

# Think Outside the Etymological Box

## Objectives

Students expand their vocabularies by learning the meanings and functions of words and how those are changed with prefixes and suffixes.

Students create colorful 3-D study aids to expand their use of vocabulary words.

Students correlate words to pictures and symbols.

## Multiple Intelligences

Bodily-kinesthetic

Linguistic

Spatial

## What Does It Mean?

**Etymology:** from the Greek *etymon* (true meaning) and *logos* (word or study), tracing the history of a word by breaking it down into parts

National Standards	
<p><b>Visual Arts Standard #2</b> Using knowledge of structures and functions</p> <p><b>Visual Arts Standard #5</b> Reflecting upon and assessing the characteristics and merits of their work and the work of others</p> <p><b>Visual Arts Standard #6</b> Making connections between visual arts and other disciplines</p>	<p><b>English Language Arts Standard #3</b> Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).</p> <p><b>English Language Arts Standard #11</b> Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.</p>

## Background Information

By learning the meaning and function of common prefixes and suffixes students can rapidly expand their word-attack skills. Many prefixes and suffixes have Greek or Latin origins. Some suffixes change a word's part of speech (adjective to adverb), tense (-ed, -ing), or degree (-er, -est).

The prefix *pre* means "before" or "ahead of." In this case, a prefix is a group of letters added before a root word that changes its meaning. Words using this prefix are *pretest*, *preview*, *prepare*. A study of prefixes often begins in first grade when the prefix *un* is introduced during a study of word opposites. *Re* (meaning *again*) is another common prefix for the early grades.

Students soon realize that learning basic prefixes gives them a clue to the meaning of unfamiliar words. Students who know that the prefix *hydro* means water can infer that *hydroelectricity* is electricity produced by water power. Knowing that *helio* refers to the sun enables students to determine a meaning for *heliotherapy*.

## Resources

*Prefixes and Suffixes: Systematic Sequential Phonics and Spelling* by Patricia Cunningham  
Series of 120 systematic lessons for teaching phonics, spelling, and vocabulary through prefixes and suffixes.

*Quick and Easy Origami Boxes* by Tomoko Fuse  
Attractive book includes a guide to basic origami symbols. Includes instructions for making boxes in squares, triangles, and hexagons. Clear step-by-step diagrams accompany close-up photographs showing the folding process as well as finished projects.

*Red Hot Root Words: Mastering Vocabulary With Prefixes, Suffixes, and Root Words* by Diane Draz  
Manual for elementary teachers includes worksheets, games, and activities for students. Contains lists of vocabulary words and sample sentences demonstrating the use of targeted prefixes, suffixes, and roots. Similar book for grades 6 to 9 is also available.

*The American Heritage Children's Dictionary* from American Heritage Dictionaries  
Child-friendly dictionary. More than 1,000 color photographs as well as information about the history of hundreds of words. Language Detective and Vocabulary Builder sections are very useful.

## Vocabulary List

Use this list to explore new vocabulary, create idea webs, or brainstorm related subjects.

- Prefixes
 

Bene- (benefit)	Il-, in- (illegal, inappropriate)
Biblio- (bibliography)	Im- (import)
Bio- (biography)	Inter- (interrupt)
Circum- (circumference)	Per- (perforate)
Cogn- (cognition)	Post- (postscript)
Dict- (dictate)	Pre- (preview)
Ex- (exit)	Re- (rewrite)
Geo- (geography)	Semi- (semisweet)
Hemi- (hemisphere)	Sub- (submarine)
Hydro- (hydrophobia)	Syn-, sym- (symmetrical)
Hyper- (hyperactive)	Trans- (transport)
Hypo- (hypodermic)	
- Suffixes
 

- ful (cupful)	- phobia (claustrophobia)
- less (careless)	- phone (telephone)
- nym (synonym)	- port (transport)
- ology (biology)	- scope (microscope)
- Art vocabulary
 

Border	Sphere
Cube	Template
Pattern	Texture



Artwork by students from St. Jane Frances De Chantal School, Easton, Pennsylvania.  
Teacher: Julie Piazza



Artwork by students from Klatt Elementary School, Anchorage, Alaska.  
Teacher: Barbara Yanoshek



Artwork by students from Mt. Prospect Elementary School, Basking Ridge, New Jersey.  
Teacher: Regina De Francisco



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# Think Outside the Etymological Box

	K-2	3-4	5-6
<b>Suggested Preparation and Discussion</b>	<p>Ascertain that children understand the concept of simple word opposites by reviewing pairs such as <i>tall/short</i> and <i>hot/cold</i>.</p> <p>Challenge students to think of opposites for words such as <i>tie</i> or <i>lock</i>. Explain how adding the prefix <i>un-</i> changes the meaning of a word to its opposite. Ask them to think of other such words.</p> <p>Together, list several familiar prefixes and their meanings.</p>	<p>Show students several familiar words with the same prefix. Ask them to identify and define the prefix (untie, unlock, unhappy). Who can explain what a prefix is? (something added to the beginning of a word that changes its meaning)</p> <p>Together, list and define some common prefixes. Post the list. Explain how knowing the meanings of common prefixes can aid in defining new words.</p> <p>Present an unfamiliar word or phrase such as <i>postoperative complications</i>. Challenge students to define it based on their knowledge of prefix meanings.</p> <p>Ask what something similar to a prefix that is added to the end of a word is called. Explain that a suffix affects a word by changing its meaning, its part of speech, or its degree.</p>	
	<p>Examine sample art projects similar to those students will make. Discuss the unique structure of a cube. Ask students how they use and see cubes daily.</p>		
<b>Crayola® Supplies</b>	<ul style="list-style-type: none"> <li>• Colored Pencils</li> <li>• Markers</li> <li>• Model Magic®</li> <li>• School Glue</li> <li>• Scissors</li> </ul>		
<b>Other Materials</b>	<ul style="list-style-type: none"> <li>• Oak tag</li> </ul>		
<b>Set-up/Tips</b>	<ul style="list-style-type: none"> <li>• Invite parent volunteers or advanced students to prepare oak tag cube templates for the entire class. Cube templates can be found by conducting a search on the Web.</li> <li>• This is an excellent small-group activity. Each small group makes one rolling cube and individual word cubes.</li> </ul>		



**Japanese Decorative Paper Box**  
 Artist unknown  
 Painted decorative paper  
 3 1/2" x 5 x 4"  
 Private Collection.

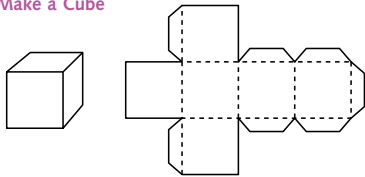


**Kenyan Decorative Box**  
 Artist unknown  
 Ikat fabric and leather  
 2 1/2" x 3" x 10"  
 Private Collection.



**Blue Scarab With Hieroglyphics**  
 Artist unknown  
 Painted stone  
 3" x 1" x 3"  
 Private Collection.



	K-2	3-4	5-6
<b>Process:</b> <b>Session 1</b> <b>10 min.</b>	<b>Create rolling cubes</b> <ol style="list-style-type: none"> <li>Roll a tennis ball-size Model Magic® sphere.</li> <li>Press the sphere on a flat surface to form a six-sided cube. Air-dry the cube at least 24 hours.</li> </ol>		
<b>Process:</b> <b>Session 2</b> <b>10 min.</b>	<b>Finish rolling cubes</b> <ol style="list-style-type: none"> <li>Students choose six different prefixes (or suffixes for grades 3-6) from a recent vocabulary lesson. Write one on each side of the cube with markers.</li> </ol>		
<b>Process:</b> <b>Session 3</b> <b>45-60 min.</b>	<b>Design word cubes</b> <ol style="list-style-type: none"> <li>Students roll prefix or suffix cube to determine the affix to use for their word cubes. If necessary, roll again so each person in the group uses a different prefix or suffix.</li> <li>Place cube templates flat on desks. In one square, write the prefix or suffix that was rolled. Use large letters.</li> <li>Think of five different words that contain that prefix or suffix. Check a dictionary to make sure the chosen words actually contain prefixes or suffixes and are not just words that happen to contain the same letters as the given prefix or suffix (deflate vs. definition).</li> <li>On each of the five remaining squares, write one word, illustrate it, and either define or write a sentence using the word. Add decorative borders using interesting textures and patterns.</li> <li>Fold the template to create a cube with the artwork on the outside. Glue the cube together. Air-dry the glue before using the cube.</li> </ol>		
<b>Process:</b> <b>Session 4</b> <b>10-15 min.</b>	<b>Share word cubes</b> <ol style="list-style-type: none"> <li>Students examine classmates' cubes. What additional words using the key prefixes or suffixes can they generate? Encourage discussion. Display cubes in the classroom.</li> </ol>		
<b>Assessment</b>	<ul style="list-style-type: none"> <li>Do all words on the cube contain the given prefix or suffix?</li> <li>Are prefixes (or suffixes) and sample words clearly written and correctly spelled?</li> <li>Do sample sentences demonstrate an understanding of word usage?</li> <li>Do illustrations accurately reflect word meanings?</li> <li>Does decorative art add visual interest to the project?</li> <li>Ask students to reflect on this lesson and write a DREAM statement to summarize the most important things they learned.</li> </ul>		
<b>Extensions</b>	<p>Limit the number of prefixes presented to younger students and those with learning needs.</p> <p>Consider working with rhyming words and syllables.</p> <p>Modify this activity as needed for kindergarten and some first grade students by putting letters or consonant blends on the rolling cube. Each student writes the letter or blend rolled and five words that start with that letter or blend on the word cube (ch: chin, church, chat, chain, cheerful).</p> <p>Or choose common word endings that can be combined with a variety of beginning consonants (-at, -in, -am).</p> <p>Instead of paper cubes, use small recycled boxes with lids glued closed. Cover with paper and fill with vocabulary as described.</p> <p>Encourage students to look for words in newspapers or their independent reading books that contain prefixes they studied.</p> <p>Children who are skilled at spatial relationships may want to create their own cubes.</p> <p>Integrate vocabulary study with a math lesson on numerical prefixes such as: uno-, mono-, bi-, tri-, quad-, pent-, hex-, sept-, oct-, nove-, deci-, centi-, and milli-.</p> <p>Challenge highly motivated students to research why September, October, November, and December seem to have been misnamed.</p> <p>Offer students an opportunity to work with irregular plurals on their cubes: knife-knives; life-lives; wife-wives.</p> <p>Have students consider working with pronoun referents such as: John saw a man. = He saw a man.</p>		
	<p><b>Make a Cube</b></p>  <ul style="list-style-type: none"> <li>Use 90 lb., 8 1/2" x 11" paper</li> <li>Scale up diagram to paper size.</li> <li>Cut along the edges and decorate squares.</li> <li>Score and fold along all dotted lines.</li> <li>Apply glue to flaps.</li> <li>Fold squares and glued flaps to create a cube.</li> </ul>		

