Grade Level	**Content Area**	**Unit Title**
Kindergarten	Writing Standards: Text Types and Purposes	Earth Materials

Length of Unit	**Time of Year Taught**	**Expected Prior Knowledge**
7 Days	4th Quarter	Students will have the ability and knowledge of how to read, write (complete sentences), and listen to each other in order to work cooperatively in a group. They will have the ability to utilize and research using 21st Century skills.

Unit Description

This mini-unit is part of an interdisciplinary unit of study on Earth Materials, reaching Language Arts, Science, and Technology standards. This area of study begins with identifying rocks, soil and water as basic Earth materials. Followed by comparing physical properties of basic Earth materials and how they are utilized in the environment. Earth materials are interesting and relevant to this population of students, as they utilize earth materials in their daily lives. Through research, documentation of observational notes, and student collaboration, students will use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

Standards: See instructions on page 15.	Strand: Writing Standards Cluster: Text Types and Purposes Standard #2: Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
Summative Assessment *In addition to the description, include a copy of the summative assessment in the application package.*	The summative assessment consists of a completed page for the class Earth Materials Book. Students will choose a resource from planet earth and a book to obtain information from. The class will put all these pages together to create a class book about the earths many resources.
Scoring for Summative Assessment *In addition to the description, include a copy of the answer key and scoring rubric (if applicable) for the summative assessment in the application package.*	Mastery = 20/24 or higher. A copy of the scoring rubric is attached. Remediation students given more time.
Materials/Resources Needed *Include all items for the entire unit.*	Pebbles, Sand and Silt (Text and audio) Earth Materials

	Books relevant to topic Computer access to FOSSweb: Pebbles, Sand, and Silt www.fossweb.com/modulesK-2/PebblesSandandSilt/index.html Chart paper, paper, drawing and writing utensils Science Journals Digital Cameras Earth Materials Book Requirement Rubric Science Experiment Kit 1: Containers of earth materials: rocks, sand, and water Science Experiment Kit 2: Cups of earth materials (pebbles, gravel, and sand), metal screens (small, medium, and large), and small containers (5 per group) Science Experiment Kit 3: Pots, plastic cups, rocks, soil, sand, and water

	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Instruction and Timeline	Opening Question: Can you explain what earth materials are? Bring students together at the gathering place. Tell the students that you have some materials from the earth hidden in a box. In the box have 3 containers – one with rocks, one with soil and one with water. Have students guess what might be in the box and record ideas on a chart or the board. Take out the containers one at a time and have the students guess what the material is inside each one. When they name the material, write student suggestions on the chart paper labeled "Earth Materials". Explain to the students that these three materials –	Opening Question: How would you evaluate and describe earth materials? Bring students together at the gathering place. Tell the students that you have different sizes of earth materials in a cup to share with them. In the cup have a mixture of pebbles (large and small), gravel (large and small), and sand. Tell the students that today they are going to sort their rocks by size with their classmates. Demonstrate with the rock mixture and metal screens (small, medium and large) how the students are going to separate and sort their earth material mixture – texture, size, and shape. Explain that color, texture, size and shape are called **physical properties.** Have students work in groups to separate and sort their earth materials into supplied containers. Students record (through drawing, dictation, or writing) their findings and name what they are writing about and supply some information about the topic in their science journals. After activity is complete, gather students in meeting	Opening Question: Which earth material do you think will hold the most water – rocks, soil or sand? Tell the students that today they will be doing an experiment called "Who Let the Water Out?" to see which material will hold the most water – rocks, soil or sand. Before doing the experiment, have the students predict which material - rocks, soil or sand, will **retain** the most water. Explain that the word retain means "to hold". Have the students come and write their name on the prediction chart under the material (rocks, soil or sand) that they feel will retain the most water. Discuss the results of the prediction chart. Set up the experiment – Place the three pots in plastic cups. Fill one pot with rocks, one with soil and one with sand. Take a measuring cup and fill it with ½ to one cup of water. Pour the water over the rocks. Wait a few minutes	Opening Question: Why do you think earth materials are important? What might happen if we did not have access to earth materials? Introduce the website: FOSSweb: Pebbles, Sand, and Silt. Explain to the students that they will be identifying things made of earth materials in the activity Find Earth Materials. Before doing the earth material search, have the students discuss the academic vocabulary for clay, silt, sand, gravel, pebbles, cobbles, and boulders along the bottom of the activity by looking at pictures and definitions for each earth material. Tell the students that today they will be identifying where and how people use earth materials. Have the students identify and locate earth material uses around the school by taking a trip around the outside of the school. Distribute digital cameras for groups to document and take pictures of the	Opening Question: Why do you need earth materials? Students will publish their own page for the Earth Materials class book. Students will explain the topic of "Earth Materials" through either drawings, dictation, or writing (depending on the level of the student). Read aloud class Earth Materials book. Ask the students to reference the Book Requirement Rubric. Direct students to find a pyramid buddy and discuss whether or not the class book did a good job meeting the requirements of an informational text. Have the students share their buddy's comments with the class.

	rocks, **soil** and **water** make up the earth. Supply student groups with boxes containing the three types of earth materials. Allow students to examine earth materials with magnifying glasses and record observations in their Science Journals. Read Earth Materials. Afterwards, students gather and discuss what the author is writing about and at least 3 facts that describe the topic of the text. Record student responses on chart paper labeled "Earth Materials." Responses are recorded through dictation, drawing, and writing. The entire time, the teacher completes a "think aloud" labeling his/her metacognition behind composing	place. Have students get with a pyramid buddy and discuss properties they can use to describe the earth materials they sorted. Record student responses on chart paper labeled "Earth Material Properties". Teacher will assess student work with the use of a checklist. The teacher takes note whether students are able to explain their findings and name what they are writing about and supply some information about the topic from their science journals. Read aloud Read Pebbles, Sand, and Silt. Afterwards, students gather and discuss what the author is writing about and at least 3 facts that describe the topic of this text. Teacher records student responses (either dictation, drawing, or writing) on chart paper labeled "Earth Materials" from Lesson 1. Again, the teachers models to students through the use of a "think aloud" where he/she labels his/her metacognition behind composing informative/explanatory text.	letting the water drain through the hole in the pot into the plastic cup. Repeat the procedure with the other pots. Students will record (through drawing, dictation, or writing) their findings in their science journals. The teacher will provide positive or corrective feedback to students as they work. Compare the amount of water in each cup. Ask the students why there is not the same amount of water in each cup? Discuss the findings. Compare the findings to the predictions made by the class. Inform the students that tomorrow they will be creating a class book that illustrates and explains the importance or earth materials. Review "Earth Materials" chart and have students discuss what possible facts or recorded findings from their science journals would be important to include when writing a book about earth materials.	earth materials they locate around the school. After activity is complete, gather students in meeting place and discuss: As an author, what writing, drawings, or observations can we use from our Science Journals to write a book about Earth Materials? Direct students to find a pyramid buddy and discuss what being an author means to them. Have the students share with the class what being an author means to them and what writing, drawings, or observations(including photos) they plan to use to write a book about Earth Materials. Record student suggestions on chart paper from Lessons 1 and 2 labeled "Earth Materials." Introduce Book Requirement Rubric and model with student input a sample page explaining why earth materials are important. The model will include examples of how to use drawings/photos, dictation, and/or writing	

	informative/explanatory text.			from their Science Journals to explain the topic of Earth Materials and create the page for the book. Instruct students to reference the Book Requirement Rubric and evaluate the sample page using the Book Requirement Rubric to see if the completed page meets all specified criteria.	

	Lesson 1	**Lesson 2**	**Lesson 3**	**Lesson 4**	**Lesson 5**
Student Activities and Timeline	Students will work together in groups to examine earth materials with magnifying glasses and record observations in their Science Journals.	Students will work together in groups to separate and sort their earth materials into supplied containers by texture, size, and shape. Afterwards, they will discuss properties they can use to describe the earth materials they sorted.	Students will complete experiment and record their observations in their Science Journals. Afterwards, groups research the web and books for relevant facts about earth materials and add their observations to the notes in their Science Journals. Teacher will assess student work with the use of a checklist. The teacher takes note whether students are able to explain their findings and name what they are writing about and supply some information about the topic from their science journals.	Students will identify and locate earth material uses around the school by taking a trip around the outside of the school and documenting and taking pictures of the earth materials they locate around the school. Students will choose which earth material (rocks, soil or water) they would like to write and draw about by choosing a picture from the trip around the school. They will use the facts about their topic documented in their Science Journal to write and illustrate their	Students will use the Book Requirement Rubric to comment about another student's page and reflect on their own page about their topic.

				page for the class book. The created page must include detailed information about their chosen earth material and what might happen if we did not have access to it.	

Summative Assessment: Materials Book

Instructions:

1. Find an appropriate book about the planet earth and its resources
    a. Show your teacher for approval before moving on to step 2.

2. You will create a one page collage of information about your resource (book selected above) to be put together into a classroom book about earth. You will use illustrations of the story you listened to or read with three supporting facts:

    a. Your page must introduce your topic.
    b. Include an illustration of your topic.
    c. Include three supporting facts about why your topic is important to earth from the book selected and Science Journal.
    d. Use of correct grammar and link your phrases together.
    e. Neatness, quality, and effort will also be used to assess the page for the class Earth Materials Book

Earth Materials Book Rubric					
Criteria	**Expert (4)**	**Practitioner (3)**	**Apprentice (2)**	**Novice (1)**	**Score**
Informational Book Format	Named topic title, and author's' name, are included.	Two items are missing from the Earth Materials Book page.	One item is missing from the Earth Materials Book page.	More than one item is missing from the Earth Materials Book page.	
Topic	Topic is clearly explained and includes excellent supporting details.	Topic is explained and includes good supporting details.	Topic is explained and includes few or no supporting details.	Topic is questionable and has no supporting details.	
Illustrations	Shows the page's topic, very neatly colored, and contains many specific details.	Shows the page's topic, neatly colored, and contains some details.	Shows the page's topic, colored, and contains some details.	Doesn't support the page's topic and contains few or no details.	
Closing Comment and Supported Opinion	Your opinion is clearly stated, giving 2 reasons for your preference.	Your opinion is clearly stated, giving 1 reason for your preference.	Your opinion is clearly stated, giving no reasons for your preference.	Your opinion is not clear and you gave no reasons for your preference.	
Grammar/ Mechanics	Flawless use of grammar, spelling, and punctuation.	Appropriate use of grammar, spelling and punctuation.	Errors in grammar, spelling, and/or punctuation.	Errors in grammar, spelling, and punctuation that inhibit understanding.	
Neatness/Effort	Page is exceptionally neat, attractive to the eye and easy to read. Evidence of great effort.	Page is neat overall, and easy to read. Evidence of good effort.	Page is fairly neat, but may be difficult to read at time. Evidence of some effort.	Page is sloppy and illegible. Evidence of little to no effort.	
Name	**Total Score**				

Summative Assessment

Create a page for the class Earth Materials Book. Choose one of the major resources on the planet earth. Collect facts and illustrations on the topic you chose, you must include a book. Your page must have an introduction to your topic, an illustration, and three supporting facts on your topic and a closing comment on why your resource is important. Neatness, quality, and effort will also be used to assess the page for the class Earth Materials Book.