

Stepwise Instructional Activity Worksheet

Unit developed by Ivette Foreit, Clarke County School System, 2006 and GDOE/Division for Exceptional Students

Activities: How Earth's Surface Formed – Dirt, Rocks & Weather. Using a computer (attached to an LCD projector if possible) the class watches the “Dynamic Earth” PowerPoint about the Earth’s surface. Students discuss/answer questions (written/verbally/using pictures) about various geological features (rivers, mountains, trees) and about physical processes (volcanoes, erosion) or weather elements (earthquakes/hurricanes.) Students participate in the “Scoop on Dirt – Building a Soil” activity (see attached) to collect elements of soil composition and create soil. Students watch the “Rocks” PowerPoint (individually or as a group) then collect and classify rocks according to various traits (size, color, shape, texture) and organize data into tables and charts. **Level 1:** Students participate in activities verbally, or through use of AAC devices, sign language, and/or picture symbols. Computer activities are completed using a mouse or adapted computer access if needed. Students use “Sort Rocks by Color”, “Sort Rocks by Texture” worksheets to sort rocks/pictures of rocks and chart results. **Level 2:** Students participate through use of verbalizations/AAC devices/gestures. Computer activities are completed using switch access, touch window, Intellikeys, or other adapted access. Sorting activities are done into baskets marked clearly with picture/tactile labels. Students can match to sample the items needed in the “Building a Soil” activity. **Level 3:** Students answer questions by making choice between two answers, utilizing AAC devices/switches. Computer activities are completed using a switch adapted computer that students activate upon request or independently. For “Building a Soil” and rock sorting activities, students make choices between two answers through pointing/touching, eye gaze, AAC device. When physically able, students work on grasp and release skills to pick up and place items (rocks/soil elements) in appropriate baskets/plates, using required level of prompting.

GPS Content Area: ELA M(S)SS	Outcomes:	Supports Needed:	Student Objectives:
<p>Standard(s): S6E5: Students will investigate the scientific view of how the Earth’s surface is formed. S6C56: Students will communicate scientific ideas and activities clearly.</p>	<p>General (for all students):</p> <ul style="list-style-type: none"> - Describe the effects of physical processes on the Earth’s surface - Erosion is mainly caused by water, but can also occur due to wind - Changes in Earth’s surface can be abrupt (volcano) or slow (erosion) - Soil forms as rock, breaks down by weathering, mixes w/ other materials - Identify types of rocks 	<p>Assistive Technology:</p> <ul style="list-style-type: none"> • AAC devices • Computer switch interface/switches • Computer access adaptations (e.g., touch window, joy stick, Intellikeys keyboard) 	<p>Standards based objectives:</p> <ul style="list-style-type: none"> • Sort/classify items by form/shape (rock, leaf, sticks) • Sort by color/size/texture (rocks) • Increase vocabulary • Give description/details • Identify weather concepts
<p>Element(s): S6E5: b. Classify rocks by their process of formation. c. Describe processes that change rocks and the surface of the Earth. e. Explain the effects of physical processes on geological features. g. Describe soil consisting of weathered rocks and decomposed organic material. S6C56: c. Organize scientific information using tables, charts, and graphs and identify relationships.</p>	<p>Specific (for students with special needs):</p> <ul style="list-style-type: none"> - Sort/classify types of rocks by color/size/texture - Identify/describe forces that change Earth’s surface (rain, wind, earthquake, erosion) - Describe the effects of physical processes on the Earth’s surface - Sort/classify soil composition materials by type/shape 	<p>Adapted Materials:</p> <ul style="list-style-type: none"> • “Dynamic Earth” (earth_changes.ppt) PowerPoint on the earth’s surfaces from the Nebo website • “Rocks” (rocks.ppt) PowerPoint on the classification of rocks from the Nebo website • Plastic baskets with picture/tactile labels for sorting • Soft Velcro® board for graphing • Color pictures of rocks • Assorted rocks of various colors, sizes, textures, types <p>Nebo website: http://www.nebo.edu/misc/learning_resources/ppt/</p>	<p>Other (academic/not aligned or functional):</p> <ul style="list-style-type: none"> • Write sentences related to a topic • Improve computer skills • Match objects/pictures • Follow directions • Activate switch • Identify numbers • Write numbers • Count from 1 - 10 • Identify colors • Size concepts • Fine motor: stirring • Grasp and release