



## Use Vocabulary: Grades 6–8

### OVERVIEW:

An abundance of research has shown the vital role that vocabulary knowledge plays in reading comprehension and the development of content knowledge. As students enter middle school, they encounter increasingly complex texts. The ability to determine the meaning of unknown, domain-specific words in these texts is critical to students' being able to read and understand content area texts. Therefore, it is essential that content area teachers provide students with instruction in strategies that can be used to determine the meaning of words they encounter. Once students learn these strategies, teachers should provide opportunities for students to acquire new vocabulary and practice using words in multiple contexts.

### Mini-Lesson I

#### Use Context Clues (20–30 minutes)

**Background:** Context clues refer to the words in and around a sentence that help readers understand the meaning of unknown words. Research has shown that direct instruction in the use of context clues not only builds students' vocabularies but also supports their reading comprehension and deepens their content knowledge. The following strategy introduces students to the different types of context clues and provides an opportunity for students to practice using context clues to determine the meaning of unfamiliar words. Note the teaching suggestions are based on the passage "Introduction to Cell Division" contained in the *Expedition: Learn!* lesson "Cell Division for Growth and Repair."

- Display the **Types of Context Clues anchor chart**. As needed, review each type of context clues using the example sentence provided.
- Introduce the text to students and invite them to create a T-chart in their notebooks or on a sheet of paper. Have students label the columns "Word and Meaning" and "Context Clue Used."
- Share with students that as they read, they will likely encounter unfamiliar words. Emphasize that as they encounter these words, they should pay attention to the clues around the word to help them determine the meaning.

- Model the process for students. Read aloud the text until you come to a vocabulary word or a word that is likely to be unfamiliar to students, and then model how to use context clues to determine the meaning of the word. Consider the following:
  - Stop after reading the sentence, "Because the jelly surrounding the black dots is **transparent**, it is easy to observe that the cells inside divide and that the number of cells in the egg increases as cell division continues."
  - Think aloud to demonstrate how to use the context of the sentence to help you determine the word's meaning, emphasizing the type of context clue you use. For example:
    - *The description of the cell and jelly helps me determine the meaning. The sentence says that it is easy to see inside the cell to observe how the number of eggs is increasing. I can use this description to help me infer the meaning. From this sentence, I think transparent must mean "easy to see through." I can check my thinking by putting the definition into the sentence to see if it makes sense. "Because the jelly is easy to see through, it is easy to observe that the cells inside divide and that the number of eggs..." That makes sense, so this must be correct.*
  - Model recording the word, definition, and type of context clue on the T-chart.
  - Continue reading, stopping after the sentence "Some **organisms**, such as bacteria, consist of only a single cell. Others, such as humans, frogs, and cacti, are made of many billions of cells."
  - Invite students to turn and talk with a partner to discuss they type of context clue the sentence provides and how they can use the sentences to determine the meaning of the word *organisms*.
  - Strategically call on partners to share the meaning of the word *organisms* and the context clue used. As they share out, synthesize responses and add to the displayed T-chart. For example:
    - *An organism is a living thing, like a plant, animal, or single cell life form, that can live on its own.*
    - *The sentences around the word give examples of organisms, which helped me determine the meaning.*
- Release students to continue reading the passage with a partner, stopping when they encounter an unknown word to practice using context clues to determine the meaning. Other words students might identify include: *binary fission, DNA, genes, multicellular, and unicellular*.
- Debrief the task, inviting students to share the words they encountered, their meanings, and how context clues helped them determine the meaning.

## Mini-Lesson II

### Analyze Word Parts: Root Words and Affixes (20–30 minutes)

**Background:** In addition to teaching students what to do when they encounter unfamiliar words in a text, developing a students' vocabulary also depends on teaching them word analysis and knowledge. Since many English words have their origins in Greek and Latin, teaching students how to break words into parts and use their knowledge of common affixes and roots can support them in determining the meaning of unknown words. This is particularly true in science, where Greek and Latin words are used for naming and classifying species. Note that before learning how to analyze word parts, some students may benefit from explicit instruction surrounding common affixes and roots and their meanings. The following teaching suggestions are based on the article "What Is Taxonomy?" in the *Expedition: Learn!* lesson "Using Characteristics to Classify Organisms."

- As needed, remind students that many of the words within the English language are composed of morphological units, known as affixes and roots, and it is these units that can help us determine the meaning of the word.

- Review the following definitions with students:
  - *affix*: a unit that is attached to a word to change its meaning. There are two types of affixes:
    - *suffix*: part added to the end of a root word. Suffixes have three functions: (1) to change the tense of the word, (2) to change the part of speech, and (3) to extend the basic meaning of the word.
    - *prefixes*: parts of words that are added to the beginning of a root word. They change the meaning of the word.
  - *root word*: the central part of a word that carries the meaning. There are two types of root words:
    - *base word*: can stand alone without an affix attached. For example: *able, dial, just*
    - *combining root*: cannot stand alone without a prefix or suffix to complete the meaning. For example: *spec, tempor.*
- Introduce the article to students, sharing that as they read, they are likely to encounter some unfamiliar words. Share that as they come across these words, they can practice using word parts to determine their meaning.
- Display and distribute the **Determine Meaning from Word Parts** organizer to students and introduce the text they will be reading.
- After reading the title, "What Is Taxonomy?", draw students' attention to the word *taxonomy*. Think aloud to analyze the word, recording on the displayed organizer. For example:
  - *First, I am going to record the word on the organizer.*
  - *Next, I am going to look at the word and break it into its parts, considering the meaning of each part.*
    - *I see the suffix -onomy and I know this means "the study of."* Record on organizer.
    - *I don't see a prefix, but I see the rest of the word tax. I know that this comes from a Greek word taxis that means arrangement.*
    - *I can combine the two to define the word taxonomy as "the study of how things are arranged or organized."* Record on organizer.
- Read aloud the text, stopping after the sentence, "Before the invention of the microscope, scientists didn't know that trillions of tiny **microorganisms** lived all over Earth and even inside other living things."
- Draw students' attention to the word *microorganisms* and think aloud to analyze the word, recording on the displayed organizer.
  - *First, I am going to record the word on the organizer.*
  - *Next, I am going to look at the word and break it into its parts, considering the meaning of each part.*
    - *I see the prefix micro- in the word. I know the prefix micro- means very small. Record on organizer.*
    - *The word organism comes from a Greek word, and I know that it means, "something having many related parts that function together as a whole."* Model recording.
    - *I can combine the two to define the word microorganism as "very small organisms or very small living things."* Model recording.
- Release students to continue reading with a partner, stopping when they come to unfamiliar words. Encourage them to analyze the word parts to determine the meaning. Emphasize that this is only one strategy they can use to learn the meaning of new words and it does not work with all words. Additional words from the lesson students might analyze: *multicellular, taxonomist, unicellular.*

## Mini-Lesson III

### Before, During, and After Reading Vocabulary Strategies

**Background:** While explicit instruction in context clues and word parts is a key component of vocabulary development, effective vocabulary instruction also depends on providing students multiple opportunities to engage with key words across a variety of contexts. The suggested activities below engage students with key vocabulary words before, during, and after reading. Note that while the activities can be applied to any *Expedition: Learn!* lesson, the examples provided are based on the lesson “Patterns in Development.”

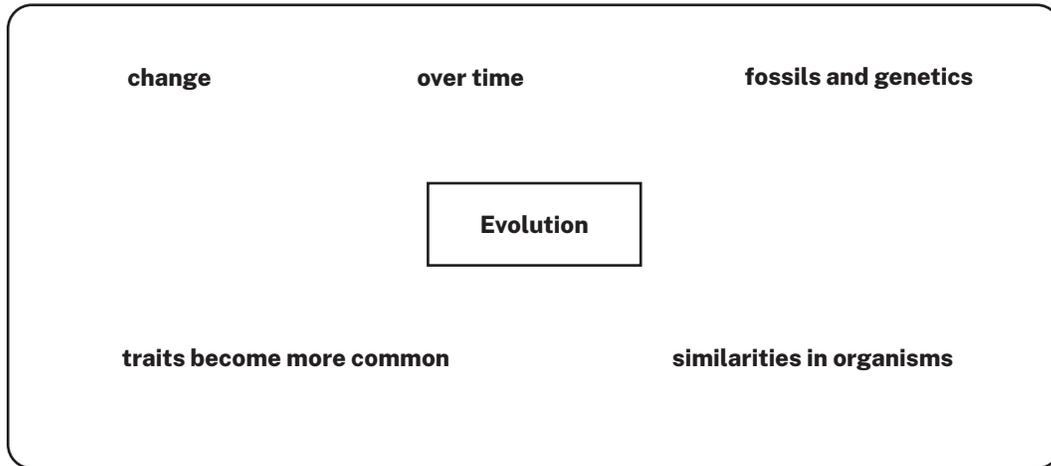
#### Before Reading: Pre-teach Key Vocabulary Words

- The teacher introduces the key vocabulary words that students will encounter in the text prior to reading. For each of the words, the teacher shares the definition, a visual cue, and an example. Students engage in immediate practice through a collaborative turn-and-talk discussion. For example:

Vertebrate (noun)	
an animal with a backbone	
<ol style="list-style-type: none"> <li>Since a fish is a vertebrate, its backbone must be removed before you can eat it.</li> <li>A jellyfish does not have a spine, so it is not a vertebrate.</li> </ol>	<p style="text-align: center;"><b>Turn-and-Talk</b></p> <ol style="list-style-type: none"> <li>Tell your partner about a vertebrate that lives in the ocean.</li> <li>Tell your partner about a vertebrate you have seen and interacted with.</li> </ol>

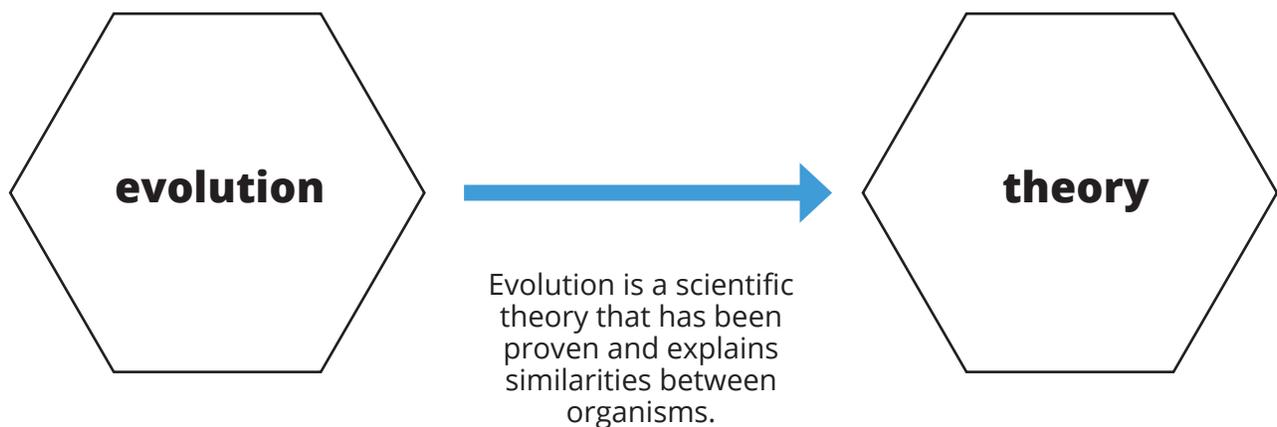
#### During Reading: Concept Mapping

- Concept mapping is a strategy for graphically representing concepts. A concept word map allows students to explore their knowledge of a new word by connecting it with other related words or phrases.
- Students begin by adding the vocabulary word to the center of a piece of paper. As they read the text, students add words and phrases around the outside that are related to the vocabulary word and help them remember the meaning. In addition, students can add images and symbols related to the meaning of the word or concept.
- Consider the following example from the article “Using Patterns in Development to Find Evolutionary Relationships” from the *Expedition: Learn!* lesson “Patterns in Development.”



## After Reading: Hexagonal Cluster—Making Connections

- Hexagonal clusters are a way for students to deepen their knowledge of key vocabulary as they discuss connections between words and concepts.
- Follow the steps below:
  - Provide students with enough hexagons so they can write one vocabulary word per hexagon.
  - Invite students to work in a triad or group to choose two words, place them on a sheet of paper, and discuss how the words are connected.
  - After they have discussed the words, ask students to draw an arrow and record the relationship between the two words. (See example below.)
  - Students repeat the process until all words have been placed.



## Types of Context Clues

 <b>INFERENCE</b>	<p><b>The author includes information across multiple sentences to indicate a meaning of the word.</b></p> <p>The <b>elusive</b> toddler scurried around the doctor's office. He was afraid of needles. It took his mother and two nurses to stop him from running out the front door.</p> <ul style="list-style-type: none"> <li>• Since the toddler is scurrying and it takes three people to stop him, it can be inferred that <b>elusive</b> means "difficult to catch."</li> </ul>
 <b>DEFINITION</b>	<p><b>The author explains the meaning of the word right after it is used.</b></p> <p>Connor has grown <b>accustomed</b> to walking in the hallway without a pass. He's used to it.</p> <ul style="list-style-type: none"> <li>• By saying Connor is "used to" walking in the hallway without a pass, the author provides a clue to determine that <b>accustomed</b> must mean or is similar to "used to it."</li> </ul>
 <b>EXAMPLE</b>	<p><b>The author includes one or more examples that define the word, often followed by "like," "such as," "including," or "for example."</b></p> <p>The mansions, antiques, yachts, and jewels announced the family's <b>affluence</b> to their neighbors.</p> <ul style="list-style-type: none"> <li>• Mansions, antiques, yachts, and jewels all fit into the category of expensive things. If the Okoye family can afford expensive things, then <b>affluence</b> most likely means "wealth."</li> </ul>
 <b>ANTONYM</b>	<p><b>The author uses a word or words that have the opposite meaning.</b></p> <p>Esmeralda disliked autumn because the weather <b>fluctuated</b> each day. She preferred summer, when the weather stayed the same for weeks at a time.</p> <ul style="list-style-type: none"> <li>• Esmeralda does not like autumn and does like summer, so fluctuated most likely means the opposite of "stayed the same." Therefore, "<b>to fluctuate</b>" most likely means "to change a lot" in this context.</li> </ul>
 <b>SYNONYM</b>	<p><b>The author uses more than one word or words that have the same meaning.</b></p> <p>The community was angry with the government's plan to close the local library and expressed their <b>grievances</b> with the city council.</p> <ul style="list-style-type: none"> <li>• The use of the word "angry" tells the reader that the community is upset. Within this context, <b>grievances</b> most likely means "complaints." If people are angry, they probably want to meet with the city council to protest the closure.</li> </ul>

**Determine Meaning from Word Parts**

**Directions:** As you read, use the following steps to determine the meaning of key vocabulary using word parts.

<b>Word</b>	<b>Meaning</b>	
<b>Break the Word Apart</b>		
<b>Prefix</b>	<b>Root</b>	<b>Affix</b>

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