

Science Unit Map – Grade 3– Trimester 2

Trimester Focus:

- Earth Materials, Change, and Resources

Big Ideas:

- The Earth has natural resources that are renewable or non-renewable.
- Humans are dependent on and affect their environments in helpful and harmful ways.
- The Earth’s surface changes through slow processes and fast processes.
- Earth materials have useful properties and can enhance the quality of life.

GLCEs	Vocabulary	Resources (See Curriculum Calendar for Details)	Assessment
<ul style="list-style-type: none"> - Identify natural resources (metals, fuels, fresh water, soil, and forests). (E.ES.03.41) - Classify renewable (fresh water, forests) and non-renewable (fuels, metals) resources. (E.ES.03.42) - Describe ways humans are protecting, extending and restoring resources (recycle, reuse, reduce, renewal). (E.ES.03.43) - Recognize that paper, metal, glass, and some plastics can be recycled. (E.ES.03.44) - Describe ways humans are dependent on the natural environment (forests, water, clean air, Earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry). (E.ES.03.51) - Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable and non-renewable resources). (E.ES.03.52) - Recognize and describe different types of Earth materials (mineral, rock, clay, boulder, gravel, sand, soil). (E.SE.03.13) - Recognize that rocks are made up of minerals. (E.SE.03.14) - Identify and describe natural causes of change in the Earth’s surface (erosion, glaciers, volcanoes, landslides, and earthquakes). (E.SE.03.22) - Identify Earth materials used to construct some common objects (for example: bricks, buildings, roads, glass). (E.SE.03.31) - Describe how materials taken from the Earth can be used as fuels for heating and transportation. (E.SE.03.32) <p style="text-align: center;">*See inquiry and reflection GLCE’s*</p>	boulder Earth materials rock clay sand gravel soil soil texture soil color water wind lie helpful change changes in the Earth’s surface harmful change earthquake erosion landslide glacier metal mineral oil	<p>Textbook: National Geographic- Earth Science</p> <ul style="list-style-type: none"> - Chapter 4 (Earth Materials) - Chapter 5 (Natural Resources/Human Impact/Using Earth Materials) - Chapter 6 (Surface Changes) - Chapter 7 (Surface Changes) <p>Inquiry Book: See Inquiry Book for student investigations</p> <p>Suggested Trade Books:</p> <ul style="list-style-type: none"> - <i>How the Earth Works</i> by Michelle O’Brien Palmer - <i>Planet Earth/Inside Out</i> by Gail Gibbons - <i>50 Simple Things Kids Can Do To Save the Earth</i> by The Earthworks Group - <i>Don’t Know Much About Planet Earth</i> by Kenneth Davis and Tom Bloom - <i>The Three R’s: Reduce, Reuse, Recycle</i> by Nuria Roca and Rosa Curto - <i>Just a Dream</i> by Chris Van Allsburg - <i>The Wartville Wizard</i> by Don Madden - <i>Where Does The Garbage Go?</i> by Paul Showers - <i>The Great Trash Bash</i> by Loreen Leedy <p>Websites, Video Streaming, & Smart Board Activities:</p> <ul style="list-style-type: none"> - myNGconnect.com - See grade level resource packet <p>Grade Level Resource Packet:</p> <ul style="list-style-type: none"> - See unit: Earth Materials, Change, and Resources 	<p style="text-align: center;">Earth Systems</p> <p>Formative:</p> <ul style="list-style-type: none"> -Classify lists of classroom items into 2 groups: items found in nature and man-made items. -Classify and graphically organize natural resources into renewable and non-renewable. <p>Summative:</p> <ul style="list-style-type: none"> -In a paper grocery bag, each student collects his/her individual “clean” trash for a specified number of days. Students examine the trash and divide it into categories: reduce, reuse, recycle, renew, other. -Design a pet house that uses all renewable materials. <p style="text-align: center;">Solid Earth</p> <p>Formative:</p> <ul style="list-style-type: none"> -Use the information students collected in their Earth Materials data charts to assess student understanding. <p>Summative:</p> <ul style="list-style-type: none"> -Categorize pictures of slow and rapid changes in the Earth’s surface using a T-chart. <p style="text-align: center;">*Refer to companion document for more “Evaluate Student Understanding” information.</p>