

Vocabulary Strategy: Learn New Words

As you read about different topics in science, you will come across some words that are unfamiliar to you. You will also see familiar words that have different meanings in science than the meanings you know. Learning the definitions of these new words is necessary to understand what you're reading. Here are some strategies for learning words and their meanings.

Pronounce the Word

It's hard to remember a word when you're unsure how to pronounce it. Pronouncing a word correctly often gives a clue to the word's meaning.

Example: The word **nuclear** (NOO klee ur) comes from the word *nucleus*, which is the center of an atom, where protons and neutrons are found. Therefore, you can remember that "nuclear energy" means energy that has to do with an atom's nucleus. This information can also help you remember that a "nuclear reaction" involves a change in the protons and neutrons in an atom.



Use Memory Tricks

Create a memory trick for yourself.

1. Connect the new word to a familiar word.
2. Link the new word to something you know.
3. Create a rhyme or a joke, or draw a cartoon.

Example: You need to remember what a concave mirror is. A **concave** mirror has a surface that curves inward. So think of the word *cave*. A cave has an opening that leads into it, and a concave mirror's surface curves inward.



Vocabulary Strategy: Learn New Words, Cont.

Learn New Words *(continued)*

Compare Meanings and Use Word Parts

Compare and contrast a new word's meaning with its familiar meaning. Make notes to compare the science meaning with the everyday meaning.

Example: In physical science, **work** is a force that is exerted on an object, causing it to move. In everyday life, **work** usually means physical or mental activity directed toward a goal, such as earning money or helping someone. That means that everyday work is work in the scientific sense only when it involves moving an object in some way. So you could say: "Work involves movement. No movement means no work, no matter how tired you get or how much money you earn!"



Use Word Parts

Many words are made up of word parts—roots, prefixes, and suffixes. Many dictionaries give the meanings of word parts along with the definition of the word. By learning the meanings of the parts of words, you know something about the meaning of an unfamiliar word that contains any of those parts.

Example: A **geosynchronous** orbit is the orbit of an object that revolves around Earth at the same rate that Earth rotates. Think:
-**geo-** means "Earth"
-**syn-** means "the same or together"
-**chron-** means "time"
-**ous** is a suffix meaning "having"



Vocabulary Strategy: Learn New Words, Cont.

Learn New Words *(continued)*

TRY THIS

For each of the examples below, explain how you would use the suggested strategy to help you remember the word's meaning.

1. **Word:** *aquaculture* — the practice of raising fish and other water organisms for food
Strategy: Create a memory trick.

2. **Word:** *endoskeleton* — (EN doh skeleton) an internal skeleton
Strategy: Explain how knowing the pronunciation can help you remember the meaning.

Unlock the meanings of the following words using the clues and what you know.

3. **Word:** *binomial*
Clues: *bi-* means “two”
-nomial means “related to name”

4. **Word:** *paleontologist*
Clues: Paleontology is the study of animal fossils and ancient animal life.
-ist is a suffix meaning “a person who is involved in or believes in something”

- 5.

Word: *decomposition*
Clues: *de-* is a prefix meaning “reversal or undoing”
compose means “to make or create by putting together” *-ion* is a suffix meaning “action or process of”

Vocabulary Strategy: Learn New Words, Cont.

Learn New Words *(continued)*

6. Work with a partner. Find four words in the glossary of your book. Write the meaning of each word. Then identify the strategy you will use to remember the definition. Explain how this strategy helps you remember the word.

Word

Meaning

Strategy

Word

Meaning

Strategy

Word

Meaning

Strategy

Word

Meaning

Strategy