Columbus County Schools *Science Curriculum Guide*		
SUBJECT: Science	**GRADE LEVEL:** 6th Grade	**GRADING PERIOD:** 1st/ 2nd Nine Weeks
Module(s): E Dynamic Earth	Time Frame: 8 weeks 3 days **Dates: October 9- December 5th**	**Unit: Two- E- Dynamic Earth, D- Ecology and the Environment**
Essential Standard: 6. P.2 Understand the structure, classifications, and physical properties. 6. P.3 Understand characteristics of energy transfer and interactions of matter and energy.		

Lessons:	Technology and Literacy Standards and Tasks	Academic Vocabulary:	Assessment(s):	Additional Resources:
Lesson Name: Earth Layers **Clarifying Objective:** 6. E.2.1 Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density. 6. E.2.4 Conclude that the good health of humans requires: monitoring the lithosphere, maintaining soil quality and stewardship. **Time Frame:** 6 days **Dates:** Oct 10- Oct 16th	**Technology Standards:** SI.1 Analyze resources to determine their reliability, point of view, bias, and relevance, for particular topics and purposes. 6.SI.1.3: Analyze resources for point of view, bias, values, or intent of information 6. RP.1 Apply a research process for collaborative or individual research. 6. RP.1.1 Implement a research process collaboratively. 6. RP.1.2 Implement a research process independently.	• Lithosphere • Mantle • core • asthenosphere • mesosphere • convection • crust • stewardship	**Formative:** - How is the inner and outer core similar? How are they different? - What is the difference between the chemical layers of the Earth and the physical layers of Earth? - **Science Formative Assessment 75 Practical Strategies for Linking Assessment-** Card Sorts pg 56, Muddiest Point pg 138, STIP pg180 - **Summative** - S.T.E.M. project – Models of Earth pg 247 - **Science Fusion- Dynamic Earth Teachers Edition** pg 251	Science Fusion- Dynamic Earth Teachers Edition pg 244-255 Layers of the Earth Worksheet Energy Lithosphere Energy Video Additional Resources in Dropbox

Essential Question: How do matter and energy move through Earth's spheres? **"I Can" Statements:** ▪ I can draw a model of earth's layers and explain the characteristics of each. ▪ I can explain how crustal plates move. ▪ I can compare and contrast the different types of mountain building; fault-block, folded, upwarped, and volcanic. ▪ I can write a paragraph to explain how human activities affect the pedosphere. ▪ I can identify how technology is used to conserve soil. ▪ I can explain methods used by humans to conserve soil.				
Lesson Name: Plate Tectonics **Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth.	WTL- **Science 5 9.2 What causes earthquakes and volcanoes?** **Technology Standards:** 6. SI.1 Analyze resources to determine their reliability, point of view, bias, and relevance, for particular topics and purposes.	• ocean basin • tectonic plates • seismologist • primary waves • secondary waves • surface waves • seismic waves • epicenter • magnitude • focus • frequency • wavelength	**Formative:** - What types of landforms can form at convergent and divergent boundaries? - Bubble Maps - Bill Nye video worksheet. Volcanoes or Earthquakes. www.Worksheets.com/site/bill-nye.php - **Science Formative Assessment 75 Practical**	6th Grade McDougal Book- Unit A- Chapters 1-5, Unit B- Chapters 3-5 ***Science Fusion Teachers Edition- Dynamic Earth-*** pg 256-339 *Plate Tectonics and Continental Drift* by John Edwards *Earthquakes and Volcanoes* by Alison Rae Additional Resources in Dropbox

6. P.1.1 Compare the properties of waves to the wavelike property of energy in earthquakes, light, and sound. **Time Frame:** 3 ½ weeks (3 weeks 2 days) **Dates:** Oct 21st- Nov 14th **Essential Question:** What evidence has contributed to the theory of plate tectonics? **"I Can" Statements:** ▪ I can identify major geological events, such as earthquakes and volcanoes ▪ I can draw a model of earth's layers and explain the characteristics of each. ▪ I can explain how crustal plates move. ▪ I can compare and contrast the different types of mountain building; fault-block, folded, upwarped, and volcanic. ▪ I can describe the characteristics of primary waves, secondary waves, surface waves.	6.SI.1.3: Analyze resources for point of view, bias, values, or intent of information 6. RP.1 Apply a research process for collaborative or individual research. 6. RP.1.1 Implement a research process collaboratively. 6. RP.1.2 Implement a research process independently. **Literacy Standards:** CCSS.ELA-Literacy.RST.6-8.4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics. CCSS.ELA-Literacy.RST.6-8.7. Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flow chart, diagram, model, graph or table).	• amplitude • speed • Pangaea • Convergent • Sea floor spreading • Divergent • Transform boundary • Plate tectonics	**Strategies for Linking Assessment-** First Word, Last Word pg 88 **Summative:** - **Science Fusion- Dynamic Earth Teachers Edition** pg 263 (online resource- Exploring plate tectonics- climb the pyramid. Have student choose one of the boxes, - Examview test generator	

Lesson Name: Rock Cycle/ minerals **Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Time Frame:** 12 days **Dates:** Nov 15th- Dec 5th **Essential Question:** How are rocks formed and how do they change over time? **"I Can" Statements:** ▪ I can create a diagram of the rock cycle, identify the 3 types of rocks and show how they change from one type to another. ▪ I can create a diagram of a soil profile and label each horizon and its content. ▪ I can create a graphic organizer that illustrates the properties of soil: texture, particle size, PH, fertility and ability to hold moisture.	6. RP.1 Apply a research process for collaborative or individual research. 6. RP.1.1 Implement a research process collaboratively. 6. RP.1.2 Implement a research process independently. **Literacy Standards:** CCSS.ELA-Literacy.RST.6-8.4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics. CCSS.ELA-Literacy.RST.6-8.7. Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flow chart, diagram, model, graph or table).	• Sedimentary • Metamorphic • Crystallization • Igneous • Pressure • Mineral • Rock • Compound • Streak • Element • Luster • Crystal • Cleavage • Moh's hardness scale • Weathering • Erosion • Deposition • Uplift • Texture • Composition • Stewardship • Contour plowing • Conservation plowing	**Formative:** - Which is a more reliable test for identifying a mineral: color or streak? - Rock Cycle food lab (metamorphic- smash 3 starburst together using the heat from their hands. Igneous- microwave marshmallows and chocolate chips for 10 seconds. Sedimentary- use a layer of graham crackers, chocolate chips, marshmallows and pudding) - Uncovering Student Ideas in Science Vol 2- Is it a rock? Version 1 and 2 pg 151-152 - **Summative:** - ExamView Dynamic Earth test questions online- download to computer - ***Science Fusion Teachers Edition- Dynamic Earth-*** pg 219- It Rocks! Online resource	*Rocks and Minerals* by R.F. Symes *Sand and Soil* by Beth Gurney 6th Grade McDougal Book- Unit A- Chapters 1-5 Unit B- Chapters 3-5 Smithsonian Rock Lab Rock Cycle with Gum and Pop Rocks Soil Texture Lab Additional Resources in Dropbox

****Note: Some of the tasks in this unit can take multiple days to complete and therefore you may need to roll some activities to the next day and/or start a new task group in the middle of a school period. This is still in the planning stage so adjust the pace to meet your student's needs and abilities. We will make adjustments at PD days after we have worked through some of the difficulties.*****

Most Internet/video content was pulled in its original format. Please PREVIEW and adjust for your population.

Day 1- Oct 7th – 11th **Lesson:** Matter and Energy	Day 2 **Lesson:** Matter and Energy	Day 3- Oct. 9th **Lesson:** Earth Layers	Day 4 **Lesson:** Earth Layers	Day 5 **Lesson:** Earth Layers
Clarifying Objective: Unit 1 **Academic Vocabulary:**	**Clarifying Objective:** Unit 1 **Academic Vocabulary:**	**Clarifying Objective:** 6. E.2.1 Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density. **Academic Vocabulary:** Core, convection, mesosphere, crust, lithosphere, mantle , asthenosphere	**Clarifying Objective:** 6. E.2.1 Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density. **Academic Vocabulary:** Core, convection, mesosphere, crust, lithosphere, mantle , asthenosphere	**Clarifying Objective:** 6. E.2.1 Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density. **Academic Vocabulary:** Core, convection, mesosphere, crust, lithosphere, mantle , asthenosphere
Bell Ringer: **Instructional Tasks:** (Labs, Readings, Literacy and Technology Tasks, Write to Learn, Assignments, Group Work, Research, Etc.) **Summarizer:**	**Bell Ringer:** **Instructional Tasks:** (Labs, Readings, Literacy and Technology Tasks, Write to Learn, Assignments, Group Work, Research, Etc.) **Summarizer:**	**Bell Ringer:** Define core, crust, mantle **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth Unit 4 lesson 1- Earth's Layers (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them **Summarizer:** Compare and contrast inner core and outer core. **Lesson quiz packets may be handed out for an end of unit assessment**	**Bell Ringer:** Define lithosphere, mesosphere, asthensosphere **Instructional Tasks:** Finish the PowerPoint presentation if not completed. **Option 1-** pg. 246 Science Fusion teacher edition. Modeling layers- hands on activity. **Option 2-** Earth Foldable Activity in dropbox. Students will color, cut, and label the layers of the earth. Students will also need to look-up the thickness of each layer and label correctly. **Option 3-** Students can be grouped for a project labeling and coloring a Styrofoam ball. **Option 4**- Digital video lesson found on Science Fusion website (found under student or teacher.) Each of these options may take two days depending time allotted for class period. **Summarizer:** Compare and contrast the mesosphere and asthenosphere.	**Bell Ringer:** Where is the asthenosphere located? What parts of the earth is included? (The asthenosphere is located in the upper mantle. The asthenosphere is below the lithosphere, the brittle outer shell of the Earth.) **Instructional Tasks:** **Option 1-** Complete any hands-on projects not finished from the day before. **Option 2-** Bill Nye video- Earth's Crust found on youtube.com. Worksheet located at http://moviesheets.com/site/bill-nye.php **Option 3-** ParrMr Science Songs on youtube. Includes words to the songs. **Option 4-** Mr. Lee rap on crust and mantle found youtube (lyrics in dropbox) **Summarizer:** What is the difference between the chemical (or compositional) layers of Earth and the physical layers of Earth? (physical layers

				are based on physical properties, not position; compositional layers are based on chemical composition)
Assessment: (Formative and/or Summative)	**Assessment:** (Formative and/or Summative)	**Assessment:** Observation	**Assessment:** Each option may be used as an assessment.	**Assessment:** Each option may be used as an assessment

Day 1- Oct. 14th- 18th **Lesson: Layers of earth**	**Day 2** **Lesson: Stewardship**	**Day 3** **Lesson: Stewardship**	**Day 4** **Lesson:** Plate tectonics	**Day 5** **Lesson: Plate tectonics**
Clarifying Objective: 6. E.2.1 Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density. **Academic Vocabulary:** Core, convection, mesosphere, crust, lithosphere, mantle , asthenosphere	**Clarifying Objective:** 6. E.2.4 Conclude that the good health of humans requires: monitoring the lithosphere, maintaining soil quality and stewardship. **Academic Vocabulary:** desertification , stewardship	**Clarifying Objective:** 6. E.2.4 Conclude that the good health of humans requires: monitoring the lithosphere, maintaining soil quality and stewardship. **Academic Vocabulary:** Desertification, stewardship	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Pangaea, sea floor spreading, plate tectonics, tectonic plates, convergent boundary, divergent boundary, transform boundary, convection	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Pangaea, sea floor spreading, plate tectonics, tectonic plates, convergent boundary, divergent boundary, transform boundary, convection
Bell Ringer: How can scientist learn about the different layers of the atmosphere? (They can study the rocks and lava from volcanoes to learn about molten rock from within Earth.) **Instructional Tasks:** Carousel Review on Earth's Layers. Science Fusion- Pg 250 Teacher's edition. Language Arts connections- key word Scan. Pg 250 **Summarizer:** What is one thing that you	**Bell Ringer:** Why do farmers rotate crops? (to maintain soil fertility) **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Ecology and the Environment Unit 4 Lesson 2 pg 292- Teachers edition- Managing resources (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them	**Bell Ringer:** What are some land use practices that impact soil resources? (farming, construction, mining, development) **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion website (Ecology and the Environment Unit 4 Lesson 2) **Option 2-** Ecology and the Environment Unit 3 Lesson 5 pg. 241 Science Fusion teacher edition. Daily Demo,	**Bell Ringer:** Which of earth's compositional layers make up the lithosphere? (crust and upper mantle) **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth Unit 4 lesson 2- Earth's Layers (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them	**Bell Ringer:** What evidence do scientists have to prove Pangaea once existed? (land formations, minerals, fossils, jigsaw puzzle shaped land) **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion website (Dynamic Earth Unit 4 Lesson 2) **Option 2-** pg. 259- Science Fusion teacher edition. Daily Demo, Exploration, or quick lab.

learned that you didn't know from the carousel activity?	McDougall Science Book pg. 132-141A **Option one** -Model Earth's soil with an apple, pg135A. McDougall **Option 2-** Landscape Architect. Pg 137A. design a park for ways to keep soil intact **Summarizer:** Why is soil a necessary resource?	Exploration, or quick lab. **Summarizer:** Why should natural resources be managed?	**Summarizer:** Explain the difference between the three types of boundaries.	**Summarizer:** Explain what plate tectonics are and how they move.
Assessment: Language Arts Connection Activity/ Observation of carousel review	**Assessment:** observation/ discussion	**Assessment:** Varies depending on the option chosen.	**Assessment:** observation/ discussion/	**Assessment:** Varies depending on the option chosen.

Day 1- Oct. 21- 25th **Lesson:** Plate Tectonics	**Day 2** **Lesson:** Plate Tectonics	**Day 3** **Lesson:** Mountains	**Day 4** **Lesson:** Mountains	**Day 5** **Lesson:**
Clarifying Objective: 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:**	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:**	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Deformation, folding, fault, shear stress, tension, compression	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Deformation, folding, fault, shear stress, tension, compression	**Clarifying Objective:** Work Day **Academic Vocabulary:**
Bell Ringer: Teacher creates based on student needs **Instructional Tasks:** "Catch up day". Reteach a concept some students may have not understood. If students have grasped the concept, continue to the next lesson. **Summarizer:** Teacher creates based on student needs	**Bell Ringer:** Teacher creates based on student needs **Instructional Tasks:** "Catch up day". Reteach a concept some students may have not understood. **Summarizer:** Teacher creates based on student needs	**Bell Ringer:** How do you think plate tectonics affect the creation of a mountain? **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 4 Lesson 3 pg 282- Teachers edition- Mountain building (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them **Summarizer:** Differentiate between anticline and syncline folds.	**Bell Ringer:** Compare and contrast the different faults. **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 4 Lesson 3 **Option 2-** Dynamic Earth- Unit 4 Lesson 3 pg. 277 Science Fusion teacher edition. Daily Demo, Exploration, or quick lab. **Summarizer:** Explain the three different ways mountains are formed.	**Bell Ringer:** **Instructional Tasks:** **Summarizer:**
Assessment: observation	**Assessment:** observation	**Assessment:** observation	**Assessment:** Varies depending on the option chosen.	**Assessment:**

Day 1- Oct. 28th – Nov 1st **Lesson:** Volcanoes	**Day 2** **Lesson:** Volcanoes	**Day 3** **Lesson:**	**Day 4** **Lesson:**	**Day 5** **Lesson:**
Clarifying Objective: 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Lava, magma, volcano, vent, tectonic plate, hotspot	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Lava, magma, volcano, vent, tectonic plate, hotspot	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:**	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Earthquake, fault, tectonic plate boundary, focus, epicenter, elastic rebound, deformation	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Earthquake, fault, tectonic plate boundary, focus, epicenter, elastic rebound, deformation
Bell Ringer: Option 1- How do you think tectonic plates affect the creation of volcanoes? Option 2- K-W-L chart on volcanoes **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 4 Lesson 4 pg 296- Teachers edition- Volcanoes (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them **Summarizer:** Explain the difference between magma and lava.	**Bell Ringer:** List the three locations that volcanoes can occur and explain how they are different. (Make sure they know not to list a state or city location) **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 4 Lesson 4 **Option 2-** Dynamic Earth- Unit 4 Lesson 4 pg. 291 Science Fusion teacher edition. Daily Demo, Exploration, or quick lab. **Summarizer:** How do volcanoes change earth's surface.	**Bell Ringer:** Teacher creates based on student needs **Instructional Tasks:** **Option 1**- "Catch up day". Reteach a concept some students may have not understood. **Option2**- Bill Nye Video on volcanoes located on youtube **Summarizer:** Teacher creates based on student needs	**Bell Ringer:** What do you know about earthquakes? **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 4 Lesson 5 pg 302- Teachers edition- Earthquakes (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them **Summarizer:** How do earthquakes occur along the three different types of faults?	**Bell Ringer:** Compare and contrast focus and epicenter. **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 4 Lesson 5 **Option 2-** Dynamic Earth- Unit 4 Lesson 5 pg. 304 Science Fusion teacher edition. Daily Demo, Exploration, or quick lab. **Summarizer:** Why do earthquakes happen?
Assessment: Observation	**Assessment:** Varies depending on the option chosen.	**Assessment:** Varies depending on the option chosen.	**Assessment:** Observation	**Assessment:** Varies depending on the option chosen.

Day 1 – Wk. of Nov. 4-8 **Lesson:** Earthquakes	**Day 2** **Lesson:** Earthquakes	**Day 3** **Lesson:** Earthquakes	**Day 4** **Lesson:** Earthquakes and Volcanoes	**Day 5** **Lesson:**
Clarifying Objective: 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Focus, epicenter, seismic waves, seismogram, magnitude, intensity	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Focus, epicenter, seismic waves, seismogram, magnitude, intensity	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** Focus, epicenter, seismic waves, seismogram, magnitude, intensity, Earthquake, fault, tectonic plate boundary, focus, epicenter, elastic rebound, deformation	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** All vocabulary from Dynamic Earth Unit 4	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** All vocabulary from Dynamic Earth Unit 4
Bell Ringer: Why do you think it is important to understand the causes of earthquakes? (Answer on pg 329) **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 4 Lesson 6 pg 320- Teachers edition- Measuring Earthquakes (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them **Summarizer:** What factors determine the	**Bell Ringer:** Explain the difference between the 3 waves that occur during a earthquake. **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 4 Lesson 6 **Option 2-** Dynamic Earth- Unit 4 Lesson 6 pg. 322 Science Fusion teacher edition. Daily Demo, Exploration, or quick lab. **Option 3:** Frayer Notes (4 corner notes)… examples for boxes: multiple choice question, picture, example,	**Bell Ringer:** Why would surface waves be more damaging to buildings than P waves or S waves? **Instructional Tasks:** **Option 1**: Share real footage of earthquakes and encourage students to discuss what they see using appropriate vocab. (Example videos: bbarnhardtadms.weebly .com/science-websites.html) **Option 2**: Bill Nye Video on volcanoes located on youtube **Option 3**: "Catch up day". Reteach a concept some students may have not understood. **Summarizer:**	**Bell Ringer:** Login to computers **Instructional Tasks:** WTL- **Science 5 9.2 What causes earthquakes and volcanoes?** **Summarizer:** Logoff/Shut down computer	**Bell Ringer:** Explain how each of the three waves move in an earthquake. **Instructional Tasks:** As a review students will go over and correct their lesson quizzes from homework. We will check and discuss each question. This will possibly take two class periods to complete. **Summarizer:** 3-2-1; 3 things I found important, 2 things I found interesting, 1 question I still have. Collect this slip for the bellringer

effects of an earthquake? (magnitude, local geology, distance from epicenter, building construction)	non example, definition) **Summarizer:** How are seismic waves used to study earthquakes?	**Option 1**: Share 3 things you learned from the videos **Option 2**: Teacher's choice		
Assessment: Observation	**Assessment:** Varies depending on the option chosen.	**Assessment:** Varies depending on the option chosen.	**Assessment:** WTL grade	**Assessment:** Lesson quizzes (Science Fusion online) for homework as a unit packet due 2 days before a test. They will be responsible for working on their unit packet on their own time.

Day 1- Week of Nov 11-15 **Lesson:** No School	**Day 2** **Lesson:** Earthquakes and Volcanoes	**Day 3** **Lesson:** Earthquakes and Volcanoes	**Day 4** **Lesson:** Earthquakes and Volcanoes	**Day 5** **Lesson:** Minerals
Clarifying Objective: **Academic Vocabulary:**	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** All vocabulary from Dynamic Earth Unit 4	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** All vocabulary from Dynamic Earth Unit 4	**Clarifying Objective:** 6E2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth. **Academic Vocabulary:** All vocabulary from Dynamic Earth Unit 4	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** Mineral, compound, streak, element, matter, luster, atom, crystal, cleavage
Bell Ringer: **Instructional Tasks:** **Summarizer:**	**Bell Ringer:** Choose student question from Friday's bellringer **Instructional Tasks:** Students should finish the review and go over and correct their lesson quizzes from homework. We will check and discuss each question. This will possibly take two class periods to complete. **Summarizer:** List three test/study strategies that can help you prepare for the test on Thursday.	**Bell Ringer:** Teacher creates based on student needs **Instructional Tasks:** "Catch up day". Reteach a concept some students may have not understand. **Summarizer:** Teacher creates based on student needs	**Bell Ringer:** **Option 1**- Study with a partner before the test. **Option 2**- Create two questions for the test. Teacher will choose questions for a bonus question. **Instructional Tasks:** Test **Summarizer:** Individual activity for students who have completed their test early.	**Bell Ringer:** What do you think minerals are? List any minerals that you know. **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 3 Lesson 1 pg 176- Teachers edition- Minerals (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them **Summarizer:** What are minerals?
Assessment:	**Assessment:** Review Grade	**Assessment:** Varies depending on the option chosen.	**Assessment:** Plate Tectonics, volcanoes, and earthquakes test	**Assessment:** Observation

Day 1- Week of Nov 18-22 **Lesson:** Minerals	**Day 2** **Lesson:** Minerals	**Day 3** **Lesson:** Rock Cycle	**Day 4** **Lesson:** Rock Cycle	**Day 5** **Lesson:** Types of Rocks
Clarifying Objective: 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** Mineral, compound, streak, element, matter, luster, atom, crystal, cleavage	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** Mineral, compound, streak, element, matter, luster, atom, crystal, cleavage	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** Weathering, igneous rock, rock cycle, rift zone, erosion, sedimentary rock, uplift, deposition, metamorphic rock, subsidence	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** Weathering, igneous rock, rock cycle, rift zone, erosion, sedimentary rock, uplift, deposition, metamorphic rock, subsidence	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** rock, composition, texture
Bell Ringer: How are minerals formed? **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 3 Lesson 1 **Option 2-** Dynamic Earth- Unit 3 Lesson 1 pg. 180 Science Fusion teacher edition. Daily Demo, Exploration, or quick lab. **Option 3:** Unit 3 lesson1 Activity on Mineral Display (can use poster or edu.glogster.com) **Summarizer:** How are minerals identified?	**Bell Ringer:** What is the relationship between atoms, elements, and compounds? (answer pg 187) **Instructional Tasks:** **Option 1:** Mineral Scratch Test Lab- Dropbox Earth Science- "Lab 2A How to Use the Mineral…" Key at bottom of powerpoint **Option 2:** Activity- Making Crystals (Dynamic Earth Unit 3 Lesson 1 pg 184) **Option 3:** Rock and Mineral Jeopardy (in dropbox… made for Mimio) **Option 4:** Frayer Notes (4 corner notes)… examples for boxes: multiple choice question, picture, example, non example, definition)	**Bell Ringer:** How do we use rock in our daily lives and what types of rock are they? **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 3 Lesson 2 pg 194- Teachers edition- Minerals (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them **Summarizer:** Why is erosion important in the rock cycle?	**Bell Ringer:** Compare and contrast the classes of rock using a Tri-Venn Diagram (answer on pg 205) **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 3 Lesson 2 **Option 2-** Dynamic Earth- Unit 3 Lesson 2 pg. 196 Science Fusion teacher edition. Daily Demo, Exploration, or quick lab. **Summarizer:** Explain the rock cycle.	**Bell Ringer:** How do rocks change over time? (pg 212) **Instructional Tasks:** Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 3 Lesson 3 pg 212- Teachers edition- Minerals (under lesson teacher support). Copy and paste to a word document to create skeleton notes. Discuss each PowerPoint as you go through them **Summarizer:** How do different mineral compositions contribute to differences in rocks?

	Summarizer: Give 2 examples of silicate minerals and 2 examples of nonsilicate minerals. (answer pg189)			
Assessment: Varies depending on the option chosen.	**Assessment:** Varies depending on the option chosen.	**Assessment:** Observation	**Assessment:** Varies depending on the option chosen.	**Assessment:** Observation

Day 1- Week of Nov 25-29 **Lesson:** Types of Rocks	**Day 2** **Lesson:** Rocks & Minerals	**Day 3** **Lesson:** NO SCHOOL	**Day 4** **Lesson:** NO SCHOOL	**Day 5** **Lesson:** NO SCHOOL
Clarifying Objective: 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** rock, composition, texture	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** rock, composition, texture, Weathering, igneous rock, rock cycle, rift zone, erosion, sedimentary rock, uplift, deposition, metamorphic rock, subsidence	**Clarifying Objective:** **Academic Vocabulary:**	**Clarifying Objective:** **Academic Vocabulary:**	**Clarifying Objective:** **Academic Vocabulary:**
Bell Ringer: Create a Venn diagram comparing and contrasting intrusive and extrusive igneous rocks. **Instructional Tasks:** **Option 1**- Digital video lesson found on Science Fusion PowerPoint notes on their website- Dynamic Earth- Unit 3 Lesson 2 **Option 2-** Dynamic Earth- Unit 3 Lesson 3 pg. 214 Science Fusion teacher edition. Daily Demo, Exploration, or quick lab. **Summarizer:** What characteristics do scientists use to classify rocks?	**Bell Ringer:** Would you expect to find sedimentary rock deep in earth's crust? Why or why not? (No, because it forms at earth's surface. When it's buried deep enough, it will change into igneous or metamorphic rock. **Instructional Tasks:** **Bell Ringer:** Choose student question from Friday's bellringer **Instructional Tasks:** As a review students will go over and correct their lesson quizzes from homework. We will check and discuss each question. This will possibly take two class periods to complete.	**Bell Ringer:** **Instructional Tasks:** **Summarizer:**	**Bell Ringer:** **Instructional Tasks:** **Summarizer:**	**Bell Ringer:** **Instructional Tasks:** **Summarizer:**

	Summarizer: Why is process of rocks changing called a cycle? (Because the steps occur over and over and have no beginning or end)			
Assessment: Varies depending on the option chosen.	**Assessment:** Lesson quizzes	**Assessment:**	**Assessment:**	**Assessment:**

Day 1- Week of Dec. 2-6 **Lesson:** Minerals & Rocks	**Day 2** **Lesson:** Minerals & Rocks	**Day 3** **Lesson:** Minerals & Rocks	**Day 4** **Lesson:** Minerals & Rocks	**Day 5** **Lesson:** BEGIN UNIT 3
Clarifying Objective: 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:** All from Dynamic Earth Unit 3 Lessons 1-3	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:**	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:**	**Clarifying Objective:** 6. E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops. **Academic Vocabulary:**	**Clarifying Objective:** **Academic Vocabulary:**
Bell Ringer: **Instructional Tasks:** **Option 1-** Frayer Notes (4 corner notes)… examples for boxes: multiple choice question, picture, example, non example, definition) **Option 2-** Virtual Lab Unit 3 Lesson 3 (under student edition **Option 3**- STEM on pg 208 Dynamic Earth **Option 4-** Dynamic Earth- Unit 3 Lesson 3 pg. 214 Science Fusion teacher edition. Daily Demo, Exploration, or quick lab (if didn't do yesterday) **Option 5**- Teacher's choice **Summarizer:** List three test/study strategies that can help you prepare for the test on Thursday	**Bell Ringer:** Teacher creates based on student needs **Instructional Tasks:** "Catch up day". Reteach a concept some students may have not understand. **Summarizer:** Teacher creates based on student needs	**Bell Ringer:** Teacher creates based on student needs **Instructional Tasks:** "Catch up day". Reteach a concept some students may have not understand. **Summarizer:** Teacher creates based on student needs	**Bell Ringer:** **Option 1**- Study with a partner before the test. **Option 2**- Create two questions for the test. Teacher will choose questions for a bonus question. **Instructional Tasks:** Test **Summarizer:** Individual activity for students who have completed their test early.	**Bell Ringer:** **Instructional Tasks:** **Summarizer:**
Assessment: Varies depending on the option chosen.	**Assessment:** Varies depending on the option chosen.	**Assessment:** Varies depending on the option chosen.	**Assessment:** Test	**Assessment:**