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Writing Strategies for Mathematics

Second Edition



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Word Trails

Background Information

A strong relationship exists between word knowledge and reading comprehension. Without word knowledge, readers read less and are more apt to be poor readers (Anderson and Freebody 1985). Seldom do words stand alone, isolated from and unrelated to other words. The Word Trails strategy helps students build connections or “trails” from unknown words to familiar ones so they can ultimately acquire and use accurately academic and domain-specific vocabulary. This strategy asks that students gather relevant information about the word of study by looking to print and digital resources for more information. Students need to have a repertoire of strategies to use when they face unknown words in their reading. The Word Trails strategy offers a way to build those bridges.

Grade Levels/Standards Addressed

See page 33 for the standards this strategy addresses, or refer to the Digital Resource CD (standards.pdf) to read the correlating standards in their entirety.

Genre

Expository

Stage of Writing Process

Prewrite

Activity

Introduce a new domain-specific word and then build “trails” and connections from other words to the new word. Have students use both print and digital resources to locate and connect relevant information about the word.

The following are the main trails that connect words:

- **root words**—Many mathematics words have similar root words. Knowing these can help students determine meaning.
- **prefixes and suffixes**—Recognizing and identifying prefixes or suffixes in a word can help determine its meaning.
- **synonyms or similar words**—Words become “friends” and can help students remember definitions. What are other words that have the same or similar meaning to the new word? What are examples of this word?
- **antonyms**—Identifying opposites is an effective way to clarify word meaning. What are the words that mean the opposite of this new word? What are nonexamples of the word?

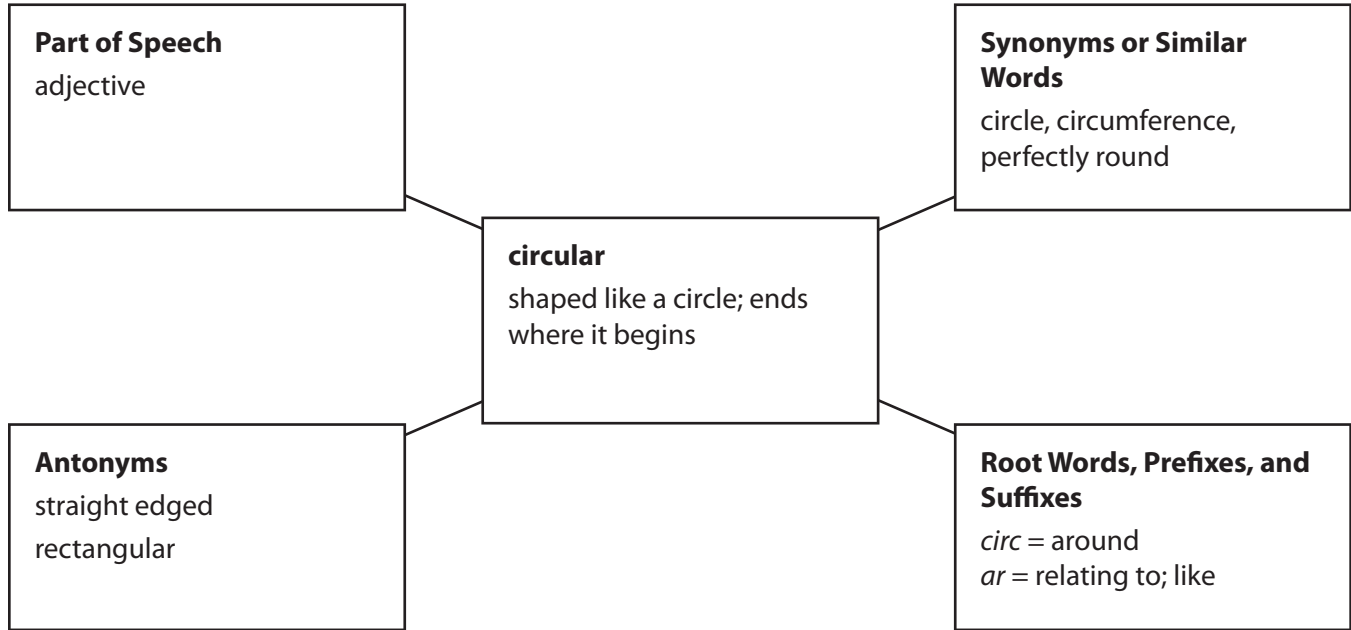
Distribute the *Word Trails* activity sheet (page 62, wordtrails.pdf), and have students identify the trails from this word to other words. When finished, discuss students’ findings. Primary grade teachers may want to complete the *Word Trails* activity sheet as a class, and then post it on the Word Wall (pages 34–38). Students can add these words and their trails to their Vocabulary Journal (pages 99–102).

Differentiation

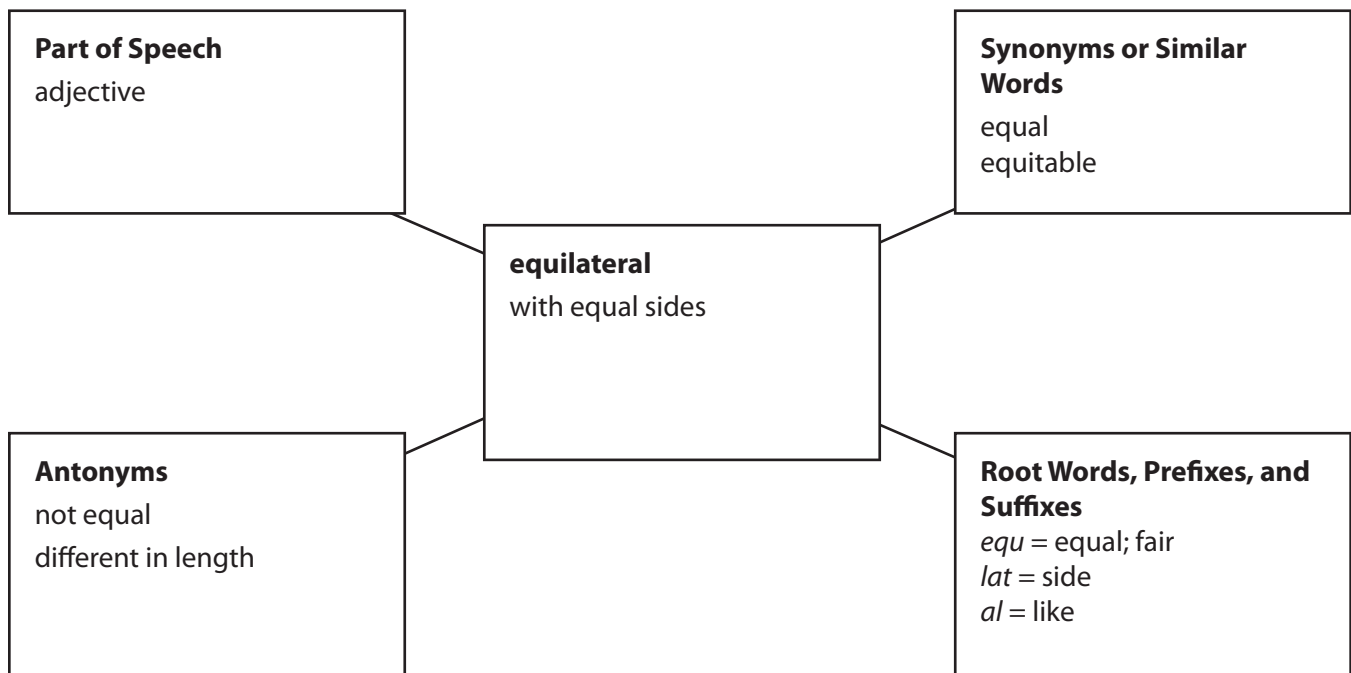
Preteach English language learners how to use the *Word Trails* activity sheet so they understand the format. Consider also preteaching the roots, prefixes, and suffixes that will be addressed during the whole-class lesson so these students will be able to recognize them and apply meaning to the unknown vocabulary word. Use visuals whenever possible. Encourage above-level students to study additional or related vocabulary words and present and explain their maps to the class. Limit the number of vocabulary words for below-level students to allow them to focus on a few words.

Word Trails *(cont.)*

Grades 3–5 Example



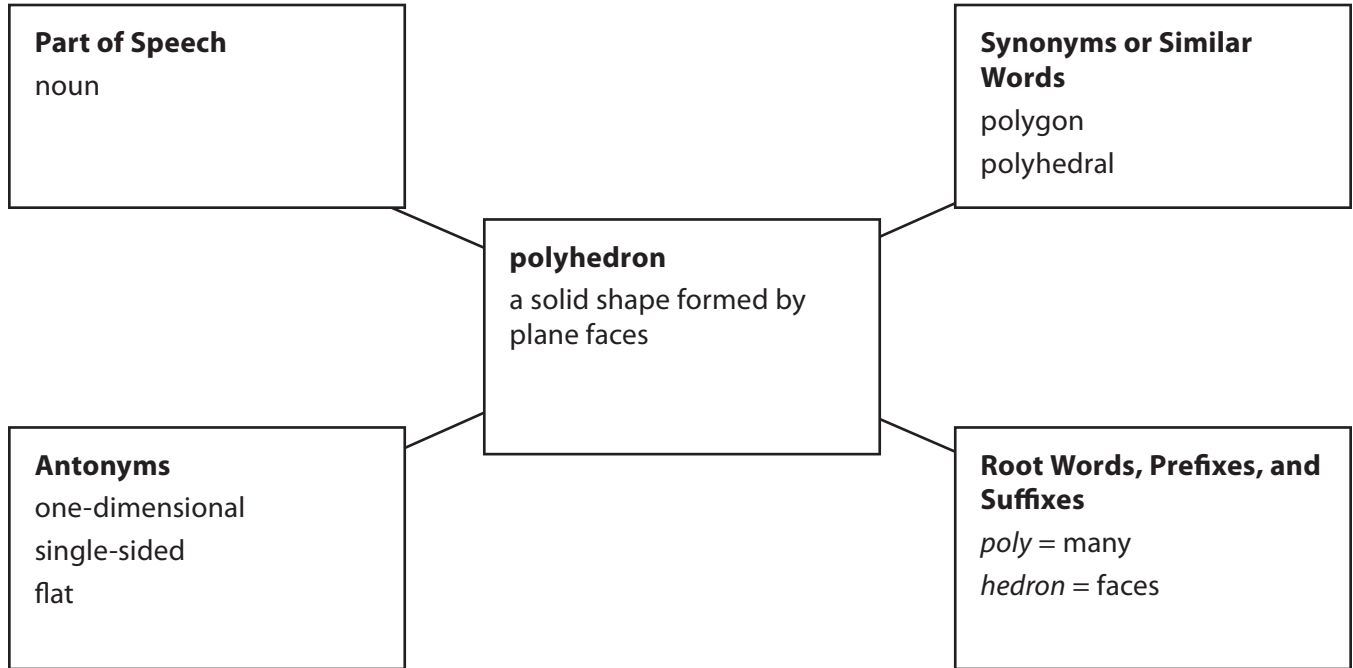
Grades 6–8 Example



Word Trails *(cont.)*

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Grades 9–12 Example



Name: _____ Date: _____

Word Trails

Directions: Write the word that you are studying in the center box. Use resources to determine the root words, prefixes and suffixes, synonyms or similar words, and antonyms. Then, complete the graphic organizer.

