

Lesson Plan Title	pneumonoultramicroscopicsilicovolcanokoniosis (Vocabulary by Analogy with Word Walls, p. 71, <i>Beyond the Blueprint</i>)
Lesson Plan Created by	Liz Buttner, CSDE Educational Consultant for K-8 Science
Grade	6
Subject	Science
Standard(s)	<p>Science Framework Content Standard 6.1– Materials can be classified as pure substances or mixtures, depending on their chemical and physical properties.</p> <p>◆ Pure substances can be either elements or compounds, and they cannot be broken down by physical means.</p> <p>GLE: Each element has distinct characteristic properties. The Periodic Table of Elements is used to organize elements based on properties such as their reactivity, state of matter, conductivity or density. Element names are represented by letter symbols on the Periodic Table.</p>
Time	45 minutes
Indicators/Objective(s)	<p><i>Science - Identify</i> properties of gold and compare its properties to those of copper.</p> <p><i>Literacy - Recall</i> the meanings of common prefixes and suffixes.</p> <p>- <i>Apply</i> prefixes and suffixes to figure out and change the meanings of new words.</p>
Required Materials for Lesson/Technology	<p>Web sites (see Resources section below)</p> <ol style="list-style-type: none"> 1. “Dissecting” an amazingly long word 2. Common prefixes and suffixes list 3. Gold article – Science News for Kids 4. Using prefixes to expand vocabulary
Initiation (prior knowledge; connections; vocabulary)	<p>Display the following word: <u>pneumonoultramicroscopicsilicovolcanokoniosis</u>. Tell students this is a real word. Give students a moment to try to read it silently. Call on volunteers willing to try pronouncing the word aloud. Ask students to share strategies they used to pronounce the word (e.g., chunking by syllables). Ask students to guess what the word might mean and share what strategies they used. Introduce the strategy of “dissecting,” or cutting open, the word to reveal its component parts: root word, prefix and suffix.</p>
Learning Procedures	<ol style="list-style-type: none"> 1. Distribute Handout 1. Together, read the meanings of the prefixes and suffixes used in the challenge word and use them to figure out its meaning. Then read the definitions of additional science prefixes and suffixes that make up other science terms. 2. Distribute Handout 2. Tell the students they are going to be reading a magazine article about gold. They will use their new knowledge of root words, prefixes and suffixes to figure out the meanings of some of the unfamiliar words used in

	<p>the article.</p> <p>3. Read “Gold’s Glittery Rewards” independently, and in pairs use a highlighter to mark words with morphemes, and record their meanings.</p> <p>4. Make a permanent class list of the morphemes students found.</p>
Grouping	Whole group, pairs and individuals
Guided Practice	Dissecting a long science word together
Instructional Strategies	Using given definitions of morphemes to decode and define unfamiliar words in a science magazine article
Closure	Post the common prefixes, suffixes and their meaning on the Word Wall.
Independent Practice	Handout 4: Ask students to find morpheme words in the textbook chapter about elements and use their new skill to define the words.

RESOURCES:

1. <http://biology.about.com/library/weekly/aa021902a.htm>
2. http://content.scholastic.com/content/collateral_resources/pdf/r/reading_bestpractices_vocabulary_prefixes_suffixes.pdf
3. <http://www.sciencenewsforkids.org/articles/20070214/Feature1.asp>
4. http://www.how-to-study.com/prefixes_print.htm