Unit 3/Week 5

Title: *Did A Dinosaur Drink This Water?*

Suggested Time: 5 days (45 minutes per day)

Common Core ELA Standards: RI.3.1, RI.3.2, RI.3.3, RI.3.4, RI.3.7; RF.3.3, RF.3.4; W.3.2, W.3.4; SL.3.1, SL.3.2, SL.3.6; L.3.1, L.3.2, L.3.4, L.3.6

Teacher Instructions

**Before Teaching**

1. Read the Big Ideas and Key Understandings and the Synopsis. Please do **not** read this to the students. This is a description for teachers, about the big ideas and key understanding that students should take away **after** completing this task.

Big Ideas and Key Understandings

Earth’s water is an essential resource for all the life on Earth. It is cleaned and recycled by the Earth’s Water Cycle. It

should be cared for and protected.

Synopsis

The selection explains the water cycle, as water moves from land to oceans, evaporates, condenses, and makes its way

back to the oceans. It stresses that all living things need water for bodily processes, habitats, and many other uses, and

closes with the idea that we all need to conserve and protect our water.

1. Read entire main selection text, keeping in mind the Big Ideas and Key Understandings.
2. Re-read the main selection text while noting the stopping points for the Text Dependent Questions and teaching Vocabulary\*.

**During Teaching**

1. Students read the entire main selection text independently.
2. Teacher reads the main selection text aloud with students following along. (Depending on how complex the text is and the amount of support needed by students, the teacher may choose to reverse the order of steps 1 and 2.)
3. Students and teacher re-read the text while stopping to respond to and discuss the questions and return to the text. A variety of methods can be used to structure the reading and discussion (i.e.: whole class discussion, think-pair-share, independent written response, group work, etc.)

Text Dependent Questions

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| **Text-dependent Questions** | **Evidence-based Answers** |
| Page 424  Why is water important? Cite evidence from the text in your answer. | According to the text, every living thing needs water. Flowers and trees need it to grow. Fish live in it, ducks swim on it, and people need to drink it every day. |
| Page 424  According to the text, what are nutrients? | Nutrients are minerals and food substances. |
| Page 424  Based on the reading, why is water essential for keeping plants healthy? | Water is essential for keeping plants healthy because it carries nutrients into them. The nutrients from soil are absorbed by a tree’s roots, and are drawn up through the tree trunk to the leaves. |
| Page 425  Based on the reading, why is water essential for keeping people healthy? | Our bodies are made mostly of water. We would become dehydrated and die without drinking water. Our blood is also mostly water, and it carries nutrients to every part of our bodies. |
| Page 425  Describe the three forms of water. | According to the text, water comes in three forms: liquid, solid, and gas. When it’s liquid, it pours. When it’s solid, it’s ice. When it’s gas, it’s water vapor. |
| Page 426  On page 426 it says, “But the water we drink every day isn’t new.” Explain what this means. | There is no new water on Earth because Earth’s water is constantly recycled, renewed, and cleaned by the water cycle. |
| Page 427  The text states that, “Flowing streams are one of nature’s ways of cleaning water.” Explain what this means. | As river water flows down a mountain, some of its impurities are filtered out by rocks, pebbles, and plants. |
| Page 428  What is the difference between river water and ocean water? | River water is fresh water, and ocean water has lots of salt. |
| Page 429  According to the text, why are clouds made of fresh water? | When the ocean water evaporates, it leaves salt and other impurities behind. Water vapor is fresh water. |
| Page 431  According to the text, where is most of Earth’s fresh water? | The text on page 431 states that most of Earth’s fresh water is frozen in polar ice or glaciers, or is stored underground. |
| Page 431-432  What is the final step in the water cycle? | The final step is when water from rain and snow makes its way back to the ocean. On page 431, the text states that, eventually, underground water seeps out into rivers, lakes, and the ocean. Polar ice and glaciers melt. All that water becomes part of the ocean again. When ocean water evaporates, the cycle begins again. |
| Page 432  Where is most of the water on Earth? | According to the text, oceans cover about 70% of the Earth’s surface and contain about 97% of the Earth’s water. The oceans play the biggest part in the water cycle. |
| Page 432  Besides using water to carry nutrients to their bodies, how else do living things use water? | Oceans provide a habitat for sea plants and animals. They need salt water to live. Millions of people depend on sea life for food every day. On land, many animals, plants, and insects need water for their habitats also. |
| Page 433 - 434  How does water create electricity? | Some river water is collected in lakes or reservoirs. The dam holding the water back has big pipes with turbines. When water flows through the pipes they make the blades spin and that makes electricity. Electricity from water is called hydroelectricity. |
| Page 434  How does the illustration on page 434 help us understand the text on that page? | The text on page 434 states that water pollution is a problem all over the world. The illustration shows some of that pollution. It shows pipes with dirty water and chemicals pouring into a lake or river. There is also garbage floating in it. A truck is dumping old machine parts near the water. Oil and chemicals from them are dripping into the dirt and then into the water. The fish swimming in the lake look sick and unhappy. |
| Page 434  Based on the text on page 434, what does toxic mean? | The text says that toxic chemicals can poison water. Toxic means poisonous or deadly. |
| Page 435  Why is it essential to practice conservation? | According to the text, there is enough fresh water for everyone if we practice conservation. Conservation is protecting water and using only what we need. Water pollution is not good conservation. |
| Page 435  What can we learn from the illustration on page 435? | The two kids drinking glasses of water have suggestions for conserving water in the thought bubbles over their heads. For example, Turn Water off While Brushing Teeth; Take Short Showers; Fix Leaky Faucets; Don’t litter. These are all good ways to help take care of our water, which has been on Earth since before the dinosaurs. |

Vocabulary

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|  | **KEY WORDS ESSENTIAL TO UNDERSTANDING** | **WORDS WORTH KNOWING** |
| **TEACHER PROVIDES DEFINITION**  not enough contextual clues provided in  the text | Page 425 – water vapor  Page 427 – impurities  Page 429 – condense; evaporate  \* essential (in Big Idea and questions) | Page 424 – minerals; substances/nutrients; dissolves  Page 425 – liquid; solid; gas  Page 426 – renewed; cycle  Page 427 – filtered out  Page 431 – compresses; glacier  Page 432 – depend on  Page 433 – hydroelectricity  Page 434 – generator; pollution; turbines  Page 435 – conservation; protect |
| **STUDENTS FIGURE OUT THE MEANING**  sufficient context clues are provided in the text | Page 424 – absorbed; drawn up  Page 425 – digested; mostly  Page 426 – constantly  Page 429 – surface; aid; droplets  Page 430 – seep; aquifers  Page 432 – habitat  Page 433 – dam; collects; reservoir  Page 434 – toxic; sewage | Page 431 - frozen |

Culminating Task

* *Using information from the text and illustrations, complete the Water Cycle Graphic Organizer.*
* *On page 423 of Did A Dinosaur Drink This Water?, the text asks the question: How could a dinosaur drink the same water as you? Write a paragraph that answers this question. Use information from the text and your graphic organizer, and include the numbers of the pages on which you found the information. Check your writing to make sure that your verb forms, spelling, and punctuation are correct.* 
  + Sample Answer: The reason that dinosaurs could have drank the same water as we drink is that there is no new water on Earth. The same water gets recycled over and over again by the Earth’s water cycle. (Page 426) The first step in the water cycle is when the sun heats water on the surface of the ocean and it turns into water vapor. As water evaporates, it leaves salt and other impurities behind, and becomes clean, fresh water. (Page 429) Then the warm water vapor meets colder air, and it condenses into billions of tiny water droplets. (Page 429) The water droplets build up and fall as rain or snow. Some of the rain or snow goes into streams and rivers and then to the ocean, and some seeps underground. (Page 430) Some snow falls on high mountains and compresses into glaciers. (Page 431) Most of the water on Earth is in the oceans: 97%. When ocean water evaporates, the water cycle repeats. It has been repeating since the dinosaurs lived, so we are drinking the same water as the dinosaurs, which has been cleaned and renewed by the Earth’s water cycle.

Additional Tasks

* On page 432 of the text, Did A Dinosaur Drink This Water?, the text states that the ocean is a habitat for sea plants, fish, and other sea creatures. Pick a sea plant, fish, or other sea creature and research its habitat. Write a paragraph telling what you learn and describing the role that water, specifically ocean water, plays in its survival. Cite the sources that you use, and use correct punctuation, spelling, and grammar in your final draft.
* Here are some infographics on the water cycle for students to explore:
  + [*http://www.kidsdiscover.com/infographics/infographic-water-cycle-for-kids/*](http://www.kidsdiscover.com/infographics/infographic-water-cycle-for-kids/)
  + [*http://water.usgs.gov/edu/watercycle-kids-adv.html*](http://water.usgs.gov/edu/watercycle-kids-adv.html)
  + [*http://www.sswm.info/category/concept/water-cycle*](http://www.sswm.info/category/concept/water-cycle)

Water Cycle Graphic Organizer (Sample)

Directions: Reread pages 429-432 and complete this graphic organizer of the water cycle.

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| Step | Description |
| 1. Evaporation | Sun heats ocean water and it turns into gas form (water vapor) |
| 2. Condensation | Water vapor rises and meets colder air and turns back into liquid water droplets |
| 3. Rain/snow | Droplets fall in the form of rain and snow |
| 4. Evaporation | Rain and snow evaporate and cycle repeats |

Water Cycle Graphic Organizer

Directions: Reread pages 429-432 and complete this graphic organizer of the water cycle.

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| Step | Description |
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Supports for English Language Learners (ELLs)

to use with Basal Alignment Project Lessons

When teaching any lesson, it is important to make sure you are including supports to help all students. We have prepared some examples of different types of supports that you can use in conjunction with our Basal Alignment Project Lessons to help support your ELLs. They are grouped by when they would best fit in a lesson. While these supports reflect research in how to support ELLs, these activities can help ALL students engage more deeply with these lessons. Note that some strategies should be used at multiple points within a lesson; we’ll point these out. It is also important to understand that these scaffolds represent options for teachers to select based on students’ needs; it is not the intention that teachers should do *all* of these things at every lesson.

**Before the reading:**

* Read passages, sing songs, watch videos, view photographs, discuss topics (e.g., using the [four corners strategy](http://www.theteachertoolkit.com/index.php/tool/four-corners)), or research topics that help provide context for what your students will be reading. This is especially true if the setting (e.g., 18th Century England) or topic (e.g., boats) is one that is unfamiliar to the students.
* Provide instruction, using multiple modalities, on selected vocabulary words that are *central to understanding the text*. When looking at the lesson plan, you should note the Tier 2 words, particularly those words with high conceptual complexity (i.e., they are difficult to visualize, learn from context clues, or are abstract), and consider introducing them ahead of reading. For more information on selecting such words, go [here](https://achievethecore.org/page/3167/selecting-and-using-academic-vocabulary-in-instruction). **You should plan to continue to reinforce these words, and additional vocabulary, in the context of reading and working with the text. (See additional activities in the During Reading and After Reading sections.)**

**Examples of Activities:**

* Provide students with the definition of the words and then have students work together to create [Frayer models](http://www.theteachertoolkit.com/index.php/tool/frayer-model) or other kinds of word maps for the words.
* When a word contains a prefix or suffix that has been introduced before, highlight how the word part can be used to help determine word meaning.
* Keep a word wall or word bank where these new words can be added and that students can access later.
* Have students create visual glossaries for whenever they encounter new words. Then have your students add these words to their visual glossaries.
* Create pictures using the word. These can even be added to your word wall!
* Create lists of synonyms and antonyms for the word.
* Have students practice using the words in conversation. For newcomers, consider providing them with [sentence frames](https://achievethecore.org/page/3159/ell-supports-for-writing-and-discussion) to ensure they can participate in the conversation.
  + Practice spelling the words using different spelling practice strategies and decoding strategies. Students could take turns spelling with a partner.
* Use graphic organizers to help introduce content.

**Examples of Activities:**

* Have students fill in a [KWL chart](http://www.nea.org/tools/k-w-l-know-want-to-know-learned.html) about what they will be reading about.
* Have students research setting or topic using a pre-approved website and fill in a chart about it. You could even have students work in groups where each group is assigned part of the topic.
* Have students fill in a bubble map where they write down anything that they find interesting about the topic while watching a video or reading a short passage about the topic. Then students can discuss why they picked the information.

**During reading:**

* Read the text aloud first so that ELLs can hear the passage read by a fluent reader before working with the text themselves.
* Allow ELLs to collaborate in their home languages to process content before participating in whole class discussions in English. Consider giving them the discussion questions to look over in advance (perhaps during the first read) and having them work with a partner to prepare.
* Encourage students to create sketch-notes or to storyboard the passage when they are reading it individually or with a partner. This will help show if they understand what they are reading as they are reading it.
* Ask questions related to the who, what, when, why, and how of the passage. For students that may need a little more help, provide them with [sentence stems](https://achievethecore.org/page/3159/ell-supports-for-writing-and-discussion).
* Continue to draw attention to and discuss the words that you introduced before the reading.

**Examples of Activities:**

* Have students include the example from the text in their glossary that they created.
* Create or find pictures that represent how the word was used in the passage.
* Practice creating sentences using the word in the way it was using in the passage.
* Have students discuss the author’s word choice.
* Use graphic organizers to help organize content and thinking.

**Examples of Activities:**

* Have students fill in a chart to keep track of their 5ws while they read to help them summarize later and figure out the central idea of a passage.
* It may again be beneficial to have somewhere for students to store new words that they encounter while reading the text. Students could use a chart to keep track of these new words and their meanings as they read.
* If you had students fill in a KWL, have them fill in the “L” section as they read the passage.
* Utilize any illustrations or text features that come with the story or passage to better understand the reading.
* Compare/contrast the passage with what the illustrations convey about the passage. Have students consider if the illustrations look the way they visualized the passage in their own minds or if the passage matches their predictions based on the illustrations.
* Identify any text features such as captions and discuss how they contribute to meaning.

**After reading:**

* Present directions for any post-reading assignments orally and visually; repeat often; and ask English Language Learners to rephrase.
* Allow ELLs to use English language that is still under development. Students should not be scored lower because of incorrect spelling or grammar (unless the goal of the assignment is to assess spelling or grammar skills specifically). When grading, be sure to focus on scoring your students only for the objective(s) that were shared with students.
* Scaffold questions for discussions so that questioning sequences include a mix of factual and inferential questions and a mix of shorter and more extended responses. Questions should build on each other and toward inferential and higher-order-thinking questions. There are not many factual questions already listed in the lesson instructions, so you will need to build some in as you see fit. More information on this strategy can be found [here](https://achievethecore.org/aligned/creating-sequencing-text-dependent-questions-support-english-language-learners/).
* Reinforce new vocabulary using multiple modalities

**Examples of activities:**

* Using the words that you had students work with before reading, have students write sentences in reference to the passage that you just finished reading.
* Require students to include the words introduced before reading in the culminating writing task.
* For newcomers, print out pictures that represent the words that you focused on and have students match the words to the pictures.
* Based on different features of the words, have the students sort them into different categories and explain their choices. For example, the students could sort the words by prefixes, suffixes, connotation, etc.
* After reading the passage, continue to examine important sentences (1–2) in the text that contribute to the overall meaning of the text. Guide students to break apart these sentences, analyze different elements, and determine meaning. More information on how to do this, including models of sentence deconstruction, can be found [here](https://achievethecore.org/page/3160/juicy-sentence-protocol).
* Provide differentiated scaffolds for writing assignments based on students’ English language proficiency levels.

**Examples of Activities:**

* For all students, go over the prompt in detail, making sure to break down what the prompt means before having the students get to work. Then have the students explain the directions back to you.
* Have students create an evidence tracking chart during reading, then direct them to look back over their evidence chart and work with a group to see if their evidence matches what the rest of the class wrote down. If some of the chart does not match, students should have a discussion about why.
* For students who need more support, model the proper writing format for your students and provide them with a properly formatted example for reference.
* For newcomers, you may consider creating sentence or paragraph frames to help them to write out their ideas.
* To further discussion about the passage, have students create their own who, what, when, where, why, and how questions related to the passage to ask each other and have students pair up and practice asking each other the questions. If available, pair students of the same home language to support the use of language still under development.