

Scaffolds and Supports for Courses and Tutorials

Apex Learning Courses and Tutorials feature embedded supports and opt-in scaffolds that support the mastery of rigorous, standards-based content for students who are English language learners.

- **Ability to self-pace:** Students work at their own pace, which means a struggling reader has enough time to read for comprehension.
- **Vocabulary Assistance:** One-click vocabulary provides critical support for understanding academic language. If students click a key term, a pop-up window is displayed with definitions and pronunciations.

Protagonists versus Antagonists

READING SUPPORT REDISCOVER CHECK IT OUT



A **protagonist** is one type of character that's easy to spot because he or she is usually the main character. In other words, the plot is usually about the protagonist's **conflict**. For example, if Jason has to slay a dragon to keep his village safe, and the plot is about his attempts to do so, then Jason is the protagonist.

Most stories have an **antagonist** too. The antagonist tries to stop the protagonist from getting what he or she wants. The antagonist in our dragon story is the dragon itself, since it wants to keep Jason from

If you're slaying a dragon, you're probably the protagonist.

two is to look at the prefix favor of," while *anti-* (or *av-*

antagonist ↻

The character in a work of fiction who tries to stop the protagonist from achieving his or her purpose; the villain of a story is often the antagonist.

CLOSE

Write equivalent expressions using the associative, commutative, and distributive properties.

The **associative, commutative,** and **distributive** properties are considered **axioms of equality**.

Associative Property

Numbers being added or multiplied can be grouped in any way without changing the outcome. The parentheses below indicate the order of operations. Notice that the left and right sides are equal.

Addition

$$a + (b + c) = (a + b) + c$$

Commutative Property

Distributive Property

KEY TERM ✕

distributive property

A rule stating that if a , b , and c are numbers or expressions, then

$$a \cdot (b + c) = a \cdot b + a \cdot c.$$

Example: According to the distributive property,

$$5(x + 2) = 5x + 10.$$

Scaffolds and Supports

- Frequent Self-Checks:** Students are provided with frequent opportunities, as often as once every page or two in study activities, where they complete active learning activities to assess their understanding of the content just covered.

3.1.1 Study: Domain and Range

Interpreting Function Notation

You can interpret the function notation at different values.

For example, a worker's pay each month, $p(h)$, depends on the hours of training, h . The table shows the meaning of the function notation for different inputs and outputs.

Function notation	Meaning
$p(30) = 2500$	A worker with 30 hours of training is paid \$2500 a month.
$p(60) = 3000$	A worker with 60 hours of training is paid \$3000 a month.

The area of a square (in square feet) depends on the length of its sides (in feet). This is written in function notation as $a(s)$.

What is the best interpretation of $a(3) = 9$?

A. 3 sides of the square have a total length of 9 feet.
 B. 3 of these squares have a total area of 9 square feet.
 C. A square with an area of 3 square feet has side lengths of 9 feet.
 D. A square with side lengths of 3 feet has an area of 9 square feet.

A B C D HINT SUBMIT

The intended audience and purpose can affect the tone of a piece.

When writers choose **supporting details** to reinforce their arguments, they have to consider their audience. If the audience is a group of teenagers, an author would probably use a different set of details than if the audience were a group of NASA scientists.

Along with details, a writer also creates a **tone** that's appropriate for the intended audience. Tone reflects the way the author feels about a subject, and that comes through in the way he or she presents the **supporting details**.

Which of the examples below do you think an audience of non-recyclers would respond most favorably to?

Argument 1

Recycling is important. If you don't recycle, you're killing the Earth. You're contributing to disease and pollution. You're just a horrible person.

Argument 2

Recycling has many positive effects on the Earth. For example, it can help combat disease and pollution by reducing greenhouse gases.

- Formative Feedback:** Meaningful praise for correct answers and encouraging feedback for incorrect answers reinforce student achievement. Feedback accompanies unscored embedded self-checks as well as computer-scored assessments.

Why Did the Renaissance Begin in Italy?

By the 14th century, modern-day Italy was divided into a number of rival city-states. Proximity to valuable trade routes across the Mediterranean Sea brought great wealth to city-states such as Florence, Venice, and Genoa. As trade became central to Italian city-states' economies, merchants and bankers began to wield more political power. Eventually, these middle-class citizens grew more powerful than traditional royal or noble families, allowing them to take political control over their city-states. As a result, the feudal system in Italy ended earlier than it did in the rest of Europe.

Peasants, who were no longer bound to land owned by feudal lords, flocked to major Italian urban centers. Many former peasants became craftspeople, producing goods that were traded across the world. This explosion of

Examine the map of Italian city-states during the height of the Renaissance on this page. How do you think the presence of so many independent city-states in such proximity could have contributed to the Renaissance beginning in Italy?

Sample Response: Having so many independent states near each other likely resulted in rivalries over territory, resources, and trading partners. This competition might have driven the Italian city-states to invest in new ideas and technologies that would give them an advantage over their rivals.

1 of 3 NEXT

Feedback
Correct!

To isolate $\frac{2}{3}x$, subtract 4 from both sides.

Feedback
Incorrect.

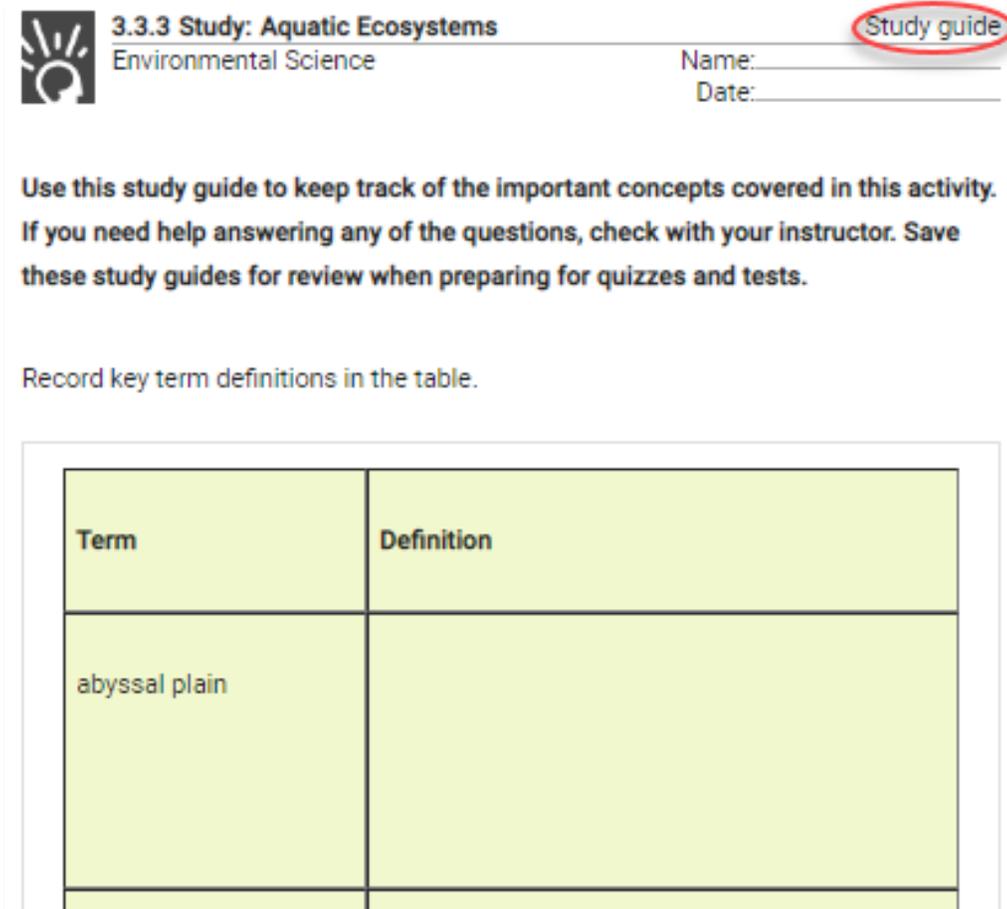
To undo the multiplication of x by $\frac{2}{3}$, you need to divide both sides by $\frac{2}{3}$. This is the same as multiplying by the reciprocal, which is $\frac{3}{2}$.

Scaffolds and Supports

- **Literacy Support:** Literacy supports for struggling readers.
- **Translation:** Apex Learning's new generation of Courses embed multi-language translation and text-to-speech across the entire Course. By embedding these supports into the course interface, students can use them for every element of their learning experience—from assessments to transcripts to on-page instruction. There are many options available for text-to-speech and translation support for Tutorials using various web browsers.

Additional supports and scaffolds within **Courses** include:

- **Audio assistance:** Students have the option to listen along as they read. Research indicates that below-proficiency readers can read at proficiency when text is accompanied by audio.
- **Study assistance:** Printable Study Sheets guide students through the content. These include graphic organizers, note-taking guides, and practice questions to aid students as they learn new material and review for tests.



3.3.3 Study: Aquatic Ecosystems Study guide

Environmental Science Name: _____
Date: _____

Use this study guide to keep track of the important concepts covered in this activity. If you need help answering any of the questions, check with your instructor. Save these study guides for review when preparing for quizzes and tests.

Record key term definitions in the table.

Term	Definition
abyssal plain	

Printable Study Guides provide guided note-taking for students, when completing instructional activities.

Scaffolds and Supports

- **Stepping Out:** Directions for complex tasks such as solving a proof or writing an essay are broken into smaller steps with explanation and guidance. This helps students understand what is expected of them and aids in the development of problem-solving skills.

The following pages and your writing guide will help you. Be sure to fill in all the questions in your writing guide; by doing so, you'll have a draft of your assignment by the end of this activity. 

This writing assignment will focus on the following skills:

- Developing a claim supported by relevant evidence
- Writing an objective summary
- Comparing and contrasting two different sources
- Creating alternative organizational schemes for an essay 

Before continuing, click the icon and print your writing guide. By completing the writing guide, you will be writing the draft of your assignment. Save this sheet for later when you will edit and submit your work for grading.



Any time you see the directions button to the right, click it for step-by-step guidance on writing the draft of your assignment. You'll be able to see sample answers once you've completed the writing activity.

Complex tasks, like essays, become manageable when the task is broken into page-by-page instructions.

Scaffolds and Supports

- **Support Cards:** These opt-in supports provide students with strategies for understanding the text on the page (Reading Support,) reminders of previously taught concepts related to the lesson (Rediscover,) and ways in which the lesson applies to real-life situations (Check It Out.)

Setting the Stage with Exposition

READING SUPPORT REDISCOVER CHECK IT OUT

Summarizing

Write down main ideas from the reading in your notes.

Conflict = A problem that gets the plot moving

Stakes = What the main character can win or lose 🗣️

As the reading explains, **exposition needs to catch the reader's attention. Well-written exposition hooks us immediately. Poorly written exposition provides a lot of unnecessary, boring information.**

Exposition also gives us an idea of what's at stake for the main character or characters. You can think of the stakes of a story as what the characters could lose or gain: money, a girlfriend, one's life, and so on. The way a writer provides this information is by introducing a **conflict**: a problem that pushes the story forward as the main character tries to deal with it.

Katie's Stakes

For example, let's say that Katie wants to go to college, but her family can't afford the tuition. She decides to enter a dance contest where the winner will receive \$50,000 — enough to get through college. But she's never been a great dancer, so she's going to need her friend Tony's help to learn.

The conflict is that Katie wants to go to college, but her family can't afford it. The stakes are the money and her future. 🗣️

CLOSE

Conflict and Tension

READING SUPPORT REDISCOVER CHECK IT OUT

Rediscover

Tension keeps an audience invested in the events of a story — it is one of the main elements that prevents a story from being boring. 🗣️

One important **aspect** of conflict is that it builds **tension** in a story. Tension is the anticipation we feel as readers while we wait to see what will happen to the characters we care about. If we know that the heroine is a plucky girl named Chloe, and we see her rush into a burning building to save a small child, we'll worry about her until she makes it out alive. That anticipation we feel before we're sure she's O.K. is tension.

Plots have to build tension as the story moves along; otherwise, there would be no reason to keep reading.

CLOSE

Compiling Themes

READING SUPPORT REDISCOVER CHECK IT OUT

Check it out!

How many other stories can you think of that explore themes like *the importance of imagination in survival*? Other stories like *The Lord of the Rings* and the *Harry Potter* books do, even though the details and situations those characters face are totally different from ones the man in 'To Build a Fire' struggles against. 🗣️

As we can see from the details of the story, the way the dog thinks is very different from the way the man thinks. The dog operates on **instinct**, while the man does not. This distinction is important, since one of them survives and the other doesn't.

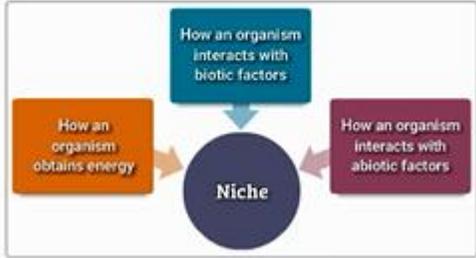
How do you interpret these details? What inferences can you make about what the story might be saying about instinct? Is it simply saying that animals are instinctual and humans are not?

Or is it saying something deeper about the role of instinctual knowledge in our lives?

Take some time with the interpretation of this **theme**, as well as reviewing some of the other themes you've interpreted, in the activity below. 🗣️

CLOSE

Supports for Struggling Readers Examples in Courses	
<p>Across all subject areas, we provide clear, straightforward language that is carefully controlled and on or below grade level to assist struggling readers</p>	
<p>Apex curriculum teaches active reading strategies like: using context clues, asking questions, using advanced organizers, and summarizing and notetaking skills. The reading support and rediscover cards in courses activate prior knowledge when reading.</p>	
<p>The specific academic linked vocabulary embedded into Apex curriculum, provides insight into specific word meanings in context.</p>	

<p>Organizing and analyzing information comes easy with tools like: on screen graphic organizers including examples and printable study guides.</p>	<p>Eating seeds is an important part of a cardinal's niche, or role within the ecosystem. A species' niche includes how it gets food and how it interacts with other organisms in its habitat. Explore factors that contribute to a species' niche. 🗣️</p> 
<p>Hints are provided in Apex curriculum, to surround students with the support they need to make an informed decision.</p>	<p>1) Write this sentence in function notation.</p> <p>The surface temperature, t, of a planet depends on the planet's distance, d, from the Sun.</p> <p>A. $t(d)$ B. $d(t)$ C. $d(p)$ D. $p(d)$</p> <p><input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="button" value="HINT"/> <input type="button" value="SUBMIT"/></p>
<p>Close Reading features in courses, will guide students through complex texts and documents.</p>	
<p>For an overview of scaffolding in Apex Learning Courses please visit: http://www.apexlearning.com/Videos/scaffold.html</p>	