comments on progress to the Master Teacher.
Go to the MAIN MENU You will see four choices.

Choose COACHING You will see four choices.

Choose CHALLENGES You will see six game exercises each with three levels.

Do each game at your appropriate level.

They are
SEEK AND DESTROY
TOUCHDOWN
WOLF
ESCAPE
AVOID THE SACK
BOARD VISION

Go back to MAIN MENU

Choose COACHING

Choose STRATEGY You will see eight game exercises.

Do each one for a few minutes.

They are
CHECKMATE
CONTROL OF THE CENTER
DEVELOPMENT
EXCHANGE
PASSED PAWNS
TRAPPED PIECES
OPEN LINES
WEAK SQUARES

Go Back to MAIN MENU

Choose MASTER GAMES
Paris 1858 Hastings 1895 New York 1956
Belgrade 1970 Moscow 1968 Nottingham 1936
Dubna 1973 Moscow 1945 Moscow 1935
Moscow 1985

Go back to the MAIN MENU.
To play a game of Chess choose PLAY CHESS from the MAIN MENU
You can play against a person or against the computer.
7th GRADE TYPING PROGRAM
7th GRADE TYPING PROGRAM OVERVIEW

The 7th Grade typing program is integrated into the Language Arts curriculum several times each week. Computers are available for optional typing practice during free time after lunch. A Typing Chart for the 10’s, 20’s, 30’s 40’s 50’s 60’s “Club” is on the classroom wall to keep track of progress.

STEPS IN TEACHING TYPING

Introduce the keyboard template.

Teach home keys and finger placement.

Have students pretend it is real and “type” on it.

Memorize the keys eyes open then closed saying them aloud.

Start the Typing Program when the keyboard is memorized.

Listen in with headphones when students start the Typing Teacher© program and help them maximize learning. (You should be familiar with the program in order to do this).

Encourage joining the 10’s, 20’s, 30’s, 40’s, 50’s, 60’s “Club”. Track progress on the Typing Chart.
GIRL TALK
GIRL TALK OVERVIEW

Girl Talk is a two week program providing our 8th Grade girls the opportunity to privately discuss under the guidance of a trained leader issues that teenagers encounter. The girls and their Intern leaders agree that all Girl Talk conversations will be confidential and sign a privacy contract. They gather in a room from 1:30 to 2:50, where there are no interruptions by other students, Interns, Teachers, or Director.

Day One

- Introductions
  - Name Game
  - What is Girl Talk?
  - Privacy Contract
- Question/List of the Day
  - Top Ten Characteristics of Perfect Boy/Future Spouse
- Topic of the day
  - What makes a good boyfriend/husband?
  - Celebrity crushes?
  - Looks or personality?
  - Perfect wedding?
  - Crushes

Day Two

- Question/ List of the day
  - Top 10 female celebrities
- Topic of the Day
  - Why did you list these women?
  - Do you look up to them? Why?
  - Do you think the media portrays women in a certain light?
    - What is this light?
  - Do you try to model yourself to be like these women?
  - What is the stereotypical woman?
  - What kind of woman do you want to be like when you are an adult?
  - Career? Housewife? Hobo?

Day Three

- Question/ List of the day.
  - What’s your favorite song?
- Topic of the Day
  - Does this song have a music video?
    - Describe it.
  - How are girls portrayed in music videos?
  - Should girls who dress like video girls be called hos?
    - Would you be insulted if you were called one?
  - Do you go to dances?
  - How do you dance?
    - What does this dancing mean?
  - Do you like dancing?
  - How do you dress when you go to dances?
  - Is it similar to video girls?
  - If I said draw a hot girl for me, what about you do you draw?
  - Can a girl be hot and not dress provocatively?
GIRL TALK OVERVIEW (continued)

Day Four
- Watch Mean Girls

Day Five
- Analyze Mean Girls
  - What is the movie saying about the girl world”?
  - Is it accurate?
  - Have you ever been picked on?
  - Do you gossip?
  - Is there such thing as good gossip?
    - What’s the difference between good gossip and bad gossip?

Day Six
- Question/List of the Day
  - What was your most embarrassing moment?
- Topic of the Day
  - Read excerpt from Chicken Soup for the Soul
    - Discuss
MUSIC
MUSIC OVERVIEW

WHY WE HAVE MUSIC IN PALS

Perhaps the basic reason for every child to have an education in music is that music is a part of the fabric of our society. The intrinsic value of music for each individual is widely recognized in the many cultures that make up American life – indeed, every human culture uses music to carry forward its ideas and ideals. The important of music to our economy is without doubt, And the value of music in shaping individual abilities and character is attested in many ways.

GOALS

- To expose the children to a variety of rhythm instruments from around the world
- To teach different beats setting the stage where children enjoy being active music makers
- To show students that his or her voice is a personal instrument or expression of music.
- To also show that singing is a common language world wide as well as here in the USA. This is done by a choice of songs from a variety of genres.
- To provide role models of adults who enjoy music. This is done by Interns who participate with enthusiasm

MUSIC FOR 7th AND 8th GRADERS WEDNESDAYS 11:30 to 12:30

This is a time when students and their Interns and Teachers meet by grade for singing and playing rhythm instruments. A Music Leader is responsible in each grade for planning and carrying out the music program. Each Music Leader has a Music Assistant playing a piano or guitar or accordion. Songs are selected from the 7th Grade or 8th Grade PALS Songbooks.

Everyone: Students, Interns and the Master Teacher join in singing.
MUSIC OVERVIEW (continued)

7th AND 8th GRADE MUSIC LEADERS’ RESPONSIBILITIES

11:15  Clean up for Math and Language Arts

11:25 Gather in the assigned Music Rooms by Grade

11:30 to 12:00 Singing

12:00 to 12:25 Rhythm Instruments followed by Attendance Awards and Pizza Outside

Music Leaders prepare the room set-up sometime during the morning so everything is ready by 11:30, including getting prizes from the Director’s office and snacks from the kitchen. Leaders are also responsible for supervising group clean up of music books, rhythm instruments, prizes and chairs and organizing the group transition from the Music Rooms to the pizza areas.

Each grade performs two songs at the Final Day Picnic. Leaders choose the performance songs while at the same time being open to suggestions from students and Interns about music choices and ideas for the performance. They review the performance plans with the Director.

Leaders divide students into small groups and assign them to Interns for more effective teaching. Groups sit together. When rhythm instruments are used, Interns facilitate their appropriate use. Interns MUST sing and sing enthusiastically! At the same time, Interns are serious when needed, making sure students are quiet when asked.

Each Wednesday, Music Leaders present a song list on a white board or a poster so both Interns and students know what to expect. This is done before the 11:30 starting time.

If a song chosen has a history, Music Leaders explain it during Music time. Ex: American Pie

Time will be provided during Orientation for each Music Leader to meet with the Interns assigned to their grade to explain expectations (enthusiastic participation!), to give out group assignments and to go over the information outlined above.

Music Leaders teach a song without rhythm instruments and teach another song with them. (or play rhythm instruments to a beat using background CD music) This instruction is scheduled for the second day of Orientation in order to give Leaders time to plan ahead.
Introduction: Teach the “Follow the Leader” game by clapping hands.

Combine a variety of hand clapping to create lively rhythms. Start a dialog between the different beats- try a call and response, back-and-forth, back-and-forth approach. Think of the rhythmic responses as “conversations” that go in a repetitive cycle. Recite the following conversation aloud and ask your students to clap along to the rhythm:

Three fast beats: How are you? (1,2,3)
One slow beat: Fine. (1)
Two fast beats: ...and you? (2) Etc.

Clap a simple rhythm with your hands and encourage students to mimic you as they beat a drum.

Have students experiment on sounds for each instrument group by group and instrument by instrument

The Head Teacher plays a basic pattern and points to a student to repeat it. Next time point to a group to follow.

Start with one group and one pattern then add a second group and a second pattern that sounds OK with the first pattern. Eventually add a third and fourth group and third and fourth Pattern. Listen to how great this sounds!
TEACHING RHYTHM INSTRUMENTS (continued)

Another variation puts a student in charge, promoting self-confidence and leadership qualities.

The Rhythmic Memory Game

Play a known song on the piano or from a CD and clap to the rhythm. Once students have learned to listen for the rhythm in recorded music, the well-known game of Memory (with a new rhythmic twist!) is a natural next step. When you can hear that the students are successfully mimicking the rhythm in the piece, stop the music and encourage the students to continue playing solo for as long possible. No matter how “perfectly” they perform, congratulate them for a job well done! Gaining self-confidence is as important (or more so!) than percussive excellence.

With practice playing along with favorite tunes, it is only a matter of time before they can recall the rhythmic parts without first hearing the whole piece.

INSTRUMENTS FOR PALS: 5 Groups

(I) Nagari clay drums (small, medium, and large) from India played by hand and Hand Drums all varieties found world wide.

(II) Kavaash Friction Shakers from India made with coconuts and beads. These are called Cabasa’s in Africa and are made with gourds and beads. They are called Afuche Cabasa in the Caribbean made with wood and metal beads. And Shakers found world wide.

(III) Mahoke from Vietnam A hand held wooden clam shell shaped bell/block. These are called Sambago in Africa. They are called Mokugyo in Japan and used in Buddhist temples. And Wooden Blocks all varieties found world wide.

(IV) Croakers from Vietnam and now found world wide. They look and sound like a frog. Kokiriko Japanese serpentine rattle of bamboo plates strung together. Scratchers or Scrapers wooden or bamboo or metal hand held friction scrapers. Rhythm Sticks found world wide. Clackers found world wide. Spoons mostly USA. Washboard and spoon or stick mostly USA.

(V) Triangle Jingle bells Small Cymbals
8th GRADE PALS
SONGBOOK

1. America
2. American Pie
3. Big Rock Candy Mountain
4. Blue Suede Shoes
5. California Girls
6. Dream A Little Dream Of Me
7. He’s Got The Whole World In His Hand
8. Home On The Range
9. If I Had A Hammer
10. I’ll Follow The Sun
11. It’s A Small World
12. Jamaica Farewell
13. Kumbaya
14. La Bamba
15. La Cucaracha
16. Michael, Row The Boat Ashore
17. M.T.A. Song
18. Oh, You Can’t Get To Heaven
19. Rock Around The Clock
20. Sloop John B.
21. Star Spangled Banner
22. Take Me Out To The Ballgame
23. This Land Is Your Land
24. This Little Light Of Mine
25. Try To Remember
26. Unicorn
27. When Johnny Comes Marching Home
28. When The Saints Go Marching In
29. Yankee Doodle Dandy
30. Yellow Submarine
7th GRADE PALS
SONGBOOK

1. America
2. Boom Boom Ain’t It Great To Be Crazy
3. Caissons Go Rolling Along
4. Clementine
5. Hail! Hail! The Gang’s All Here
6. He’s Got The Whole World In His Hand
7. Home On The Range
8. If I Had A Hammer
9. It Ain’t Gonna Rain No More
10. It’s A Grand Old Flag
11. I’ve Been Working On The Railroad
12. John Jacob Jingleheimerschmidt
13. Kookaburra
14. La Bamba
15. La Cucaracha
16. Michael Finnegan
17. M.T.A. Song
19. Oh, Susanna
20. Oh, You Can’t Get To Heaven
21. Once There Were Three Fishermen
22. On Top Of Spaghetti
23. She’ll Be Comin’ Around The Mountain
24. Star Spangled Banner
25. Take Me Out To The Ballgame
26. This Little Light Of Mine
27. Titanic
28. Unicorn
29. When Johnny Comes Marching Home
30. When The Saints Go Marching In
31. Yankee Doodle
32. Yankee Doodle Dandy
33. Yellow Submarine
SPIRIT DAYS
At the end of the third and the beginning of the fourth week students and Interns wear appropriate clothes entirely voluntarily!
PALS MEDICAL PERMISSION FORM

To the parents or guardian of a PALS student or Intern under the age of 18

PERMISSION FOR MEDICAL CARE

I expect that the program will use all precaution to avoid injury and will not hold Phillips Academy responsible for accidents that might occur during the program.

I hereby authorize the School Physician or other appropriate members of the clinical staff of the Health Center to provide basic medical care to my child in the event of illness or injury.

In rare instances a surgical emergency arises, in which written consent by the parent or guardian legally is required but the proper person cannot be located. In this event and in order to avoid delay which might jeopardize the life or recovery of a student or an Intern, we request the following permission from the parent or guardian, with the understanding that every effort will be made to contact you in an emergency.

I hereby grant permission to any physician or surgeons considered appropriate by the Director of PALS or a Head Teacher of PALS students, to give necessary anesthesia and perform emergency surgical procedures on

my son or daughter or ward (Please Print) _______________________________ in the event that he/she is unable to contact me and further delay might jeopardize life or delay recovery.

Date____________________________________ Signature _____________________________

Relationship____________________
Your Name and Address (Please Print) __________________________________________ (name) (address) (phone#)

Emergency person’s name, address and telephone other than a parent or guardian
Name and Address (Please Print) ____________________________________________ (name) (address) (phone#)

Any medical conditions that should be noted?____________________________________

Any allergies?______________________________________________________________

MEDICAL INSURANCE     NAME OF INSURANCE________________
(if you do not have medical insurance write “none”)
NAME OF INSURED________________
I.D. #_____________________________

Please return to the PALS Director before your son or daughter participates or works for PALS.
FINAL AWARDS

AND

PERFORMANCES

INVITATION

Final Get-Together Cookout
for Students and their Families

Friday, July ___

5:00 – 7:30 PM

at PALS Outside Area
(or in classrooms if rainy)

Music Presentations by 7th and 8th Grades,
Awards for Perfect Attendance,
Academics and the Chess Team Winner
PALS DIRECTORS’
TO-DO LIST FOR
THE SUMMER
PROGRAM

- Hire summer teachers
- E-mail teachers confirming salary and start date
- Develop the summer schedule including family events
- E-mail last year’s Interns inquiring if they wish to teach again.
- E-mail applications to PA and the local high schools for Intern positions. Include the summer schedule and a form to return.
- Send acceptances and rejections to Intern applicants
- Give handouts to 6th and 7th Grade teachers for recommendations
- Give handouts to continuing 7th Grade students for enrollment in the summer program. Include the summer schedule and a form to return.
- Give handouts via teachers to new 7th and 8th Grade students. Include a schedule and a sign-up form.
- Mail opening welcoming letter to students. Include the bus schedule, medical permission form, a map to the classrooms, and the summer schedule.
- E-mail welcoming letter to Teachers, Interns and Volunteers with medical permission form, map to the classrooms and Orientation schedule.
- Develop enrichment activities and make reservation where necessary.
- Negotiate bus $ and reserve buses
- Contact academic year teachers to see about permission to use their rooms in the summer
- PA swimming pool to schedule and/or confirm for Wednesdays PM
- Make labels for names and for addresses
- See the Summer School Director about classroom and organ use
- Arrange Infirmary and Insurance coverage for students and Intern’s
- Get W-4s and Payroll forms from the personnel office
- Make food and dining hall reservations
- Confirm Pizza for Wednesdays
- Singing on Wednesdays: schedule an accompanist for each grade
- Edit the Orientation Booklet and print it
- See the locksmith for classroom key changes
- Arrange computer and printer rentals
- Buy markers, brown tape, scotch tape, staplers, scissors, pencils, paper, pens, computer paper, poster board, flash drives, folders for all grades for summer
- Order “T” shirts for staff and students with PALS logo and year.
- Check tennis rackets and get new tennis balls
PALS DIRECTOR’S TO-DO LIST
FOR THE SUMMER PROGRAM (continued)

- Set up benches and picnic tables in the playground.
- Bring a camera to Orientation to photograph teaching staff. Take individual photos and a group photo. (print photos and make a staff poster with names ASAP)
- Get snake, mice, turtle, fish and get food and litter
- Set up natural science: aquariums; terrariums for reptiles, toads, frogs; skeletons, bees nest etc.
- Set out posters, books etc.
- Make a birthday list and star July birthdays
- PR: invite and schedule school administrators, funders, Lawrence schools principals
- Library books to review and purchase as needed
- Update the Master Teacher list
- Update the Intern list
- Make a sports sign-up sheet using the grade lists
- Make up an afternoon activities list: chess, science, girl talk and interviewing
- Get computer rooms ready: Set up tables and chairs, cords and surge protectors as needed for computers and printers
- Set up classrooms for PALS use
- Label staplers, tape dispensers and hole punches by grades and by subject (Math or LA)
- Set up for animals in 7th Gr. room and set up for chess in hallway
- Set up tables and chairs in the 7th Gr. rooms.
- Put a folding book display in the 7th Gr. LA Room and one in the 7th Gr. Math Room
- Move cabinets to the 7th Gr. LA Room and Math Rooms
- Sort magic markers by type
- Set up tables and chairs in the 7th Gr. Rooms and 8th Gr. Math Room
- Put two upright bulletin board dividers in the 7th Gr. Math Room.
- Distribute whiteboard in classrooms
- Set up the volley ball net
- Distribute Dictionaries and Thesauruses
- Look at the First Aid kit and list, what is there and what is needed
CHAPTER III
ACADEMIC YEAR
PALS
ACADEMIC YEAR PROGRAM OVERVIEW

Academic Year PALS, beginning in mid-September and running through May, offers important follow-up for the summer program. Central to these experiences is the continued teaching and mentoring provided by high school students from the Community Service Programs of both Phillips Academy and Andover High School, who meet with the Master Teachers each Wednesday afternoon to coordinate planning and practice methods of teaching for the following week.

After school on Tuesdays, these older students go to Parthum School to teach all the PALS students – stressing language arts, math and study skills. Wednesday afternoons they offer enrichment activities at Phillips Academy similar to those offered in the summer.

An adult Master Teacher is in charge of each grade with the help of one or two Student Coordinators. Each grade averages about 16 to 20 students. Ideally there is one high school volunteer matched for the school term with each PALS student.
PALS students ride a bus to their homes
**A Two Year Program for Teacher Recommended Students**

**PALS** is a two-year program for 7th and 8th grade students such as your child who are teacher recommended as academically capable, successful in school, and self-motivated. PALS is privately funded. All students receive scholarships to attend.

**The Academic Year**

From September to May, PALS provides individualized math and focused writing on Tuesdays, and enrichment activities in science, art, music, drama, sports or computers on Wednesdays.

**The Summer Component**

PALS is a year-round program, which includes a required fun four-week summer program of teaching in academic skills and enrichment in July.

**Support of Short, Mid and Long Term Aspirations**

The PALS curriculum also helps your child set short, mid and long term goals and, in eighth grade, guides him or her in planning a high school program, and assists in the application process.

**Summer Intern Teacher and Mentor**

Interns teach your child in July, guided by Master Teachers. They are looked up to as role models, building self-confidence, motivating them to continue doing well in school and to fulfill future aspirations.

**September to June High School Teachers**

High school volunteers from Andover High and Phillips Academy teach your child during the school year. The volunteers work under an Adult Master Teacher and meet weekly to train for Tuesday and Wednesday PALS learning activities.

**Attendance**

Attendance is required unless a student is sick and has missed school. Parents are asked to schedule all medical appointments at times when PALS does not meet.

**PALS Director**

Thomas (Tom) Cone has been the PALS Director since 1990. PALS began in 1988. Tom can be reached at 978-470-0668 or by e-mail at tcone@andover.edu

**PALS Web Address:**

www.andover.edu/PALS
PALS Students Need You!

VOLUNTEER

Become a PALS Teacher/Mentor

What? PALS is the partnership teaching program

Where? Middle Schools in Lawrence

Who? 7th and 8th grade students with lots of potential

When? Tuesdays 3-4p.m. teach at Parthum School
  Wednesdays 3-4p.m. enrichment activities at Phillips Academy campus
  Wednesdays 4:00-4:45p.m. teacher training at P.A.

Why? You can make a difference
  It’s an opportunity for personal growth
  Develop your teaching skills
  The students are great!

????? Sign up with Community Service. PALS starts Friday
Fall Trimester
On Tuesdays of the fall term, students who wish to attend private schools, focus on the process of selecting high schools and completing the application process. Student teachers, who are volunteer high school students from mainly Phillips Academy and Andover High School, work with one or sometimes two students. The process builds strongly on the foundation laid down in Summer PALS, the intensive July program where students learn about private high schools, scholarships and special programs at Lawrence High School.

Because the Director hires as “Summer Interns,” older teen-agers who are graduates or upper level students at those schools, the eighth graders easily learn about these targeted schools through interviews of the “Interns.” Thus, when the application season begins in the fall, the PALS students are way ahead of peers by having investigated school options.

Students who expect to attend private high schools, usually complete the application process for a highly regarded and long-standing scholarship program in Lawrence, MA., which puts them on the path to earn scholarships to pay for their tuition.

PALS students commonly apply to three local private high schools. All three schools send their graduates to college. Occasionally PALS students apply to and are accepted by local boarding schools.

A number of PALS students do not apply to private schools in order to take part in the opportunities of Lawrence High School. Many apply for the Math, Science and Technology Academy among several, with chances for AP classes and special academic opportunities.
On Tuesdays these students continue the intense math curriculum begun in the summer working on sequential subjects that fill gaps and provide enrichment. These activities are adaptations from the Saxon Home School Math Series.

Students, guided by the student teachers, visit the chosen high schools on “shadow” days at the high schools. They also are helped in the test preparations for both the SSAT for prep schools and High School Placement Test used by local Catholic schools. There is an afternoon devoted to an interviewing skills workshop given by a member of the Phillips Academy Admissions Department. Student teachers help the students carefully hone the essays that each school requires; the students build on the essay assignments that they crafted in the summer just two short months previously. It is a seamless process.

It has been important for the 8th Grade Master Teacher to assume the responsibility of making sure the marks of previous years and those of the first term of 8th Grade, plus standardized tests are put on the applications. That person also writes recommendations and advocates for PALS acceptances to private schools and to the Lawrence High School programs.

Wednesday activities on our campus include challenges on the Project Adventure course under the guidance of the school’s Search & Rescue teams, art-study visits to the Addison Gallery of American Art, and writing essays in the computer center.

Winter Trimester

At the end of January, most of the PALS students have been accepted to the private Catholic high schools and by mid-March to the prep schools. Thus student teachers begin the work of guiding their student/s about how to choose from several options, and to weigh the advantages among several schools.

In order to pay for the private high schools, the student teachers under the guidance of the Master Teacher, counsel and mentor their students on how to earn scholarships by preparing them for more interviews and essay writing ahead. In order to qualify for scholarships the students and their parents must complete FACTS forms online and submit financial documents. The student teachers guide their pupils through this complicated process most carefully.

Students choosing to attend Lawrence High School write application letters to the headmaster to enter special demanding programs and activities.

When scholarship and application letters are completed the student teachers focus on math problem solving skills continuing where the intensive Fall PALS math courses left off. All students also begin or continue algebra.

On Wednesdays, the PALS 8th graders and their student teachers usually investigate the winter exhibition at the Addison Gallery, do winter Project Adventure exercises outdoor, revisit chess skills from Summer PALS, and write in the computer center.
Spring Trimester

By the first of April, all students have been accepted to the high school of their choice and have secured scholarship funding, if need be. Thus, the curriculum now includes a hefty dose of time management and study strategy skills so the PALS youngsters will be able to enter their freshman year successfully. Since students are not taught measures in school because they are not on the MCAS, the student teachers teach or review measures: quarts, pints, inches, pounds to strengthen this vital knowledge.

In addition, the student teachers teach research skills at our school’s computer center, carefully guiding their students to seek reputable and scholarly sites for future fact-finding. Because the PALS 8th graders do not organize and write long reports in middle school, this investigation is crucial for strenuous high school work ahead.

Realizing that the youngsters are not required to read widely and or in depth in middle school, the student teachers give them a booklist of their very own favorites for summer reading. Broad reading and a strong vocabulary aids in the transition to high school.

As a culminating experience, the 8th graders write a finely tailored thank you letter to the Director of PALS explaining what they have loved in their adventure as a student for two summers and two academic years in PALS, what skills and passions they will take to their secondary school, and what they are planning to do for community service for the next four years. Long complex sentences and sophisticated vocabulary are stressed plus valuable reflection.

In the years to come, the Director of PALS expects to select some of these students as Summer PALS “Interns,” paid teachers. These positions are highly sought after and respected. Each year as they graduate from 8th grade many PALS students craft their goals to include teaching in Summer PALS.
Academic Year Curriculum Overview

7th Grade

Fall Trimester
The 7th Graders meet for an average of eight Tuesdays in the fall term. A majority of the days are devoted to continuing and deepening their summer experience in Math, and the remaining portion in Language Arts.

Math
Because math enrichment seems to have made the greatest difference in the long term academic success of PALS graduates, the majority of time with the students in the fall trimester focuses on expanding the concepts introduced in the summer – problem-solving, strategy thinking, and understanding math as a language.

The summer foundation of math begins with reasoning skills, which include: reading the problem; what is asked; what is given; what strategy to use; solving the problem; and checking for logic and common sense. These concepts are furthered when students are taught strategies on finding math words that explain operations, estimating an answer, using tables or charts, making a model, group brainstorming, equivalent rules, and expressing percents as a ratio. Throughout the program the materials are “hands-on”, meaning that students use math manipulatives such as calculators, clocks, maps, compasses, play money, counters, measures, writing tools and other materials as needed for the day’s activities.

With this summer foundation of math, student teachers are able to apply these problem solving strategies further with students during the fall trimester. Math is taught using selections from Scholastic Math Magazine© and other Math textbooks. When students have demonstrated mastery of these exercises, they proceed to the SSAT preparatory math book.

Language Arts
The fall essay is frequently a photographic essay. Given disposable cameras, the students photograph something like a tree, a pond, a rock or a statue. They write the essay from the point of view of the object photographed. Students are encouraged to ask about the history of the area to embellish what, for example, the tree might have witnessed in the past.

The strategy of writing this essay draws on the foundation of process writing introduced in the summer.

The sequence for process writing begins with picking a central idea, brainstorming for vocabulary and making a potential vocabulary list. Students use a thesaurus and dictionary for help. Next the students brainstorm to decide on related main ideas and making a web off the central idea to represent these related ideas. They expand this brainstorming to cluster the web. (see Page 45 of this Handbook) Each cluster represents the ideas for one paragraph. These ideas are further organized into a logical order, from which students write a topic sentence for each paragraph. The final stage of this writing introduces the concept of expanding with details to expand each paragraph.

The essay is then peer edited. Before editing, student teachers explain that editing is more than a one-step job. This emphasis underscores the need to go over written work more than once. When the students learn that reviewing and editing their work multiple times is necessary, they are prepared mentally to expect several edits. To further exemplify the benefits and need for multiple editing, students read their writing aloud to their peers. Reading what has been written aloud to peers then reading it again and sometimes again seems to help students realize for themselves the need to clarify their ideas. (see Editing Strategies page 46 of this Handbook)
Winter Trimester
The 7th Graders meet for an average of six Tuesdays in the winter term. A majority of the days are devoted to continuing and deepening their fall experience in Math, and the remaining portion in Language Arts.

Math
Students continue to progress through mastery of Scholastic Math Magazine© and SSAT books, reinforcing the reasoning skills and strategies for math first introduced in the summer.

Language Arts
With the assistance of the student teachers, students select a book from the PALS library. (see Reading List pages 48-56 of this Handbook) Both the student teacher and student each have a copy of the book. Together they discuss the book in depth using a list of questions prepared by the Master Teacher. (see Reading List Questionnaires pages 57-67 of this Handbook) Some of these questions serve as a basis for the final winter project – a book report essay – again employing process writing.

Spring Trimester
The 7th Graders meet for an average of seven Tuesdays in the spring term. By this time the Master Teacher and student teachers have a solid understanding of each student’s academic accomplishments of the year, and are able to individualize learning for continued progress in Math and Language Arts.

Math
By the spring, most students are working on SSAT math and many have progressed to Algebra. This gives these PALS 7th Graders a real boost if their schools begin Algebra in the 8th Grade.

Language Arts
During the spring, an essay is submitted for an end-of-the-year essay contest. While visiting the Addison Gallery of American Art, students select a painting. They are then asked prepared questions by their student teachers about what they see in the picture, what the artist was trying to convey, etc. The responses serve as the topic from which essays are written and submitted for the essay contest. All essays are shared in the Spring 7th Grade Newsletter.

During the academic year all students are encouraged to sign out books on the PALS Reading List from the PALS Library.
QUALITIES OF A GOOD STUDENT

This week’s activity is to write an essay on the qualities of a good student. Here are some ideas for PALS volunteer teachers to consider when “brainstorming” on this topic with PALS students.

A good student often has a positive attitude, believing “I can succeed, I want to succeed and I can do it!” Other qualities of a good student might include attention to detail as well as to the larger picture, a problem solving method for math, and good class attendance.

He or she might know how to get help. Ask for some examples. (library reference materials, Internet sites, parents, magazines …)

Other qualities might include working to increase language competence, working on spelling, a desire to improve recall of information. Ask how these might be accomplished.

Setting goals for tomorrow, for next week, for next month, for next year and for long term are qualities of many good students.

The list might also include:
- Eating healthy foods, exercising adequately and sleeping enough
- Originality, creativity, a sense of humor, intelligence, curiosity and adventurousness
- Hardworking, tenacious, punctual, honest, socially skilled, kind, generous and reliable
- The ability to express oneself clearly, effectively and concisely
- Punctuality
- A capacity for growth
- Active participation and initiative when asked
WEDNESDAY AFTER-SCHOOL ENRICHMENT
ACTIVITIES DURING THE ACADEMIC YEAR

(3:00 – 4:00P.M.)

The first Wednesday Activity: Get-To-Know-You Games

The last Wednesday Activity: Award Ceremony for Perfect Attendance and Academic Achievement Award/ a Birthday cake with names on it of all the students and volunteers with birthdays during the term/Pizza/Drinks. Prizes are given for each award. Prizes are from a local school that has a yearly Community Service drive to support PALS with stuffed animal donations.

Other Wednesday Activities (What is done depends on the interests of the High School Volunteers and on the materials available. The goal is to participate in small groups with volunteers as leaders)
Board Games: Bug House Chess (or Checkers, Connect Four, Dominoes or Scrabble)
Natural Science Projects (making a terrarium, bird walk, insect hunt, etc.)
Nursing Home Community Service project (performing music, planting a flower pot together, decorating pumpkins together, etc.)
Art Gallery and local Museum visits with focused thought questions to answer
Cooking Projects (make butter, pick apples and make apple pies, ice cream social, bread Baking, etc.)
Project Adventure (based on Outward Bound activities)
Watching Sports (see Wednesday competitions of sports not commonly played by PALS students)
Impro Group (Drama)
Hand Puppets (provided) In small groups make up and present puppet shows.
Arts and Crafts Projects (Pottery, Face Masks, Group Murals, learn an art medium, etc.)
Hand Drumming
Business Fair Posters
Practicing being Interviewed (8th Grade)
Computer Learning Center visits: to write up Newsletter Essays/Thank You Letters/ Applications to High Schools, Autobiographies (8th Grade) etc.
Learn some Jump Roping
Learn Some Folk Dance(s)
Photo Walk: Take a walk with disposable cameras and take photos. The next Tuesday write a fiction scary story about the photos taken on the walk. (The Master Teacher gets the photos developed in time for the following Tuesday.)
Music: Learn about organs and how an organ is played with the school organist at the Chapel.
Orienteering: Use a compass for a Treasure Hunt (each group has a different map and treasure location made ahead of time by high school volunteers).
A SAMPLE WEDNESDAY AFTER-SCHOOL ENRICHMENT ACTIVITY:

PALS INTERVIEWS
- Divide up into groups of three or four (two students and one or two student teachers)
- Student teachers interview students and vice versa.
- Write down the responses to the questions.
- Types of questions:
  - Where have you lived in your life?
  - What is your family make-up?
  - What are your favorite foods, hobbies, pets…?
  - What sports do you like to play?
  - What sports do you like best to watch?
  - Do you have any heroes or heroines?
  - What might be your short term, midterm, and long term goals?
  - What would you like to tell about yourself?
- Write out the interview
- Peer edit it
- And then read it to each other.

(Some can be saved for the Newsletter.)
PALS Academic Year
Tips for Student Teachers

1. At all times you are a mentor, a role model, a teacher and a supervisor. On Wednesdays, look for opportunities to interact with students. It’s fine to start off with superficial conversations, but it’s important to make connections beyond that with the children.

2. “Tell me about…?” is a strategy to begin a conversation (about your weekend, your family, what music you like, your favorite sports…)

3. Keep personal conversations between adults to before and after PALS time. Come early or stay late if you want to get to know each other better!

4. Use Wednesday’s informal opportunities to make connections with students by sharing ideas, interests and concerns.

5. During the academic portions of PALS on Tuesday, however, the focus is on teaching and learning. Students sometimes try to divert the teacher with personal topics not related to the subject at hand. It is important at these times to refocus on the specific work.

6. Be aware of the behavior of students in your company—language, “put downs”, pinching, poking, hat snatching. If it is not appropriate tell them so. If it continues let Tom know.

7. PALS doesn’t allow any personal or sexist or racist or other “put downs” by teachers or students. (“you’re so short”, “he/she is stupid”, “You’re not listening”, or “you’re not trying”) Avoid labeling in general. (“You don’t listen”, “girls really like you”).

8. Avoid letting yourself get drawn into a competitive situation. If a student says I can do this faster than you, it is best to reply, “I’m glad you are so fast”, etc. If playing Chess let them be White and give them pointers that might help them win.


10. Give choices when presenting an activity. “Do you want me to read this to you or would you like to read to me?” Your enthusiasm about either alternative will be contagious.

11. Empathize with the student’s situation. Tell about a similar situation when you were his or her age.

12. Listen to what the student is trying to tell you that s/he doesn’t know and be flexible.

13. Require repetition: this ensures understanding. Ask the same question in another way or explain the process in another way.

14. Be understanding. It’s not fun to think you’re the only one who doesn’t understand something. Never say: “That’s easy” or “Everyone knows that”. Sometimes students say, “I’m dumb” or words like that which shows they’re discouraged. Try something like: “You may not have learned it yet” or “What are you having a problem with…” (try to get him/her to be specific)”… “Let’s try it together with me, or with the group”.

15. Be positive and when a student accomplishes something REVIEW WHAT HAS BEEN ACCOMPLISHED.

16. Be realistic. You only have a limited amount of time. You can make a difference but you may not accomplish all you want to do.

17. Be objective. It’s important to be supportive, but maintain a degree of detachment. If you get personally involved in a student’s situation, you can’t be effective as a teacher.

18. Teach in “digestible” bits. Too much information is the equivalent of a stomach ache.

19. Whenever possible in math use manipulatives, graph paper, white boards, measurement tools, money, and real life problems.

20. Talking with students about their goals and dreams is strongly encouraged. You may wish to give them options to make their goals reachable. (Be careful about building up our school or Harvard, etc. as a realistic option for schools to attend).

21. Feel free to talk about your interests, dreams and career goals with the students. They look up to you. Your input means a lot.

22. When using computers with your students, watch while they do the work. Keep your hands off the keyboard! Be patient.

23. No touching of the opposite sex. This applies among student teachers as well as between student teachers and PALS students. “Hi Fives” and “Bumps” are OK!

24. Have fun. Just the fact that your students are receiving some individual attention means they will make some progress. Enjoy your time together!
PALS COORDINATORS

What a PALS Student Coordinator Job Entails

A Coordinator may apply individually or jointly to be responsible for Grade 7 or Grade 8

Major responsibilities of a PALS STUDENT COORDINATOR:
1) Work together with the adult Master Teacher of his/her grade.
   a) Assign students to student teachers at the beginning of each term.
   b) Meet weekly to jointly plan:
      for the carrying out of activities for Tuesday teaching sessions, for the planning and
      preparation of Wednesday Enrichment Activities, and for planning and running of
      Wednesdays Training Sessions

2) In 8th grade, to create individualized math activities for Tuesday Teaching

3) Busy Work!!!
   a) carrying out preparations for Tuesday’s teaching sessions (photocopying, putting “hands
      on” materials into carrying bins etc.)
   b) preparing, as needed, for Wednesday’s enrichment activities
   c) snack set-up Wednesdays
   d) room and snack set-up for planning meetings Wednesdays
   e) organizing other student teachers for a PALS Newsletter submittal

4) Meet occasionally each term with the PALS Director, the adult Master Teachers and the other PALS
   Student Coordinators for updates and changes in the schedule and curriculum, and to plan
   coordinate Wednesday Enrichment Activities for the following term.

5) Possibly meet with the Community Service Director to talk about PALS.

6) Act as a teacher and as a role model to both student teachers and Leonard School and Parthum School
   students at all PALS activities.
APPLICATION FOR PALS STUDENT COORDINATOR

Dear past or present PALS student teacher,

We encourage you to apply for one two or three terms. Each term one or two PALS Student Coordinators’ per grade will work together with the adult PALS Master Teachers to plan and carry out the goals and activities of the PALS program. Student Coordinators will have general responsibility for one specific grade: 7th, or 8th, working closely with the adult Master Teacher for the grade. (* Applications may be made by two students as a team for one grade.)

To be a PALS Student Coordinator is to be an administrator, educator and overseer. It is quite a different role from that of a student teacher. This is an exceptional opportunity for four students a term to lead a successful program and experience tremendous growth and education. Few positions at PA offer students such a great amount of responsibility combined with a unique learning experience.

Applications will be accepted from any student who has participated in at least one term of PALS and will be an upper or senior next year. Applications are due in Tom Cone’s mailbox by ____________________.

Please feel free to contact past or present PALS Student Coordinators or _________ PALS 8th Grade Master Teacher, or __________ PALS 7th Grade Master Teacher, if you have any questions.

Part A
Please Complete:
* Name: ____________________________________________________________________________
* Class at PA: _________________________________________________________________________
* Term(s) and year(s) you have participated in PALS: ________________________________________
* A list of your free periods this term so we can meet for an interview: (answer on the back) ________________________________________________
* What terms are you applying for? this Spring Term __________________ Fall Term ________________ next Winter Term ____________________________
* What grade level (7th or 8th) are you applying for? _______________________________________________________________________
* Would you consider another grade? ___________________________________________________________________________________
* Will you have any other leadership positions next year (e.g. in a club, team, society, etc.)? If so, please describe them. _______________________________________________________________________
* If this is a joint application Student’s Name(s) _____________________________________________________________________________
* For joint applications, each student please write individual essays in Part B.
* Would you consider being paired up with another student who has applied independently from you? _____________________________________________________________________________

Part B
In no longer than two typed pages please

1) Reflect on your own experience or experiences working in a community.

2) Why do you think you would be an effective PALS Student Coordinator?

3) What are your strengths and weaknesses as a leader?

4) In what ways do you see community service integrated into the school as a whole? What do you see as the objectives?
**ACCEPTANCE LETTER FOR PALS STUDENT COORDINATOR**

Date _____________________

To _______________________

From PALS Director

As a follow up, I am pleased to inform you that you have been accepted as a PALS Student Coordinator. I am looking forward to your leadership this coming year in planning and carrying out the goals and activities of the PALS program.

I thought that you would be interested in seeing who the other coordinators will be for this next year:

<table>
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<tr>
<th>Fall Term</th>
<th>Winter Term</th>
<th>Spring Term</th>
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**7th Grade**

**8th Grade**
**PALS COORDINATORS (continued)**

**PRE-ORIENTATION MEETING**

*For the PALS Student Coordinators with the Director and Master Teachers to plan for the assignments and training of student volunteers*

AGENDA:

INTRODUCTIONS

HANDOUT OF CLASS LISTS

HANDOUT OF WEDNESDAY ACTIVITIES

First Orientation Meeting: (What to do)

- Handout Orientation Guide
- Handout and collect PALS Student Teacher Questionnaires to help place volunteers
- After reading the Questionnaires, list the assignments to grades on the Whiteboard. Guidelines include:
  1) assigning younger volunteers with 7th graders
  2) assigning the same student to returning volunteer if requested

- The Director reviews the Orientation Guide with everyone. When going over the Tips for Student Teachers, Coordinators please volunteer which Tips are most meaningful to you

- Each grade divides up and goes to an assigned area.

- Coordinators talk about how we want to help PALS students think in short, middle and long term goals. (do well in PALS in middle school, plan for high school, and college, be responsible persons. think about future jobs)

Therefore, to be role models for the students, their high school teacher/mentors need to be able to verbalize their own personal short, middle and long term goals. (you can’t be clueless! ha)

In your group have everyone introduce themselves and say something about their aspirations (college, baseball, travel family, jobs etc.)

- play a name game (Joe Mary, Joe, Mary Bill, Mary, Bill Sue etc.)

- share your Grade’s Photograph and Essays Notebook

- Explain next weeks’ Monday, Tuesday, and Wednesday schedule. On Monday meet at 3:00 in the same area to train for Tuesday and Wednesday. After the first week, meet every Wednesday to train for Tuesdays and Wednesdays.
SECOND ORIENTATION MEETING BY GRADES (WHAT TO DO)

- Hand out PALS student and student/teacher match ups

- Parthum School Room assignments for Tuesdays

- Hand out Individual White notebooks for each student. This notebook is returned to the plastic carrying bin (not taken to dorms or home)

Handouts to be put in the notebook include
- A front page for the notebook
- A sheet of Wednesday’s events
- Student/teacher assignments and room assignments
- Tuesday’s directions for Tuesday’s activity

(Wednesday’s directions are given to PALS students and student teachers on Wednesday)

To prepare for Tuesday’s activity, have the student teachers actually DO the activity on training days when appropriate and then get together to share teaching strategies.

USE OF TIME TUESDAYS
Teaching at Parthum School is for at least 45 minutes. If your student has really worked hard and wants to play chess or checkers at 3:45 that is fine but please be respectful of others who may still be working.

Wednesday Get to Know You has as the main goal helping everyone learn the names of all the children and teachers. Go over the plans you have made for Wednesday.

Questions?

Explain again that on Tuesday we meet at 3:00 to be driven by bus to the Parthum School in Lawrence.
ACADEMIC YEAR PALS VOLUNTEER
PLACEMENT QUESTIONNAIRE

High school students from Phillips Academy and Andover High School volunteer during the academic year to teach and mentor PALS students.

PALS Volunteer Placement Questionnaire  Date________________________

This questionnaire is to help place you with your 7th or 8th grade student(s) and to work with you to individualize teaching once you are assigned.

Name_____________________________ Age____ Birthday______________
Grade___ Telephone________________ e-mail_________________ Voice mail#______________
P.A. Student?_____  Andover High Student?_________  Other ____________________________
Address or Dorm _____________________________ Do you know Spanish?___Do you sing___
Instrument(s)played?______________________________________

What are your sports interests as a spectator and as a participant? (hiking, biking, canoeing, swimming, volleyball, table tennis, racquet sports, individual and group team sports)

Have you done any teaching (formal or informal?)(To your siblings? Your peers? in PALS?)


What are some of your long term aspirations that you might share with PALS students? (exploring careers in science, being on an adult volleyball team, being a parent etc.)

What Math courses have you taken in the past?

What English and History courses have you taken in the past?

Why did you sign up for PALS? (special needs, concerns, hopes, talents, related experiences?)

Will you have a sports or other afternoon commitment for the next:
   Fall term: ______________________________________________________________________
   Winter term: _____________________________________________________________________
   Spring term: _____________________________________________________________________

Please number in order your preference for teaching. If you have done PALS before and wish to request the same grade or want to have the same student(s) please write a note on this sheet. 7th Grade___________________________8th Grade___________________________
CHAPTER IV
RECRUITMENT OF STUDENTS AND INTERNS
RECRUITMENT OF STUDENTS

Why 7th and 8th Grade?
We feel that one of our goals is to stimulate our students to remain in school and go on to high school. We also help our students get into a high school of their choice, if they wish to apply to a private school. If they are more interested in their local high school, we help them get accepted into upper tracks. Motivated 7th and 8th Grade students are still excited about school during these years and look forward to high school.

We found that we could be more efficient with just these two grades. The families of the children we select are somewhat transient, another reason why we wait until 7th Grade to start PALS.

In addition, high school with its potential applications, visits, and entrance tests are issues that parents, who may not have gone this far in their own education, look to others for help. We feel we are able to fill this role, since many of our winter volunteers and summer interns have themselves been through this process and may be doing it again as they apply to college.

Who is Chosen?
Since we are not a remedial program we choose “the best and the brightest”. This is the group that has the least state and federal aid and sometimes gets turned off to school because the slow pace of classes due to their size, and may eventually drop out during their high school years. Despite students getting A’s, there are many excellent school systems where this grade would be lower. Bright motivated children working with strong high school aged role models who are themselves doing well in school is a “win-win” situation.

All are Teacher Recommended
The children are all teacher recommended. Teachers fill out a detailed skill sheet. It is important to know from them that recommended students are cooperative, work well with adults and are motivated learners since we are training our high school and college teacher/volunteers to teach and mentor children that are eager to learn.
RECRUITMENT OF STUDENTS (continued)

6TH GRADE RECOMMENDATION
FROM MIDDLE SCHOOL TEACHER

Thomas Cone, Director
Teacher’s name:_____________

PALS
Room Number:___________

Phillips Academy
Andover, MA 01810

April, 20xx

The time of year is fast approaching to add recommended students to the PALS Program for the 20xx-20xx academic year. Teacher recommendations are essential to the success of the program. We continue to stress enrichment of already academically motivated and capable students who demonstrate self-discipline and an enjoyment in learning. The majority of the teaching and mentoring is done by high school students under adult supervision. They are knowledgeable, enthusiastic, eager and caring volunteers, and work well with similarly ambitious students.

The academic year begins with a daily required summer program during the month of July followed by two afternoon commitments on Tuesdays and Wednesdays throughout the school year. Beginning in their 6th Grade summer, students are encouraged to remain in the program for two years.

Would you be so kind as to recommend students from your 6th Grade who you consider to be strong candidates for the PALS Program who will be in Lawrence and wish to attend this summer? Feel free to recommend as many capable students as you wish.

An information sheet with a grid is included for each recommended student. Please check to see if the phone number you have is correct.

Please return to ________________ desk by ________________.

Thank you for your help!

Sincerely,

Tom Cone

<table>
<thead>
<tr>
<th>Student’s Name</th>
<th>Approximate Final Average for Year</th>
<th>Parent or Guardian’s Name</th>
<th>Address</th>
<th>Phone</th>
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<tbody>
<tr>
<td>1.____________</td>
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Please use the back of this paper if necessary.
RECRUITMENT OF STUDENTS (continued)

7TH GRADE RECOMMENDATION
FROM MIDDLE SCHOOL TEACHER

Thomas Cone, Director
PALS
Phillips Academy
Andover, MA 01810

Teacher’s name:_____________
Room Number___________

April 20xx

The time of year is fast approaching to add recommended students to the PALS Program for the 20xx-20xx academic year. Teacher recommendations are essential to the success of the program. We continue to stress enrichment of already academically motivated and capable students who demonstrate self-discipline and an enjoyment in learning. Most of the teaching and mentoring is done by high school aged students. They are knowledgeable, enthusiastic, eager, caring volunteers who work well with similarly ambitious students.

The academic year begins with a daily required summer program during the month of July followed by two afternoon commitments on Tuesdays and Wednesdays throughout the school year. Those students beginning in the summer after their 7th Grade are encouraged to remain in the program for one year.

Would you be so kind as to recommend students from your 7th Grade who you consider to be strong candidates for the PALS Program, who will be in Lawrence this summer and wish to attend? At present our class is mostly full, but we may have missed some good candidates!

An Information sheet is included for each recommended student. Please check that the phone numbers are correct.

Please return this form to __________________ by _________________.
Thank you for your help!

Sincerely,
Tom Cone

<table>
<thead>
<tr>
<th>Student's Name</th>
<th>Approximate Final Average for Year</th>
<th>Parent or Guardian's Name</th>
<th>Address</th>
<th>Phone</th>
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Please use the back of this paper if necessary.
**RECRUITMENT OF STUDENTS (continued)**

**PALS INFORMATION SHEET** *(From the student’s middle school teacher)*

<table>
<thead>
<tr>
<th>Student’s Name</th>
<th>Grade</th>
<th>Male</th>
<th>Female</th>
<th>Teacher’s Name</th>
<th>Date</th>
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Please complete and be as thorough as possible. Thank you for your help,

Tom Cone, PALS Director

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<thead>
<tr>
<th>Sense of responsibility</th>
<th>Outstanding</th>
<th>Excellent</th>
<th>Good</th>
<th>Your Comments</th>
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<tbody>
<tr>
<td>Self confidence: - with peers</td>
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<tr>
<td>- with teachers</td>
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<tr>
<td>- in math</td>
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<tr>
<td>- in writing</td>
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<table>
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<tr>
<th>Relationship with adults</th>
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<tr>
<th>Self control</th>
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<tr>
<th>Emotional maturity</th>
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<table>
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<tr>
<th>Attention span</th>
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<table>
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<tr>
<th>Motivation</th>
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<tr>
<th>Active in class, a “Self-starter”</th>
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<table>
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<tr>
<th>Creativity</th>
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<tr>
<th>Logical thinking</th>
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<tr>
<th>Sense of play</th>
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<tr>
<th>Consideration for others</th>
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<tr>
<th>Social relationship with peers</th>
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<table>
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<tr>
<th>Respects property of others</th>
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<table>
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<tr>
<th>Works well independently</th>
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<tr>
<th>Solves math word problems independently</th>
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<table>
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<tr>
<th>Willingness to try new activities</th>
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<table>
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<tr>
<th>Participates constructively in group activities</th>
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<table>
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<tr>
<th>Reading for pleasure</th>
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<tr>
<th>Writing for pleasure</th>
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<table>
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<tr>
<th>Follows written directions</th>
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<tr>
<th>- oral directions</th>
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<tr>
<th>Public speaking: - ability to express ideas orally</th>
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<tr>
<th>- poise/presence</th>
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<tr>
<th>Approximate overall grade for the year in math?</th>
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<th>in Language Arts subjects?</th>
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<tr>
<th>Approximate end of year average?</th>
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<th>Approximate # days absent this year?</th>
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RECRUITMENT OF STUDENTS (continued)

INVITATION TO JOIN PALS

May 20xx

Dear Parent or Guardian,

I am happy to say that your child has been recommended by his or her teacher to join the PALS program, now beginning its ____ year. PALS consists of a daily Summer Program during the month of July followed by a two afternoon commitment Tuesdays and Wednesdays throughout the school year. Students may join PALS after their 6th or 7th grade year. Children can continue to participate until they graduate from the 8th grade.

The purpose of PALS is to strengthen academic skills, to build self-confidence, to provide enrichment of already motivated students who demonstrate self-discipline and an enjoyment in learning, and to help with high school choices. The paid summer faculty is made up of four Master Teachers and 16 Teaching Assistants. During the school year, Student Teachers are volunteer students from Phillips Academy and Andover High, guided by two Master Teachers.

The requirements for participating in the summer and academic year program are that a student attends except when sick, behave cooperatively, and be eager to learn and work hard.

PALS Summer 20xx program begins _________ on the Phillips Academy campus and continues every week day ending _________. A bus picks up students at their homes between 8 and 8:45 AM and returns them home between 3:30 and 4:15 PM. Lunch is provided. The entire program is funded by donations, so there is NO charge for bus transportation, food, classes and sports.

If you want to visit the classrooms and the PA campus on __________ from 3PM TO 4PM, please contact me for directions.

I think it will be both an enjoyable and helpful summer program. All students will have morning classes of reading, writing, and math. Many activities are done on computers. Sports will take place before lunch. The afternoons will have different programs for the 7th and 8th graders, including science and chess. There will be swimming on Wednesdays and group enrichment activities Friday afternoons. A morning field trip _________ will take the students to the Museum of Science in Boston.

Please feel free to call me if you have any questions. More information will be mailed in late June. (Bus times, clothes to wear, medical permission form).

I hope that your child will join PALS and participate both this summer and of course during the school year 20xx-20xx. Preference in the fall will be given to students who successfully complete the summer program.

Please sign the enclosed application form and give to your child to be returned to his or her teacher tomorrow.

Sincerely,

Thomas Cone, PALS Director
RECRUITMENT OF STUDENTS (continued)

PALS SUMMER 20xx APPLICATION FORM
(FOR RECOMMENDED STUDENTS)

Student’s Name ___________________ Grade in September 20xx? _____________________________

Address _____________________________________________________________________________

Parent/Guardian’s Name ________________________________________________________________

Daytime Telephone Number ____________________________________________________________

Evening Telephone Number ____________________________________________________________

Name of person to contact in case of emergency other than parent:
__________________________________________________________________________________

Telephone Number of person to contact in case of emergency other than parent:
__________________________________________________________________________________

Student’s Birthday ___________________________________________________________________

What school will your son or daughter attend in September? ______________________________

Perfect attendance is so important in a program as short as one month. Will your child be able to
Attend PALS every day during the summer program?  Yes ________________ No __________________

If no, please explain why, and the dates:
__________________________________________________________________________________

Please Sign Below and return Tomorrow to your teacher.

_________________________________________________________ Date ____________________
(Signature of parent or guardian)

Tom Cone, PALS Director
PALS SUMMER 20xx APPLICATION FORM
( FOR RETURNING STUDENTS)

Student’s Name ______________________________________ Grade in September 20xx? __________
Address _____________________________________________________________________________
Parent/Guardian’s Name _______________________________________________________________
Daytime Telephone Number _____________________________________________________________
Evening Telephone Number _____________________________________________________________
Name of person to contact in case of emergency other than parent:
____________________________________________________________________________________
Telephone Number of person to contact in case of emergency other than parent:
____________________________________________________________________________________
Student’s Birthday _____________________________________________________________________
What school will your son or daughter attend in September? __________________________________
Perfect attendance is very important in a program as short as one month. Will your child be able to
Attend PALS every day during the summer program? Yes ________________ No ________________
If no, please explain why, and the dates:
___________________________________________________________________________________

Please sign below and return to me Tomorrow.

________________________________________________________Date ______________________
(Signature of parent or guardian)

Tom Cone, PALS Director
RECRUITMENT OF SUMMER INTERNS

RECRUITMENT OF INTERNS OVERVIEW

- Interns either attend or have graduated from high schools in the area of your program (for our program in the Greater Lawrence area, e.g. Lawrence High School, Central Catholic, Presentation of Mary, the Governor’s Academy, Pingree School, Andover High School, or Phillips Academy.) They therefore have personal experience at schools our PALS students might attend in the future.

- Interns may be successful PALS alums. We have several of them apply every year, and they serve as especially good role models and guides on how to prosper in middle school in Lawrence and to think carefully about high school choices.

- We look for older students who are academically outstanding and show high motivation in their schools. This will ensure a depth of understanding of material that often has to be taught in multiple ways to different students. We don’t all learn the same way! Interns who are imaginative, resourceful and active learners themselves can make it happen.

- Lastly, all interns are chosen only if they are “kid-friendly.” They have to enjoy the company of younger children, be interested in them beyond initial casual conversations, and seek them out when in non-structured times – when walking to sports, eating lunch, etc. A great amount of mentoring occurs during those times!
Dear __________________________

I was wondering if you might be interested in applying for a paid position as an Intern in Summer PALS? First year Interns are paid $__________.

PALS is a two-year program for 7th and 8th Grade students who are teacher recommended as academically capable, successful in school, and self-motivated.

Interns teach the students in the summer, guided by Master Teachers. Interns are looked up to as role models, build self-confidence, and motivate students to continue doing well in school and to fulfill future aspirations.

There is more about PALS at www.andover.edu/PALS

Orientation is on __________________________________________________________.
And the teaching days schedule is ____________________________________________.
Staff meetings are __________________________________________________________.

If you can be present for all of these days and would like to apply please e-mail me for an application at tcone@andover.edu

Sincerely,

Mr. Tom Cone
Director of PALS
RECRUITMENT OF SUMMER INTERNS

PALS SUMMER 20xx
INTERN APPLICATION

Name_____________________________Date___________Telephone__________________________________

Address____________________________________________________________________________________

current e-mail________________________________summer e-mail_________________________________

Current School____________________Grade in school next year_______________________________________

Date of Birth___________________Social Security #__________________________________________________

US citizen or permit to live and work in the US?_____________________________________________________

Describe your previous experience with PALS if any.

____________________________________________________________________________________________

Please list previous work experience paid or volunteer (use the other side if needed)

<table>
<thead>
<tr>
<th>Date</th>
<th>Job</th>
<th>Employer or Supervisor</th>
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What computer programs are you familiar with?________________________________________________________

Do you speak Spanish?_____Can you Swim?_____Are you a Lifeguard?_____________________________________

Do you Type?___________Do you Sing?________________________________________________________

What Instruments do you play or have you played?____________________________________________________

Do you play Chess?_____(beginner, intermediate advanced?)_________________________________________

Do you Drive?________________________________________________________

What Sports do you play or enjoy watching?

____________________________________________________________________________________________

Have you ever played Tennis?

____________________________________________________________________________________________

What hobbies, skills or interests might you share? (drama, dance, gardening, art, crafts, science, nature, animals, photography, reading, mechanical skills, technical skills etc.)?

____________________________________________________________________________________________

What is your grade average in English?_____________in Math?_______________________________________

If not currently taking English or Math, what was your last grade and when did you complete the course?

English?____________________Math?________________________________________________________________

Have you any leadership positions in your school this year or next year?

____________________________________________________________________________________________

- 196 -
What subject(s) do you prefer to teach? ________________________________________________________________

Are you interested in the Science Intern position which involves leading the 7th Grade Science Program three afternoons a week under Tom Cone's guidance? ________________________________________________________
This pays an extra stipend.

Are you interested in a Music Leader position in 7th Grade or in 8th Grade? This involves leading singing in either 7th or 8th Grade, preparation of the room and planning the songs. ____________________________________________
This pays an extra stipend

If you can play the piano, keyboard or guitar are you interested in a Music Player position in 7th or 8th Grade to work with the Music Leader of 7th or 8th Grade?
This involves playing to accompany the songs that are sung. _______________________________________________
This pays an extra stipend

****Can you be present for the two days of Orientation and the 4 weeks of teaching? Yes_____________________

In no more than two typed pages please describe:

1. What personal qualities would you bring to the job and how would you use those qualities to be effective as a PALS Intern?

2. Outline one or two of your aspirations giving short, medium and long term examples that you feel you might share with PALS kids as a role model to help them think about their short, medium and long term planning.

Please give the name, address and telephone of two references, other than relatives, who may be contacted.

1____________________________________________________________________________________________

2____________________________________________________________________________________________

e-mail to Tom Cone  tcone@andover.edu
RECRUITMENT OF SUMMER INTERNS (continued)

RECOMMENDATION FORM
FOR SUMMER INTERNS

PALS is a two-year program for 7th and 8th students who are teacher recommended as academically capable, successful in school, and self-motivated.

____________________ has applied for a job as a PALS Summer Intern gave your name as a reference. Working in Summer PALS is a rewarding experience. Interns teach the students in the summer, guided by Master Teachers. Interns are looked up to as role models, build self-confidence, and motivate students to continue doing well in school and to fulfill future aspirations. Your honest evaluation of this candidate's potential to contribute to and gain from such an experience will be most helpful in deciding whether to offer him or her a position as a PALS Summer Intern.

Many thanks in advance for your help.
Tom Cone, PALS Director

please e-mail your recommendation to me at tcone@andover.edu

1. How long have you known this candidate?..................................................................................
   In what capacity?..........................................................................................................................

2. What adjectives or expressions come to mind when you think of this candidate?
   ............................................................................................................................................................

3. Would you enjoy having this applicant as a member of a group for which you were responsible?
   ............................................................................................................................................................

4. Please explain your answer to question 3
   ............................................................................................................................................................
   ............................................................................................................................................................
   ............................................................................................................................................................

5. Since the candidate would be working with 12 and 13 year olds, do you think he or she would be outgoing, cheerful and "kid friendly? Please explain your answer
   ............................................................................................................................................................

6. Does the candidate have any (a) emotional, (b) learning, (c) personality problems that would interfere with full and successful participation in this program?
   ............................................................................................................................................................
   ............................................................................................................................................................
   ............................................................................................................................................................
RECRUITMENT OF SUMMER INTERNS (continued)

RECOMMENDATION FORM
FOR SUMMER INTERNS (continued)

7. Please rate the candidate by checking the appropriate boxes.

<table>
<thead>
<tr>
<th>Truly Outstanding</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual curiosity</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Seriousness of purpose</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Interest/openness to new ideas</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Honesty</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Maturity</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Ability to laugh at self</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Warmth</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
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<tr>
<td>Consideration for others</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Flexibility</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Punctuality</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Willingness to live within rules</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
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<tr>
<td>Energy and physical health</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Relationship to peers</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Relationship to adults</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
</tbody>
</table>

10. I feel this candidate would be especially strong in

1. _____ working together in a group
2. _____ assuming a leadership role
3. _____ expressing ideas clearly
4. _____ collective responsibility
5. _____ common sense
6. _____ other (explain)

…………………………………………………………………………………………………………………………

11. I would appreciate any additional comments that would help gain a sense of what this applicant is "really like".

…………………………………………………………………………………………………………………………

14. How do you recommend this candidate? .....Enthusiastically .....Strongly

.....Without enthusiasm .....Not recommended

Name: _______________________________________________________________________
Date: _______________________________________________________________________
RECRUITMENT OF SUMMER INTERNS (continued)

NEW INTERN CONTRACT

Tom Cone, PALS Director                                              May ________
Phillips Academy
180 Main Street
Andover, MA 01810

Dear

I am pleased to offer you a position as an Intern in the PALS Summer Program, contingent on your being able to commit to the schedule outlined below.

SCHEDULE
Program planning, training, and orientation meetings are for two days on _________________________ from 9:00 A.M. to 4:00 P.M. in the PALS classroom area.

The program starts __________ and continues ________ ending ______________________________

Daytime schedule is 8:30 A.M. to 3:00 P.M. Monday, Tuesday, Thursday and Friday and 8:00 A.M. Wednesdays (staff meeting days)

There is an end-of-session Family/Staff picnic/Performance/Prizes in the evening on ________. The schedule on this day is from 8:30AM to 7:30P.M.

Since the summer program is so short, it is essential that you be present for all of the above dates. You will need to schedule any medical appointments and personal activities outside these hours. Your salary is $ ______________

If you can commit to this schedule, please complete the form below and return it to me as soon as possible!

I hope you are looking forward to the beginning of this summer’s PALS program as much as I am.

Thomas Cone, PALS Director
Phillips Academy
180 Main Street
Andover, MA 01810

=====================================================================  

Yes, I can commit to the PALS ______ Summer schedule and would like to be an Intern.

Name:___________________________  Birthday____________________________________________

Address at present______________________________________________________________________
Address in the summer __________________________________________________________________

Telephone at present__________________E-mail ____________________________________________
Telephone in the summer______________ SOC SEC # ________________________________________
RETURNING INTERN CONTRACT

February 20xx

Dear ______________________

Are you interested in returning to Summer PALS 20xx? You have done an excellent job in the past.

This summer the schedule is as follows:

Orientation Days- ____________ from 9:00am to 4:00pm.

Teaching days - ____________ from 8:30am to 3:00pm

Final day – awards and family picnic from 8:30am to 7:30pm

Pay will be ____________________________________________________________________.

If you would like to return, please give me a firm commitment by ____________ or before!
tcone@andover.edu

Thomas Cone, PALS Director
Phillips Academy
180 Main Street
Andover, MA 01810

Yes, I can commit to the PALS 20xx summer schedule and would like to be an Intern.
Name: _______________________ Birthday ____________________________
Address at present _________________________________________________
Address in the summer _____________________________________________
Telephone at present ___________________ E-mail ______________________
Telephone in the summer ___________ SOC SEC # ____________________
CHAPTER V
BUDGET AND FUNDRAISING
BUDGET OVERVIEW

A preliminary PALS projected budget for July-June is submitted to the Director of Outreach Programs in March for Academy approval. The total budget enables all students to attend at no personal cost. The major expense of the PALS program are for educational staff—the director, four summer teachers, fourteen summer student teachers, and two master teachers during the academic year, who together comprise more than half the total budget. The remainder major costs are transportation for the students to and from Phillips Academy and the participating middle schools in Lawrence; food; and instructional costs, which include the cost of renting computers in the summer.

PROJECTED BUDGET ITEMS

<table>
<thead>
<tr>
<th>Description</th>
<th>Summer</th>
<th>Academic Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer School Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Year Master Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FICA/Retirement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Transportation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional Supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Rental</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing, Postage</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Family Outreach</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Field Trips</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Labor Service</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% Overhead Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The 10% administrative overhead fee charged by Phillips Academy to PALS as one of its educational outreach programs is in recognition of the considerable services provided by the Academy, at no cost, in terms of use and maintenance of facilities and administrative support from such offices as personnel, development, comptroller, and publications.
FUNDRAISING OVERVIEW

The very successful collaboration of foundation directors, business leaders, countless individuals, teachers, administrators and students in both public and private schools has sustained the program. The annual budget is supported entirely by outright gifts and grants and gifts-in-kind since its inception in the late 80’s.

A typical grant application includes the following components
1. Overview of the PALS Program
2. The Community and Students Served by the Program
3. The Faculty, Staff, Student Interns and Student Volunteers
4. The Program Components: Summer PALS and Winter PALS
5. Program Evaluation
6. Benefits to Students, Student Teachers and Other Local Programs
7. Sources of Support
8. Our Request
9. The Estimated Budget

PALS 7th and 8th Graders celebrating two birthdays!
CHAPTER VI

PROGRAM EVALUATION
While it is difficult to quantify the success of a program like PALS, we have looked to qualitative ways to assess academic accomplishments since our inception in 1988. Some of the ways in which we annually measure the program’s success (using various formal and informal methods and results) include the following:

- PALS graduates invariably enroll in honors courses at Lawrence High School.
- Independent and parochial area high schools have confidence in PALS students and their preparation; admission officers consider these students “excellent risks.”
- Since 1998, a total of 52 PALS graduates have earned Adelante Scholarships (approximately ⅓ of all recipients) to attend one of three demanding high schools: Central Catholic, Presentation of Mary Academy, and Notre Dame.
- In the last 10-15 years, as far as we know, all of the children who have completed PALS to date have either graduated from high school or are on track to do so.
- In recent years, the majority of PALS graduates have gone on to college, several to excellent institutions, including Boston College, Brown University, M.I.T., and University of Massachusetts (at both Amherst and Lowell).
- Inspired by a desire to “give back,” many students over the years have returned to PALS as student teachers. In Summer PALS 2008, there were three PALS graduates who served in this capacity, each now an undergraduate at University of Massachusetts/Lowell, M.I.T., and Providence College respectively.
- Each year, we become even more aware of the positive impact the program has on our high school student teachers; some report that their experience in PALS convinced them to enter the teaching profession after college.
- A 2007 PALS graduate, an 8th grader at Parthum School, won a prestigious national scholarship, being named a Jack Kent Cook Young Scholar.
CHAPTER VII

HOW TO START A PALS-LIKE PROGRAM
HOW TO START A PALS LIKE PROGRAM

Find a non-profit sponsor such as your school.
Write a Mission Statement that describes your philosophy.
Decide on how many students, what age group, and from what school or schools.
Get collaborative support from school(s) administrators and teachers.
Present an estimated support from school(s) administrators.
Raise funds.

A MONTH BY MONTH GUIDE
(WHEN FUNDS ARE AVAILABLE)

MAY: Recruiting
- Approximate dates for PALS Program
- Get teacher recommendations of students, letter to parents, parent’s agreement
- Make up student and teacher/staff lists with addresses
- Make a bus list with times and place of pick up
- Confirm bus company
- Confirm classrooms availability for the summer
- Plan field trips
Acceptance
- Send letters of acceptance to students and staff

JUNE Follow-up
- Send June letter to students with bus schedule and what to wear,
- Send medical permission forms
- Send June letter to staff with employment forms and orientation information
- Prepare and print the Summer Orientation Guide
- Organize room set-up
- Order PALS staff and student shirts
- Meet with certain Head Teachers late June

JULY
- Orientation and then the 4 weeks of PALS Summer Program
- See the Handbook for PALS Summer Program details

SEPTEMBER
- Send bus list with times and place of pick up
- Confirm bus company
- See school administrators about dismissal process, whether any students have moved since July and potential new-to-the school students
- Mass mailing: Fall Enrollment Form, yearly PALS calendar, start-up day bus schedule, and what classrooms in the school to use on Tuesdays
- Reserve rooms for Wednesdays’ activities at your school
- Recruit volunteer student teachers
- Director meets with Master Teachers for planning
- Director writes a Summer PALS report
- Director and Fundraising office collaborate on a PALS Fall Newsletter
- Prepare and print a Fall Orientation Guide
- Using summer school photos and essays to make “Here is the 7th and 8th Grade” to serve as booklets/guides for the academic year volunteers.
HOW TO START A PALS LIKE PROGRAM (continued)

A MONTH BY MONTH GUIDE (continued)

SEPTEMBER (continued)
-1<sup>st</sup> Orientation meeting with teachers and volunteers: general program description
-2<sup>nd</sup> Orientation meeting: divide volunteers by class they will be working with; prepare for the opening day
-Daily Tues. & Wed. get food

OCTOBER
-End of term final meeting get food
-End of term Attendance and Academic Awards and prizes
-Director prepares a preliminary budget for the following July-June year

JANUARY

FEBRUARY
-PALS student schedule and “to do” list same as the Fall Term

LATE MARCH
-PALS student schedule and “to do” list same as the Fall/Spring terms

APRIL AND MAY
-Recruiting starts for next year’s students and summer staff

PALS support at the family picnic

8<sup>th</sup> Graders interviewing

Teaching with whiteboards