"Building a Word Wall" Roots - The Foundation of Language

Grade Level or Special Area: 6th grade Language Arts
Written by: Keva Wolfe, Bromley E. Charter School, Brighton, CO
Length of Unit: Ten lessons (45 minutes each)

I. ABSTRACT
Students will memorize and understand the Core Knowledge vocabulary by learning the impact Greek and Latin root words have made on the English language. Students will utilize a variety of dictionaries to find words, which utilize the 33 root words. Students will demonstrate their understanding of these root words by creating a class word wall. They will demonstrate application of their learning by writing about a museum where they will create unique inventions using these root words.

NOTE: To do this unit, the teacher should designate a wall, or bulletin board in the room to display the words students will find that use the Core Knowledge roots. It is also beneficial to the learner if you do this unit while your Social Studies counterpart is doing Ancient Rome, if possible. I found this unit had a greater impact after the students read the Core Knowledge five Greek love myths, The Odyssey and The Iliad as there are several origins of the roots within these stories (i.e. Psyche).

II. OVERVIEW
A. Concept Objectives
1. Students will develop an awareness of root words in English vocabulary.
2. Students will gain an understanding of the impact Greek and Latin has on the English language.
3. Students will develop an awareness of the information found in dictionaries.

B. Content from the Core Knowledge Sequence
1. 6th Grade English (pp. 134-135)
   a. Writing, Grammar, and Usage
      i. Vocabulary

C. Skill Objectives
1. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems. (CSS Reading and Writing 6.1.H)
2. Locate meanings, pronunciations, and derivations of unfamiliar words using dictionaries, glossaries, and other sources. (CSS Reading and Writing 6.1.J)
3. Use listening skills to understand directions. (CSS Reading and Writing 4.6.F)
4. Choose vocabulary that communicates their messages clearly and precisely. (CSS Reading and Writing 2.6.D)
5. Create readable documents with legible handwriting or word processing at the appropriate time. (CSS Reading and Writing 2.6.H)
6. Write using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling. (CSS Reading and Writing 3.6.AB,C,D,E, and F)

III. BACKGROUND KNOWLEDGE
A. For Teachers
2. Morwood, James and Mark Warman. Our Greek and Latin Roots

B. For Students
1. Grade 3: English: Vocabulary (pg. 66)
2. Grade 4: English: Vocabulary (pg. 88)
3. Grade 5: English: Vocabulary (pg. 109)
4. Grade 2: English: Grammar (pg. 44)
5. Grade 3: English: Grammar (pg. 66)
6. Grade 4: English: Grammar (pg. 87)
7. Grade 5: English: Grammar (pg. 109)

IV. RESOURCES
B. Goldman, Jonathan and Andrew W. Sparks. *Webster's New World Student's Dictionary* (Lessons One, Four, Five and Six)
C. Morwood, James and Mark Warman. *Our Greek and Latin Roots* (Lessons One, Four, Five and Six)
E. Agnes, Michael E. *Webster's New World Children's Dictionary* (Lessons One, Four, Five and Six)

V. LESSONS
Lesson One: Exploring a Dictionary (45 minutes)
A. Daily Objectives
1. Concept Objective(s)
   a. Students will develop an awareness of the information found in dictionaries.
   b. Students will develop an awareness of root words in English vocabulary.
   c. Students will gain an understanding of the impact Greek and Latin has on the English language.
2. Lesson Content
   a. Vocabulary
3. Skill Objective(s)
   a. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.
   b. Locate meanings, pronunciations, and derivations of unfamiliar words using dictionaries, glossaries, and other sources
   c. Use listening skills to understand directions.
B. Materials
1. Make a transparency of a page of a dictionary that your students use in the classroom (you can use a variety of dictionaries to differentiate for different levels of learners)
2. Appendix B (one per student)
3. A variety of dictionaries, one for each pair of students (some suggestions are: *Webster's New World Student's Dictionary*, *Webster's New Explorer Student Dictionary* or *American Heritage Student Dictionary*)
4. Agnes, Michael E. *Webster's New World Children's Dictionary* (for use with modified or ESL students)
Overhead projector and transparency markers

C. **Key Vocabulary**
1. Derivation – a source or origin of something
2. Dissect – to take apart and examine the pieces

D. **Procedures/Activities**
1. Ask students, "Have you ever used a dictionary? Why did you use one? How is the information in a dictionary arranged? [alphabetically] What other books are arranged alphabetically? [encyclopedia, thesaurus, telephone books]"
2. Tell students, "Today we are going to investigate and dissect a page of a dictionary to find out all the information you can learn from one page and one individual entry."
3. Put transparency on the projector and point out the different parts of the entry using colored markers (syllabication, pronunciation, part of speech, derivation, and definition).
4. Point to the two words at the top of the page (right-hand corner) and circle in a colored marker. Ask if anyone knows what they are, what they are called [guidewords], and what they are used for [locating words on the page]. What other books use these words?
5. Distribute one dictionary to each pair of students and Appendix B. Allow students to work quietly, giving them enough time for finish their investigation.
6. Have students share their words and the information.

E. **Assessment/Evaluation**
1. Ask students, "What information did we learn about dictionaries today?" (Key points - syllabication, definition, and derivation)
2. Satisfactory completion of Appendix B

Lesson Two: **How to Use the Dictionary - Alphabetizing and Guidewords** (depending on your students' skill level, you may need to modify the attached Appendices by using easier words or teach a mini-lesson on these skills) (45 minutes)

A. **Daily Objectives**
1. Concept Objective(s)
   a. Students will develop an awareness of the information found in dictionaries.
   b. Students will develop an awareness of root words in English vocabulary.
   c. Students will gain an understanding of the impact Greek and Latin has on the English language.

2. Lesson Content
   a. Vocabulary
3. Skill Objective(s)
   a. Use listening skills to understand directions.
   b. Locate meanings, pronunciations, and derivations of unfamiliar words using dictionaries, glossaries, and other sources.
   c. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

B. **Materials**
1. Appendix C (one per student)
2. Appendix D (one per student)
3. Appendix H (Teacher's Key to Appendix C and D) (one for the teacher)

C. **Key Vocabulary**
1. Alphabetize – to arrange in the usual order of the alphabet
2. **Guidewords** – words at the top of a page of an alphabetically-arranged resource such as a dictionary or telephone book to inform you of which words or topics can be found on the page.

**D. Procedures/Activities**

1. Say, "I'm sure you have all used a dictionary before, but we are going to review the necessary skills for correctly using a dictionary. You will need a pencil, and the worksheet which I am now distributing to the class." (Appendix C - Alphabetizing)
2. Say, "Let's do #1 together." Give students a couple of minutes to do #1. Rotate through the room as the students are working to check their work. Select a student to give their answer.
3. Have students finish the worksheet, and compare their answers with a partner.
4. Check class results for understanding.
5. If there seems to be understanding, you may go on to Appendix D. Use the same procedure for Appendix D as you did with Appendix C. If some students are having difficulty, you may need to work with them one-on-one. If a number of students are having difficulty you may need to teach a mini-lesson, or prepare a less challenging worksheet on alphabetizing skills.
6. Say, "Tomorrow there will be a quiz on alphabetizing and the use of guidewords. If you have any questions on these two skills, you need to ask them now."

**E. Assessment/Evaluation**

1. Results of Appendix C and Appendix D (use Appendix H to grade)
2. Student questions and answers

**Lesson Three: Testing for Understanding - Alphabetizing and Guidewords (45 minutes)**

**A. Daily Objectives**

1. **Concept Objective(s)**
   a. Students will develop an awareness of the information found in dictionaries.

2. **Lesson Content**
   a. Vocabulary

3. **Skill Objective(s)**
   a. Use listening skills to understand directions.
   b. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

**B. Materials**

1. Appendix E (one copy for each student)
2. Appendix F (teacher's key) (one for the teacher)

**C. Key Vocabulary**

1. Alphabetize – to arrange in the usual order of the alphabet
2. Guidewords – words at the top of a page of an alphabetically-arranged resource such as a dictionary or telephone book to inform you of which words or topics can be found on the page

**D. Procedures/Activities**

1. Make sure that the room is silent as you distribute a test paper (Appendix E) to each student.
2. Have students skim the test before they begin.
3. Inform students that when they are finished with their test, they must check it over for careless mistakes.
4. After checking their paper for mistakes, they are to turn in their paper and read quietly until all students have finished.
Lesson Four: Building a Word Wall (45 minutes)

Daily Objectives
1. Concept Objective(s)
   a. Students will develop an awareness of the information found in dictionaries.
   b. Students will develop an awareness of root words in English vocabulary.
   c. Students will gain an understanding of the impact Greek and Latin has on the English language.

2. Lesson Content
   a. Vocabulary

3. Skill Objective(s)
   a. Use listening skills to understand directions.
   b. Locate meanings, pronunciations, and derivations of unfamiliar words using dictionaries, glossaries, and other sources.
   c. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

B. Materials
1. Appendix A (one copy for each student)
2. A variety of dictionaries at varying levels (one copy for each student) (some suggestions are: Webster's New World Student's Dictionary, Webster's New Explorer Student Dictionary or American Heritage Student Dictionary)
4. Agnes, Michael E. Webster's New World Children's Dictionary (Lessons One, Four, Five and Six) - For use with modified or ESL students.
5. Overhead projector and transparency markers
6. Create a wall or bulletin board in your room to display the words the student will find in a dictionary that uses the Core Knowledge word roots; I wrote each root word on a 5" x 8" index card and used blue for Greek roots (16), green cards for Latin roots (15) and yellow for word roots that are both Greek and Latin (2), then left enough room under each card to display the students' findings

C. Key Vocabulary
1. Derivation – a source or origin of something
2. Guidewords – words at the top of a page of an alphabetically-arranged resource such as a dictionary or telephone book to inform you of which words or topics can be found on the page

D. Procedures/Activities
1. Draw students' attention to the "Word Wall" display. Have them take a minute or two to read all 33 root words to themselves. Ask them, "Are any of these root words familiar to you? Can you see any words, which are combinations that make words you recognize? (tele [far] + scope [see] = telescope)
2. Seat students in groups (three-four students per group), although they will be working independently, they can consult with each other and trade dictionaries.
3. Distribute one copy of Appendix A to each student and set a dictionary for each student at the group table.
4. Say, "Today, we will be using dictionaries to find words that use each root word. We will then be writing these words on the chart. First, let's look at the chart. The first column gives you the root word. The second column gives you the
derivation; whether it is Greek or Latin. The third column gives you the meaning of the root. In the last column you will write a word that uses the root word. You will be able to find these words in the dictionary. Let's do the first one together. Does anyone know a word that begins with *annus* or *annu*? (Allow students to think of words they might know) I would like everyone to find a word that begins with *annus* or *annu* in the dictionary." Allow students, using the dictionaries, to find a word and write it in the last column on their chart.

5. Have students share the word they found with their group members.

6. Students are to complete root words #1-10.

7. The teacher must rotate through the room to ensure that students are finding words using these roots in the dictionary.

8. Collect Appendix A to continue the next day.

E. **Assessment/Evaluation**

1. Completed Appendix A #1-10

**Lesson Five:**  **Continuing to Build the Wall (45 minutes)**

A. **Daily Objectives**

1. Concept Objective(s)
   a. Students will develop an awareness of the information found in dictionaries.
   b. Students will develop an awareness of root words in English vocabulary.
   a. Students will gain an understanding of the impact Greek and Latin has on the English language.

2. Lesson Content
   a. Vocabulary

3. Skill Objective(s)
   a. Use listening skills to understand directions.
   b. Locate meanings, pronunciations, and derivations of unfamiliar words using dictionaries, glossaries, and other sources.
   c. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

B. **Materials**

1. Appendix A (students continue to use their charts from the previous day)

2. A variety of dictionaries at varying levels (one copy for each student) (some suggestions are: *Webster's New World Student's Dictionary*, *Webster's New Explorer Student Dictionary* or *American Heritage Student Dictionary*)

3. Agnes, Michael E. *Webster's New World Children's Dictionary* (for use with modified or ESL students)


C. **Key Vocabulary**

1. Derivation – a source or origin of something

2. Guidewords – words at the top of a page of an alphabetically-arranged resource such as a dictionary or telephone book to inform you of which words or topics can be found on the page

D. **Procedures/Activities**

1. Review with the students what they did the previous day (how to use the dictionary, how to use the chart) and ask them what difficulty, if any, they had the day before. Ask students if they found any interesting or unusual words during their research.
2. Return Appendix A to the students, distribute dictionaries, and allow time for students to complete words #11-21. Rotate through the room, checking for understanding and allowing students to share their findings.

3. Ask students what difficulty they are having, if any. Ask students to share interesting or familiar words they have discovered.

4. Collect Appendix A.

E. **Assessment/Evaluation**
   1. Student discussion.
   2. Completed Appendix A #11-21.

**Lesson Six: Finishing the Wall (45 minutes)**

A. **Daily Objectives**
   1. **Concept Objective(s)**
      a. Students will develop an awareness of the information found in dictionaries.
      b. Students will develop an awareness of root words in English vocabulary.
      c. Students will gain an understanding of the impact Greek and Latin has on the English language.
   2. **Lesson Content**
      a. **Vocabulary**
   3. **Skill Objective(s)**
      a. Use listening skills to understand directions.
      b. Locate meanings, pronunciations, and derivations of unfamiliar words using dictionaries, glossaries, and other sources.
      c. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

B. **Materials**
   1. Appendix A (students continue to use their charts from the previous day)
   2. A variety of dictionaries at varying levels (one copy for each student) (some suggestions are: *Webster's New World Student's Dictionary, Webster's New Explorer Student Dictionary* or *American Heritage Student Dictionary*)
   3. Overhead projector and transparency markers
   4. Agnes, Michael E. *Webster's New World Children's Dictionary* (for use with 
      modified or ESL students)

C. **Key Vocabulary**
   1. Derivation – a source or origin of something
   2. Guidewords – words at the top of a page of an alphabetically-arranged resource such as a dictionary or telephone book to inform you of which words or topics can be found on the page

D. **Procedures/Activities**
   1. Complete root words #22-33 using the same procedure as the previous day.

E. **Assessment/Evaluation**
   1. Student discussion.
   2. Completed Appendix A #22-33
Lesson Seven: "The Individual Bricks" - Finishing the Wall (45 minutes)

A. Daily Objectives
   1. Concept Objective(s)
      a. Students will develop an awareness of the information found in dictionaries.
      b. Students will develop an awareness of root words in English vocabulary.
      c. Students will gain an understanding of the impact Greek and Latin has on the English language.
   2. Lesson Content
      a. Vocabulary
   3. Skill Objective(s)
      a. Use listening skills to understand directions.
      b. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

B. Materials
   1. 5" x 8" white index cards (one per student)
   2. A slip of paper with each root written on it in a bowl or box

C. Key Vocabulary
   1. Derivation – a source or origin of something

D. Procedures/Activities
   1. Return completed Appendix A to the students.
   2. Have students randomly select a slip of paper with a root word written on it from a bowl or box.
   3. Distribute an index card to each student. Students will, using a large, neat handwriting, write a sample word for the selected root on the index card.
   4. Students will affix their card under the root on the bulletin board in the classroom. The bulletin board display will now be complete with the root word, and a sample word that uses that root. The "Word Wall" is complete.
   5. Allow students time to peruse the words displayed.
   6. Students should check their charts with the "Word Wall" for correctness, and to fill in additional example words for the roots.
   7. Allow time for students to quiz one another on the content. Rotate through the room checking for focus and understanding.
   8. Announce to students that they should take their charts home and study them for a test the following day.

E. Assessment/Evaluation
   1. Completed "Word Wall"
   2. Students quizzing one another

Lesson Eight: "Testing the Wall" (NOTE: cover the display in the classroom while students take their test) (40 minutes)

A. Daily Objectives
   1. Concept Objective(s)
      a. Students will develop an awareness of the information found in dictionaries.
      b. Students will develop an awareness of root words in English vocabulary.
      c. Students will gain an understanding of the impact Greek and Latin has on the English language
   2. Lesson Content
      a. Vocabulary
3. **Skill Objective(s)**
   a. Use listening skills to understand directions.
   b. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

B. **Materials**
   1. Appendix I (one per student)

C. **Key Vocabulary**
   1. Derivation – a source or origin of something

D. **Procedures/Activities**
   1. Have students take out a pencil and clear their desks.
   2. Distribute Appendix I to each student.
   3. Say, "This test looks exactly like the chart we have been working on, so I think you will understand the format. There are some parts of the chart, which are empty; you must fill these in. Does anyone have any questions? When you have completed your test, turn it face down on your desk and read quietly until everyone is done."
   4. When all students are finished, collect the tests.

E. **Assessment/Evaluation**
   1. Appendix I

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**Lesson Nine:** Introduction to "An Invention Convention" - Writing Assignment (40 minutes)

A. **Daily Objectives**
   1. Concept Objective(s)
      a. Students will gain an understanding of the impact Greek and Latin has on the English language.
      b. Students will develop an awareness of root words in English vocabulary.
   2. Lesson Content
      a. Vocabulary
   3. Skill Objective(s)
      a. Chose vocabulary that communicates their messages clearly and precisely.
      b. Create readable documents with legible handwriting or word processing at the appropriate time.
      c. Write using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling.
      d. Use listening skills to understand directions.
      e. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

B. **Materials**
   1. Appendix G (one copy per student and a transparency)
   2. Appendix J (a transparency)

C. **Key Vocabulary**
   1. Criteria – a standard or rule by which something can be judged

D. **Procedures/Activities**
   1. Say, "Today you are all going to have an opportunity to use your imaginations and create an invention that could better the world and make you successful. What may seem ridiculous and impossible at one time in history, can soon become a reality. This happened with the airplane, the automobile, the television and the computer, and now we all use these amazing inventions without even thinking about how truly amazing they are. (write "tele - phone" on the board)"
Let's look at this word and notice the two roots that make up this word - tele, which as we know means "far" and phone, which means "voice". Does the word telephone make sense for what this invention does?

2. Distribute one copy of Appendix G to each student, and use a transparency of Appendix G to explain the assignment. Check for questions from students.

3. After explaining the assignment to the students, use the transparency of Appendix J to share the rubric with them. Explain the criteria, and check for questions from the students.

4. Give a clear due date for the assignment. Over a weekend is suggested, but you may want to give students time in class to work on this assignment.

E. Assessment/Evaluation

1. Student questions, answers and discussion

Lesson Ten: An Invention Convention - Share and Display (40 minutes)

A. Daily Objectives

1. Concept Objective(s)
   a. Students will gain an understanding of the impact Greek and Latin has on the English language.
   b. Students will develop an awareness of root words in English vocabulary.

2. Lesson Content
   a. Vocabulary

3. Skill Objective(s)
   a. Use listening skills to understand directions.
   b. Establish and adjust purposes for reading, such as reading to find out, to understand, to interpret, to enjoy, and to solve problems.

B. Materials

1. Students' completed assignments (Appendix G)
2. Appendix K (one copy per student)

C. Key Vocabulary

1. Publish – to issue or display in printed form
2. Feedback – a response

D. Procedures/Activities

1. Prepare an area in your classroom or in the hallway to display your students' works. Prepare a title for the display.
2. Have students place their finished assignment on their desk.
3. Say, "Now we will all have an opportunity to share and enjoy each other's inventions. You will also have an opportunity to give some positive "feedback" or a "response" to your classmates. (Distribute Appendix K to each student, and have them tape it to their desks next to the drawing of their invention.) Let's take a look at this sheet."
4. Go over Appendix K, and allow time (15-20 minutes) for classmate to rotate through the room to enjoy the inventions. (Rotate through the room checking for understanding and to ensure that students maintain focus.) Students should return to their seats, and read the positive comments.
5. When students have finished, have them share some of the positive comments they particularly liked.
6. When finished, have students put up their inventions on the display board.
7. You may want to allow time for students to come to the front of the room to share their inventions.

E. Assessment/Evaluation

1. Appendix J - "An Invention Convention" rubric
2. Display of student work, sharing of comments and inventions.
3. Appendix K - Peer Feedback

VI. CULMINATING ACTIVITY
A. Appendix I - Root Words - Test
B. Appendix G - "An Invention Convention"
C. "Word Wall" - student display
D. Appendix K - Peer Feedback
E. Display of student inventions

VII. HANDOUTS/WORKSHEETS
A. Appendix A: Vocabulary- Word Roots (student chart) (lessons 4,5,and 6)
B. Appendix B: "A Page in the Dictionary" (student worksheet) (lesson 1)
C. Appendix C: Dictionary Worksheet #1 - Alphabetizing (student worksheet) (Lesson Two)
D. Appendix D: Dictionary Worksheet #2 - Guidewords (student worksheet) (Lesson Two)
E. Appendix E: Alphabetizing and Guidewords - Test (Lesson Three)
F. Appendix F: Teacher's Key for Appendix E (Lesson Three)
G. Appendix G: "An Invention Convention" (Lesson Nine)
H. Appendix H: Teacher's Key for Appendix C and Appendix D (Lesson Two)
I. Appendix I: Root Words - Test (Lesson Eight)
J. Appendix J: "An Invention Convention" Rubric (Lesson Nine)
K. Appendix K: Peer Feedback (Lesson Ten)

VIII. BIBLIOGRAPHY
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<th>Meaning</th>
<th>Example</th>
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## Root Derivation Meaning Example

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<tr>
<td>thermos</td>
<td>Greek</td>
<td>heat</td>
<td></td>
</tr>
<tr>
<td>tri</td>
<td>Greek, Latin</td>
<td>three</td>
<td></td>
</tr>
<tr>
<td>unus</td>
<td>Latin</td>
<td>one</td>
<td></td>
</tr>
<tr>
<td>video, visum</td>
<td>Latin</td>
<td>see, seen</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B

A Page in the Dictionary

Name ______________________________

With your partner, open your dictionary to any page. Each of you selects a word (one word per student) and fills in the information below:

Your word _________________________

Write how the word is divided into syllables ___________________________________

What part of speech is the word? ________________________________.

What is the definition of the word? _________________________________

Are there nearby words, which are words in the same "word family"? What are they?

_________________________________________________________________

What other information did you learn about the word? What is the derivation of your word?

_____________________________________________________________________

What are the guide words on your page?

_________________________________ and _________________________________.

Why are dictionaries useful?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________
Appendix C

Dictionary Worksheet #1 - Alphabetizing

Name _________________________

Put the following groups of words in alphabetical order. Write you answer below the words.

1. amuse  address  Arab  antler  actor

2. together  the  twice  tiger  turkey

3. duckling  ostrich  flamingo  dove  dormouse

4. enormous  energy  enthusiasm  enough

5. wrist  women  written  wrong  worst

6. chinese  change  chocolate  challenge  champion

7. fiber  feverish  festive  fervor  fertilizer

8. shale  shaft  shady  shallot  shaky

9. myth  mystery  myself  mysterious

10. feminine  fellowship  femoral  feline
Appendix D

Dictionary Worksheet #2 - Guidewords

Name _______________________

"Guidewords" are the two words in the top-right corner on a page of a dictionary. They are the first entry and the last entry on a page of a dictionary, thesaurus, telephone book, encyclopedia or any other resource, which is arranged alphabetically. They are necessary to help you locate your word.

1. If the guidewords on a page were "sidewalk" and "silence," which word would NOT be on the page?
   sierra   sign   sieve   simple   sigh
   Your answer ___________________________________

2. If the guidewords on a page were "laundry" and "lawn," which words would NOT be on the page?
   lavender lawyer lax lava lavish
   Your answer ___________________________________

3. If the guidewords on a page are 'pause" and "payment," which word would be on the page?
   payroll pattern patriot pavilion peacock
   Your answer ___________________________________

4. If the guidewords on a page were "ample" and "anchor," which word would be on the page?
   anvil   amber   ancient   amusement   amaze
   Your answer ___________________________________

5. If the guidewords on a page were "crochet" and "crossbones," which words would NOT be on the page?
   criticize crocodile croquet crouch crocus
   Your answer ___________________________________

6. If the guidewords on a page were "penicillin" and "pepper," which word would NOT be on the page?
   peninsula peony penniless peppermint people
   Your answer ___________________________________
Appendix E, page 1

Alphabetizing and Guidewords - Test

Name ___________________

Read each question carefully, and when you must rewrite a word, copy it correctly. Points will be taken off for incorrect spelling.

1. If the guidewords on a page were "manicure" and "mantel," which words would NOT be found on the page? Please circle your answers.
   manmade  maniac  mannerism  mantilla  mantle

2. If the guidewords on a page were "relative" and "relief," which words would NOT be found on the page? Please circle your answers.
   release  reliable  rejoice  relieve  relax

3. If the guidewords on a page were "human" and "humor," which word would NOT be found on the page? Please circle your answers.
   humerus  hummock  humorous  humidity  humble

4. If the guidewords on a page were "jaguar" and "jelly," which word would be found on the page? Please circle your answers.
   jeopardy  jade  jealous  jersey  jackal

5. If the guidewords on a page were "armchair" and "arrange," which word would be on the page? Please circle your answer.
   armadillo  arrow  arena  armor  arrest

6. Alphabetize the following words: unicorn, unique, unicycle, uniform, union
   1. ______________
   2. ______________
   3. ______________
   4. ______________
   5. ______________

7. Alphabetize the following words: laughter, lightning, laundry, lovely, legal
   1. ______________
   2. ______________
   3. ______________
   4. ______________
   5. ______________
Appendix E, page 2

8. Alphabetize the following words: disappoint, disaster, disagree, disarm, disable
   1. ____________
   2. ____________
   3. ____________
   4. ____________
   5. ____________

9. Alphabetize the following words: shudder, shuffle, shut, shutdown, shuttle
   1. ____________
   2. ____________
   3. ____________
   4. ____________
   5. ____________

10. Alphabetize the following words: entrance, entertain, envision, enviable, envelope
    1. ____________
    2. ____________
    3. ____________
    4. ____________
    5. ____________
Appendix F

Teacher's Key for Appendix E

1. maniac, mantilla, mantle
2. rejoice, relieve
3. humorous
4. jealous
5. armor

6. unicorn, unicycle, uniform, union, unique
7. laughter, laundry, legal, lightning, lovely
8. disable, disagree, disappoint, disarm, disaster
9. shudder, shuffle, shut, shutdown, shuttle
10. entertain, entrance, envelope, enviable, envision
Appendix G
"An Invention Convention" Assignment

Name ______________________________

Words we use are combinations of roots, prefixes and suffixes. We build words just like building a train, by adding on cars to the front or back. The "telephone" is an example of such a word, *tele* means "far" and *phone* means "sound or voice". This combination of roots is very logical and makes sense when we think of how a telephone is used.

*Imagine you are an inventor and want to create a new invention to introduce to the world.*

Using no fewer than four of the 33 roots we have studied, your task is to create an invention, which is unique and useful. Keep the following criteria in mind as you design your invention and complete the assignment.

**VISUAL PRESENTATION:**
*All writing must be large enough to read
*All writing must be clear enough to read
*Drawing of invention must be colored
*Drawing of invention must be labeled
*Neat work
*Your name

**CONTENT:**
*Title your invention
*Title must use no fewer than three root words
*Root words are used correctly
*Purpose of invention matches root word meaning
*Explanation of labeled parts
*Paragraph explaining purpose of invention and uses

**WRITING FLUENCY:**
*Correct vocabulary
*Correct sentence structure
*Variety of sentence structure
*Clarity

**WRITING CONVENTIONS:**
*Correct spelling
*Correct verb tense
*Correct punctuation
*Correct capitalization
Appendix H

Teacher Key to Appendix C and Appendix D

Key to Appendix C
1. actor, address, amuse, antler, Arab
2. the, tiger, together, turkey, twice
3. dormouse, dove, duckling, flamingo, ostrich
4. energy, enormous, enough, enthusiasm
5. women, worst, wrist, written, wrong
6. challenge, champion, change, chinese, chocolate
7. fertilizer, fervor, festive, feverish, fiber
8. shady, shaft, shaky, shale, shallot
9. myself, mystery, mysterious, myth
10. feline, fellowship, feminine, femoral

Key to Appendix D
1. simple
2. lawyer, lax
3. pavilion
4. amusement
5. criticize, crouch
6. peppermint
Appendix I, page 1

Root Words - Test

Name _______________________________

Fill in the missing words in the chart below:

<table>
<thead>
<tr>
<th>Root</th>
<th>Derivation</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>psyche</td>
<td>Greek</td>
<td>at a distance</td>
<td>psychology</td>
</tr>
<tr>
<td></td>
<td>Greek</td>
<td>light</td>
<td></td>
</tr>
<tr>
<td>quartus</td>
<td>Latin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greek, Latin</td>
<td>three</td>
<td></td>
</tr>
<tr>
<td>magnus</td>
<td>Latin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mega</td>
<td>Greek</td>
<td></td>
<td></td>
</tr>
<tr>
<td>centum</td>
<td>Latin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>decem</td>
<td>Latin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aqua</td>
<td>Latin</td>
<td></td>
<td>aquarium</td>
</tr>
<tr>
<td>minus</td>
<td>Greek</td>
<td></td>
<td></td>
</tr>
<tr>
<td>primus</td>
<td>Latin</td>
<td>first</td>
<td></td>
</tr>
<tr>
<td>protos</td>
<td>Greek</td>
<td>first</td>
<td></td>
</tr>
<tr>
<td>omnis</td>
<td>Latin</td>
<td>all</td>
<td></td>
</tr>
<tr>
<td>annus</td>
<td>Latin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greek</td>
<td>star</td>
<td></td>
</tr>
<tr>
<td>pre</td>
<td>Latin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>post</td>
<td>Latin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Root Words – Test – Answer Key

Fill in the missing words in the chart below:

<table>
<thead>
<tr>
<th>Root</th>
<th>Derivation</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TELE</strong></td>
<td>Greek</td>
<td>at a distance</td>
<td><strong>TELEPHONE</strong></td>
</tr>
<tr>
<td>psyche</td>
<td>Greek</td>
<td><strong>SOUL, MIND</strong></td>
<td>psychology</td>
</tr>
<tr>
<td><strong>PHOTO</strong></td>
<td>Greek</td>
<td>light</td>
<td><strong>PHOTOSYNTHESIS</strong></td>
</tr>
<tr>
<td>quartus</td>
<td>Latin</td>
<td><strong>FOURTH</strong></td>
<td><strong>QUARTER</strong></td>
</tr>
<tr>
<td><strong>TRI</strong></td>
<td>Greek, Latin</td>
<td>three</td>
<td><strong>TRIANGLE</strong></td>
</tr>
<tr>
<td><strong>GE</strong></td>
<td>Greek</td>
<td>earth</td>
<td>geology</td>
</tr>
<tr>
<td>magnus</td>
<td>Latin</td>
<td><strong>GREAT, LARGE</strong></td>
<td><strong>MAGNITUDE</strong></td>
</tr>
<tr>
<td>mega</td>
<td>Greek</td>
<td><strong>GREAT, LARGE</strong></td>
<td><strong>MEGAPHONE</strong></td>
</tr>
<tr>
<td>centum</td>
<td>Latin</td>
<td><strong>HUNDRED</strong></td>
<td><strong>CENTURY</strong></td>
</tr>
<tr>
<td>decem</td>
<td>Latin</td>
<td><strong>TEN</strong></td>
<td><strong>DECIMAL</strong></td>
</tr>
<tr>
<td>aqua</td>
<td>Latin</td>
<td><strong>WATER</strong></td>
<td>aquarium</td>
</tr>
<tr>
<td>minus</td>
<td>Greek</td>
<td><strong>SMALLER</strong></td>
<td><strong>MINUTE</strong></td>
</tr>
<tr>
<td>primus</td>
<td>Latin</td>
<td>first</td>
<td><strong>PRIMAL</strong></td>
</tr>
<tr>
<td>protos</td>
<td>Greek</td>
<td>first</td>
<td><strong>PROTOTYPE</strong></td>
</tr>
<tr>
<td>omnis</td>
<td>Latin</td>
<td>all</td>
<td><strong>OMNISCIENT</strong></td>
</tr>
<tr>
<td>annus</td>
<td>Latin</td>
<td><strong>YEAR</strong></td>
<td><strong>ANNUAL</strong></td>
</tr>
<tr>
<td><strong>ASTRON</strong></td>
<td>Greek</td>
<td>star</td>
<td><strong>ASTRONOMY</strong></td>
</tr>
<tr>
<td>pre</td>
<td>Latin</td>
<td><strong>BEFORE</strong></td>
<td><strong>PREVIEW</strong></td>
</tr>
<tr>
<td>post</td>
<td>Latin</td>
<td><strong>AFTER</strong></td>
<td><strong>POSTSCRIPT</strong></td>
</tr>
</tbody>
</table>
## Appendix J

"Invention Convention" Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VISUAL PRESENTATION</strong></td>
<td>*Writing is large</td>
<td>*Writing is generally large</td>
<td>*Writing is somewhat large</td>
<td>*Writing is too small</td>
</tr>
<tr>
<td></td>
<td>*Writing is clear</td>
<td>*Writing is generally clear</td>
<td>*Writing is somewhat clear</td>
<td>*Writing is unclear</td>
</tr>
<tr>
<td></td>
<td>*Drawing is colored</td>
<td>*Drawing is mostly colored</td>
<td>*Drawing is partially colored</td>
<td>*Drawing is not colored</td>
</tr>
<tr>
<td></td>
<td>*Drawing is labeled</td>
<td>*Drawing is mostly labeled</td>
<td>*Drawing is partially labeled</td>
<td>*Drawing is not labeled</td>
</tr>
<tr>
<td></td>
<td>*Neat</td>
<td>*Generally neat</td>
<td>*Somewhat messy</td>
<td>*Messy</td>
</tr>
<tr>
<td></td>
<td>*Your name</td>
<td>*Your name</td>
<td>*Your name</td>
<td>*Your name is not written</td>
</tr>
<tr>
<td><strong>CONTENT</strong></td>
<td>*Title</td>
<td>*Title</td>
<td>*Title is somewhat appropriate</td>
<td>*No title</td>
</tr>
<tr>
<td></td>
<td>*At least four root words are used in title</td>
<td>*At least three root words are used in title</td>
<td>*At least two root words are used in title</td>
<td>*Root words are incorrect or not used at all</td>
</tr>
<tr>
<td></td>
<td>*Roots are correctly used</td>
<td>*Roots are generally used correctly</td>
<td>*Roots are somewhat used correctly</td>
<td>*Invention's purpose does not match the meaning of the root word</td>
</tr>
<tr>
<td></td>
<td>*Purpose matches root word meaning</td>
<td>*Purpose generally matches root word meaning</td>
<td>*Purpose somewhat matches root word meaning</td>
<td>*Parts are not labeled or explained</td>
</tr>
<tr>
<td></td>
<td>*Explanation of labeled parts is correct and present</td>
<td>*Explanation of labeled parts is generally correct and present</td>
<td>*Some explanation of labeled parts</td>
<td>*Paragraph explaining purpose of invention and uses is either incorrect, insufficient, or not present</td>
</tr>
<tr>
<td></td>
<td>*Paragraph explaining purpose of invention and uses is correct and well-developed</td>
<td>*Paragraph explaining purpose of invention and uses is generally correct</td>
<td>*Paragraph explaining purpose of invention and uses is somewhat correct</td>
<td>*Paragraph explaining purpose of invention and uses is not written</td>
</tr>
<tr>
<td><strong>WRITING FLUENCY</strong></td>
<td>*Correct vocabulary</td>
<td>*Vocabulary is generally correct</td>
<td>*Vocabulary is somewhat correct</td>
<td>*Vocabulary is incorrect</td>
</tr>
<tr>
<td></td>
<td>*Correct sentence structure</td>
<td>*Sentence structure is generally correct</td>
<td>*Sentence structure is somewhat correct</td>
<td>*Sentence structure is incorrect</td>
</tr>
<tr>
<td></td>
<td>*Variety of sentence structure</td>
<td>*Some variety of sentence structure</td>
<td>*Little variety of sentence structure</td>
<td>*No variety of sentence structure</td>
</tr>
<tr>
<td></td>
<td>*Clarity</td>
<td>*Writing is mostly clear and understandable</td>
<td>*Writing is somewhat clear, but difficult to understand</td>
<td>*Writing lacks clarity</td>
</tr>
<tr>
<td><strong>WRITING CONVENTIONS</strong></td>
<td>*No spelling errors</td>
<td>*one-two spelling errors</td>
<td>*three spelling errors</td>
<td>*more than four spelling errors</td>
</tr>
<tr>
<td></td>
<td>*No verb tense errors</td>
<td>*one-two verb tense errors</td>
<td>*three verb tense errors</td>
<td>*more than four verb tense errors</td>
</tr>
<tr>
<td></td>
<td>*No punctuation errors</td>
<td>*one-two punctuation errors</td>
<td>*three punctuation errors</td>
<td>*more than four punctuation errors</td>
</tr>
<tr>
<td></td>
<td>*No capitalization errors</td>
<td>*one-two capitalization errors</td>
<td>*three capitalization errors</td>
<td>*more than four capitalization errors</td>
</tr>
</tbody>
</table>
Appendix K

Peer Feedback

Inventor's Name ________________________
Name of Invention ______________________

As you rotate through the room to enjoy your classmates' inventions, take this opportunity to give them some positive feedback. Be specific and write WHAT you specifically like about their invention (limit yourself to only one comment). For example, you could write, "I think your title is really unusual", or "I love your drawing; it is so colorful", or "Your invention seems like it could really work someday."

Remember how great you feel when someone gives you positive comments on your work. If you cannot think of something positive to write, do not write anything.

Comment #1

Comment #2

Comment #3

Comment #4

Comment #5