



## Read to Be Ready plans for: Erosion - 2nd Grade Week 1

### ELA Standards:

- 2.FL.PWR.3 Know and apply grade-level phonics and word analysis skills when decoding isolated words and in connected text. a) Distinguish long and short vowels when reading regularly spelled one-syllable words. b) Know spelling-sound correspondences for additional common vowel teams.
- 2.FL.WC.4 Know and apply grade-level phonics and word analysis skills when encoding words; write legibly. a) use conventional spelling for one-syllable words including position-based patterns, complex consonant blends, less common vowel teams for long vowels, vowel-r combinations, contractions, homophones, plurals, and possessives.
- 2.FL.F.5 Read with sufficient accuracy and fluency to support comprehension. a) Read grade-level text with purpose and understanding.
- 1.FL.SC.6 Demonstrate command of the conventions of standard English grammar and usage when speaking and conventions of standard English grammar and usage, including capitalization and punctuation, when writing. i) Produce and expand simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts. **(1st grade skill review/expectation)**
- 2.FL.VA.7a Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase.
- 2.RI.KID.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- 2.RI.CS.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
- 2.RI.IKI.7 Identify and explain how illustrations and words contribute to and clarify a text.
- 2.SL.CC.1 Participate with varied peers and adults in collaborative conversations in small or large groups about appropriate 2nd grade topics and texts.
- 2.SL.CC.2 Recount or describe key ideas or details from a text read aloud or information presented orally, or through other media.
- 2.SL.PKI.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
- 2.W.PDW.4 With guidance and support, produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 2.W.RBPK.7 Participate in shared research and writing projects, such as exploring a number of books on a single topic or engaging in science experiments to produce a report.
- 2.ESS1: Earth's Place in the Universe** 1) Recognize that some of Earth's natural processes are cyclical, while others have a beginning and an end. Some events happen quickly, while others occur slowly over time.
- 2.ESS2: Earth's Systems** 1) Compare the effectiveness of multiple solutions designed to slow or prevent wind or water from changing the shape of the land. 2) Observe and analyze how blowing wind and flowing water can move Earth materials (soil, rocks) from one place to another, changing the shape of a landform and affecting the habitats of living things. 3) Compare simple maps of different land areas to observe the shapes and kinds of land (rock, soil, sand) and water (river, stream, lake, pond).
- 2.ETS1: Engineering Design** 1) Define a simple problem that can be solved through the development of a new or improved object or tool by asking questions, making observations, and gather accurate information about a situation people want to change. 2) Develop a simple sketch, drawing, or physical model that communicates solutions to others. 3) Recognize that to solve a problem, one may need to break the problem into parts, address each part, and then bring the parts back together. 4) Compare and contrast solutions to a design problem by using evidence to point out strengths and weaknesses of the design.
- 2LS2: Ecosystems** Predict what happens to animals when the environment changes

**Comprehension skill:** Cause and Effect

**Phonics/Syllabication:** Compound Words

**Grammar/Writing:** Verbs for Past, Present, and Future

**Unit Focus:** The effects of wind & water on earth's surface & how to prevent it

**Culminating Task:** Students will participate in science experiment showing effects of water on soil erosion & effect of plants on preventing erosion.

**Advanced Task:** Partners will work together to design a new experiment with illustrations of steps in experiment to show erosion or prevention of erosion.

	Read Aloud/Shared Reading	Vocabulary Focus	Discussion Questions	Written Response	Small Group/Center ideas/Resources
<b>M O N D A Y</b>	1st read of <u>Erosion: Changing Earth's Surface</u>  Read pages 4-11 today, pausing along the way to discuss vocab words as they appear in the text.	<ul style="list-style-type: none"> <li>Erosion/erode</li> <li>Weathering</li> <li>Stream</li> <li>Flash-flood (significant to our area)</li> <li>Riverbanks</li> <li>Landscape</li> <li>Waves</li> <li>Shore</li> <li>Cliffs</li> </ul>	<p>p. 4-5 What is the definition of erosion? (the wearing away and reshaping of the land)</p> <p>P. 6-7 Where have you seen examples of fast moving rainwater? (gutters on street, down spot on house gutters)</p> <p>We have flash flood warnings in our area. Why and what do they mean?</p> <p>p. 8-9 Where does the water from our streets end up going? (Wolf River) What does that tell us about what should be put down a storm drain? (don't put paint or other chemicals in the drains)</p>	Explain at least one way that water can cause erosion using complete sentences and an illustration.	

			<p>p. 10-11 How are our beaches formed?</p> <p>What is meant by 'earth's surface'? (the top layer of earth – dirt, grass, hills, etc.)</p> <p>What happens to that surface during erosion? (breaks away, wears down, moves to another place)</p>		
<b>TUESDAY</b>	<p>2<sup>nd</sup> read of <i>Erosion: Changing Earth's Surface</i></p> <p>Read pages 12-21 today, pausing along the way to discuss vocab words as they appear in the text.</p> <p>Show TDOT clip of how potholes form  <a href="http://tinyurl.com/yavZigvp">http://tinyurl.com/yavZigvp</a></p>	<ul style="list-style-type: none"> <li>Erosion/erode</li> <li>Weathering</li> <li>Stream</li> <li>Flash-flood (significant to our area)</li> <li>Riverbanks</li> <li>Landscape</li> <li>Waves</li> <li>Expands</li> <li>Glacier</li> </ul>	<p>Frozen Erosion: p. 12-13: After our winter weather our streets develop potholes. Using the text on this page explain what causes potholes in the streets.</p> <p>Carving Caves: p. 14-15: Using the text and illustrations, what forms inside caves? (stalactites and stalagmites) During winter weather what similar objects are formed by dripping water? (icicles)</p> <p>Whipping Wind: P. 16-17: Why do you think wind has a bigger effect on land that has few plants? What evidence of this is seen in our story, <i>A Walk in the Desert</i>?</p> <p>Fast Erosion: p. 18-19 What are some examples for the text of erosion that occurs quickly? (heavy rain, high winds, landslides, hurricanes, cutting down trees, etc.)</p> <p>Living with Erosion: p. 20-21 How have we learned to slow down erosion based on the text?</p>	<p>Give a step by step description of what causes potholes in our roads.</p>	<p><b>What are some ways that erosion can be slowed or prevented?</b></p> <p>**Begin with a bubble map using "Prevent erosion" as the center bubble.</p> <div data-bbox="1291 760 1539 919" data-label="Image"> </div> <p>Students will then use their bubble map as the thinking map to help with their written response.</p> <p>Engaging explanation of weathering &amp; erosion with super heroes representing each:  <a href="http://tinyurl.com/ovsn6d4">http://tinyurl.com/ovsn6d4</a></p>
<b>WEDNESDAY</b>	<p>Teacher will display pages 16-17 in the R2BR text, <i>Erosion</i>, and reread these two pages.</p>		<p>Have students discuss what types of erosion might happen quickly vs those that happen over time. Make a list. Think about events that have happened recently (earthquake, tornado, etc.)</p> <p>Complete the Wind erosion experiment (<b>PDF of experiment on BCS R2BR weebly page under theme of Erosion</b>)</p> <p><b>Materials needed:</b>          Shoebox with lid          Clay and popsicle sticks (about 8 popsicle sticks)          sand dry soil rocks tape          straws – one for each student</p>	<p>Present students with writing prompt after conducting the experiment on wind erosion:</p> <p><b>How can the wind erode the earth's surface and how can we prevent it?</b></p> <p>Students will use what they observed from the experiment and what they have learned this week to respond to this prompt.</p>	<p><b>Bill Nye video on erosion:</b>  <a href="http://tinyurl.com/o9oduyl">http://tinyurl.com/o9oduyl</a></p> <p><b>Interactive game on erosion &amp; weathering:</b>  <a href="http://sciencenetlinks.com/interactives/shapeitup.html">http://sciencenetlinks.com/interactives/shapeitup.html</a></p> <p><b>Canyonlands – great photos and information:</b>  <a href="http://tinyurl.com/y8c6havj">http://tinyurl.com/y8c6havj</a></p>

<p><b>T H U R S D A Y</b></p>	<p>Re-read pages 6-11 in <b>Erosion</b>.</p> <p><b>**Throughout daily discussions be sure to engage students in think-pair-share opportunities. How are group routines going? Are students using the routines you have established, for example touching their chins if they have an answer rather than calling out or waving their hands in the air?</b></p>	<p><b>**Make sure that the vocabulary cards from this week have remained posted in the room as a tool for writing responses.</b></p>	<p>What effect can water have on land? Give evidence from the text</p> <p>Describe today's experiment and then spend time conducting the experiment, asking students to be scientists looking for and describing evidence of erosion and evidence of how erosion can be prevented.</p> <p>Materials needed:</p> <ul style="list-style-type: none"> <li>• 6 empty coke bottles</li> <li>• 1 x piece of ply wood (30cm x 30cm x 2cm thick)</li> <li>• Wood glue</li> <li>• Scissors and Stanley knife</li> <li>• String</li> <li>• Soil from the garden</li> <li>• 4 Seedlings or small plants</li> <li>• Mulch (bark chips, dead leaves and sticks)</li> </ul>	<p>Illustrate, label, and write about the science experiment on soil erosion.</p> <p><b>Homework suggestion:</b> Research and/or brainstorm with your family other ways to conduct an experiment to show erosion or how to stop erosion. Are there household materials or foods you could use?</p> <p>*Invite students to bring their supplies to school the next day to demonstrate.</p>	<p><b>Science Experiment:</b> <a href="http://tinyurl.com/y7l9rd8z">http://tinyurl.com/y7l9rd8z</a> <b>PDF of experiment found on BCS R2BR weebly page under 2nd grade theme of Erosion.</b></p> 
<p><b>F R I D A Y</b></p>	<p>Re-read or review the book <b>Erosion</b> using a picture walk and talk through the book.</p> <p>Review the experiments on wind and water erosion.</p> <p>Allow time for either students to create their own experiment ideas on erosion, for student teams to use the PDF cards of other erosion experiment ideas.</p>	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Prediction</li> </ul>	<p>What other ways could we design an experiment to show water erosion and/or the prevention of erosion?</p> <p>Work with a partner to come up with a supply list and illustrated steps to follow for your science experiment.</p> <p>OR---- Work with a partner or small group to complete one of the 5 erosion experiment cards (found in a PDF on BCS R2BR weebly site under the theme of erosion.)</p>	<p><b>Activity idea:</b> Illustrate, label, and write the steps involved in the experiment idea created by you and your partner. How can you show the effects of erosion OR how can you show a way to stop erosion?</p> <p><b>ALTERNATE activity:</b> Give student pairs or small groups one of the 5 experiment cards and have them illustrate and write about what they observe happening and how it demonstrates erosion.</p> <p>PDF of these alternate activity cards can be found on the BCS R2BR weebly site under the theme of erosion.</p>	<p>Materials needed for the 5 experiment cards:</p> <ul style="list-style-type: none"> <li>• Sugar cubes</li> <li>• Baby food jars</li> <li>• Gravel</li> <li>• Sandpaper</li> <li>• Limestone</li> <li>• Sand</li> <li>• Shallow pan</li> <li>• Cups with pouring lip</li> <li>• Large pans</li> <li>• Dirt</li> <li>• Water</li> </ul>