

## BPS Science Department Earth Science - Unit 7 - Earth's Changing Surface

**Unit 7** - During this unit, students will develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. They will analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems. Students will plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.

### Driving Questions:

- What processes lead to the development of different landscape features, such as valleys, mountains, and plateaus?
- What factors on Earth's surface affect how landscapes evolve?
- How do Earth's internal processes affect features on Earth's surface?

### NYSSLS Standards:

**Lesson 7.1:** In this lesson, students examine how active geologic processes have altered Earth's surface and investigate feedback effects within the biologic and geologic systems (**DCI ESS2.A Earth Materials and Systems**). Students develop arguments to explain how various agents affect rocky material (**SEP Engaging in Argument from Evidence**) and use a model to infer the causality of bedding patterns and how rates of change can be quantified and modeled over very short or very long periods of time (**SEP Developing and Using Models, CCC Patterns, CCC Systems and System Models, CCC Stability and Change**). Students learn how the unique characteristics of water on Earth's surface drive many surface processes such as ice wedging and sediment transport at different spatial and temporal scales (**DCI ESS2.C The Roles of Water in Earth's Surface Processes, CCC Scale Proportion, and Quantity**).

- **HS-ESS2-5 Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.**
  - **ESS2.C The Roles of Water in Earth's Surface Processes**
    - The abundance of liquid water on Earth's surface and its unique combination of physical and chemical properties are central to the planet's dynamics. These properties include water's exceptional capacity to absorb, store, and release large amounts of energy, transmit sunlight, expand upon freezing, dissolve and transport materials, and lower the viscosities and melting points of rocks. (HS-ESS2-5)
- **HS-ESS2-2 Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.**
  - **ESS2.A Earth Materials and Systems**
    - Earth's systems, being dynamic and interacting, cause feedback effects that can increase or decrease the original changes (HS-ESS2-2) (Note: This Disciplinary Core Idea is also addressed by HS-ESS2-1.)

**Lesson 7.2:** In this lesson, students explore how various features of Earth's landscape are formed (**CCC Stability and Change**) by various forces (**DCI ESS2.A Earth Materials and Systems**), including flowing water, waves, ice (**DCI ESS2.C The Roles of Water in Earth's Surface Processes**), and wind. These forces typically act either through processes that erode existing formations or create new features through deposition (**CCC Structure and Function**). Understanding will be expanded through hands-on labs that model some of these processes (**SEP Planning and Carrying Out Investigations, Developing and Using Models**).

- **HS-ESS2-1 Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean floor features.**
  - **ESS2.A Earth Materials and Systems**
    - Earth's systems, being dynamic and interacting, cause feedback effects that can increase or decrease the original changes. (HS-ESS2-1) (Note: This Disciplinary Core Idea is also addressed by HS-ESS2-2.)
- **HS-ESS2-5 Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.**
  - **ESS2.C The Roles of Water in Earth's Surface Processes**
    - The abundance of liquid water on Earth's surface and its unique combination of physical and chemical properties are central to the planet's dynamics. These properties include water's exceptional capacity to absorb, store, and release large amounts of energy, transmit sunlight, expand upon freezing, dissolve and transport materials, and lower the viscosities and melting points of rocks. (HS-ESS2-5)

**Lesson 7.3:** In this lesson, students will analyze the characteristics of various types of surface features (**SEP Analyzing and Interpreting Data**) and investigate and model the interplay (**SEP Developing and Using Models**) between constructive and destructive processes responsible for their formation (**DCI HS-ESS2.A Earth Materials and Systems, CCC Stability and Change**). These include tectonic processes

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that occur at converging and diverging plate boundaries (**DCI HS-ESS2.B Plate Tectonics and Large-Scale System Interactions**), as well as surface processes that lead to erosion and sedimentation (**CCC Stability and Change**).

- **HS-ESS2-1 Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean floor features.**
  - **ESS2.A Earth Materials and Systems**
    - Earth's systems, being dynamic and interacting, cause feedback effects that can increase or decrease the original changes. (HS-ESS2-1) (Note: This Disciplinary Core Idea is also addressed by HS-ESS2-2.)
  - **ESS2.B Plate Tectonics and Large-Scale System Interactions**
    - Plate tectonics is the unifying theory that explains the past and current movements of the rocks at Earth's surface and provides a framework for understanding its geologic history. (ESS2.B Grade 8 GBE) (HS-ESS2-1) (secondary to HS-ESS1-5)
    - Plate movements are responsible for most continental and ocean-floor features and for the distribution of most rocks and minerals within Earth's crust. (ESS2.B Grade 8 GBE) (HS-ESS2-1)
- **HS-ESS2-2 Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems. -**
  - **ESS2.A Earth Materials and Systems**
    - Earth's systems, being dynamic and interacting, cause feedback effects that can increase or decrease the original changes (HS-ESS2-2) (Note: This Disciplinary Core Idea is also addressed by HS-ESS2-1.)

### Science & Engineering Practices ([link to SEP break-down](#)):

- Analyzing and Interpreting Data
- Planning and Carrying Out Investigations
- Developing and Using Models
- Engaging in Argument from Evidence

### Crosscutting Concepts ([link to guiding questions for CCC](#)):








- Stability and Change
- Cause and Effect
- Structure and Function
- Patterns
- Scale, Proportion, and Quantity

### Opportunities for Student Collaboration p. 391H (Complete Collaboration Strategy Guide):





- **Simple Jigsaw** p. 393 ● **Group Activity** pp. 396, 400, 404, 421 ● **Gallery Walk** pp. 398, 430, 437 ● **Think, Pair, Share** pp. 402, 412, 417, 419, 429 ● **Four Corners** pp. 403, 420, 423, 433 ●
- **Model** pp. 409, 424, 435 ● **One Moves** p. 425 ● **Self-Assessment** p. 428 ● **Four Square** p. 430 ● **Say Something** p. 436 ● **Take and Pass** pp. 437, 439 ●

Time Frame	Lesson Framework	Instructional Sequence	Resources- HMH Dimensions- Earth & Space Science Textbook	Resources- HMH Dimensions Digital Component	Additional Resources
1/30/23-2/17/23	<b>Unit 7: Earth's Changing Surface</b>		<ul style="list-style-type: none"> <li>● <b>Unit Opener (Pre-Assessment): Predict-</b> What are some of the forces that may have worked to produce a landform like the Wave? (pp. 390-391)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Unit Project: Altering Landscapes-</b> Students develop a model that demonstrates the relationship between the loss of groundcover and increase in erosion. They use their models to determine which factors have the greatest effects on erosion and offer suggestions for how the effects of lost ground cover can be minimized in real-world situations.</li> </ul>	<b>ESRT:</b> <ul style="list-style-type: none"> <li>● Relationship of Transported Particle Size to Water Velocity (p. 6)</li> </ul>
	<b>Lesson 7.1 Surface Processes</b>	<b>Engage</b>	<ul style="list-style-type: none"> <li>● <b>Phenomenon: Can You Explain It?-</b> Can rocks grow from smaller pieces to larger pieces? If so, is the process usual? (p. 392)</li> </ul>		
	In this lesson, you will examine how various geologic forces	<b>Explore/ Explain</b>	<ul style="list-style-type: none"> <li>● <b>Exploration 1-</b> Agents of Change (pp. 393-395)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Lesson 1- Surface Processes PPT (editable)</b></li> </ul>	

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<p>alter Earth's surface over different timescales.</p> <p><b>Vocabulary:</b> surface process weathering erosion deposition soil horizon</p>		<ul style="list-style-type: none"> <li>● <b>Exploration 2-</b> Weathering (pp. 396-399)</li> <li>● <b>Exploration 3-</b> Transport of Material (pp. 400-401)</li> <li>● <b>Exploration 4-</b> Sediment and Soil (pp. 402-403)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Exploration 2:</b>  <b>Hands-On Lab- Weathering of Rock Materials-</b> In this lab, students observe and measure some effects of chemical weathering on rock samples and relate observations to chemical weathering in nature.</li> <li>● <b>Exploration 4:</b>  <b>Hands-On Lab- Soil Chemistry-</b> In this lab, students test the acidity of the soil samples and identify the composition of soil samples.</li> </ul>	<p><a href="#">Relationship of Transported Particle Size to Water Velocity-Three Level Guide for Diagram Interpretation</a></p> <p> <a href="#">Rates of Weathering</a></p> <p> Weathering and Erosion Modeling</p> <ul style="list-style-type: none"> <li>● <a href="#">Directions</a></li> <li>● <a href="#">Student Worksheet</a></li> </ul>
	<b>Elaborate</b>	<ul style="list-style-type: none"> <li>● <b>Continue Your Exploration- Careers in Science:</b> Cartographer (p. 404)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Continue Your Exploration:</b> <ul style="list-style-type: none"> <li>○ Diatomaceous Earth</li> <li>○ <b>Exploration 3:</b>  <b>Hands-On Lab- Modeling Surface Processes-</b> In this lab, students design a model of surface processes such as sorting of sediments by water, controlling soil erosion, or determining the effects of wind and waves on a coastline.</li> <li>○ Studying Transport</li> </ul> </li> </ul>	
	<b>Evaluate</b>	<ul style="list-style-type: none"> <li>● <b>Lesson Self Check</b> (pp. 405-407)- Can You Explain It- Revisit</li> <li>● <b>Make Your Own Study Guide</b> (p. 407)</li> <li>● <b>Checkpoint Questions</b> (pp. 406-407)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Can You Explain It?</b> Revisit</li> <li>● <b>Checkpoint Questions</b></li> <li>● <b>Make Your Own Study Guide</b></li> <li>● <b>Unit 7- Lesson 1 Quiz</b></li> </ul>	
<p><b>Lesson 7.2 Earth's Surface</b></p> <p>In this lesson, you will explore how various features of Earth's landscape are formed through the processes of erosion and deposition.</p> <p><b>Vocabulary:</b> drainage basin delta sinkhole longshore current glacier moraine</p>	<b>Engage</b>	<ul style="list-style-type: none"> <li>● <b>Phenomenon: Can You Explain It?-</b> What processes might be responsible for carving the deep meander in the Colorado River that produced Horseshoe Bend (p. 408)</li> </ul>		<p>*Ganges-Brahmaputra Delta (p. 411)</p> <p>*Yardangs in Gobi Desert, China (p.421)</p> <p>*Monument Valley (p. 422)</p>
	<b>Explore/ Explain</b>	<ul style="list-style-type: none"> <li>● <b>Exploration 1-</b> Features Shaped by Flowing Water (pp. 409-412)</li> <li>● <b>Exploration 2-</b> Features Shaped by Waves (pp. 413-416)</li> <li>● <b>Exploration 3-</b> Features Shaped by Ice (pp. 417-420)</li> <li>● <b>Exploration 4-</b> Features Shaped by Wind (pp. 421-423)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Lesson 2- Earth's Surface PPT (editable)</b></li> <li>● <b>Exploration 3:</b>  <b>Hands-On Lab- Slipping Ice-</b> In this lab, students model the formation of a glacier using snow or shaved ice.</li> <li>● <b>Exploration 4:</b>  <b>Hands-On Lab- Modeling Desert Winds-</b> In this lab, students investigate how wind moves sand and gravel to form various landforms.</li> </ul>	
	<b>Elaborate</b>	<ul style="list-style-type: none"> <li>● <b>Continue Your Exploration- Guided Research:</b> The Channeled Scablands (p. 424)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Continue Your Exploration:</b> <ul style="list-style-type: none"> <li>○ Glaciologist</li> <li>○ Beach Nourishment Projects</li> </ul> </li> </ul>	
	<b>Evaluate</b>	<ul style="list-style-type: none"> <li>● <b>Lesson Self Check</b> (pp. 425- 427)- Can You Explain It- Revisit</li> <li>● <b>Make Your Own Study Guide</b> (p. 427)</li> <li>● <b>Checkpoint Questions</b> (pp.426-427)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Can You Explain It?</b> Revisit</li> <li>● <b>Checkpoint Questions</b></li> <li>● <b>Make Your Own Study Guide</b></li> <li>● <b>Unit - Lesson 2 Quiz</b></li> </ul>	

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<p><b><u>Lesson 7.3 Development of Features</u></b></p> <p>In this lesson, you will investigate and model the formation of various types of surface features, including those created by tectonic processes.</p> <p><b><u>Vocabulary:</u></b>                      active margin                      passive margin                      isostatic equilibrium                      uplift                      subsidence</p>	<b>Engage</b>	<ul style="list-style-type: none"> <li>● <b>*Phenomenon: Can You Explain It?-</b> How might the striped mountains in the Zhangye Geopark have formed? Use what you have learned to identify processes that might have been involved. (p. 428)</li> </ul>		<p><b>ESRT:</b></p> <ul style="list-style-type: none"> <li>● Generalized Landscape Regions of New York State (p. 2)</li> </ul> <p>*Forces in New Zealand (p. 438)</p>
	<b>Explore/ Explain</b>	<ul style="list-style-type: none"> <li>● <b>Exploration 1-</b> Constructive and Destructive Processes (pp. 429-431)</li> <li>● <b>Exploration 2-</b> Uplift and Subsidence (pp. 432-433)</li> <li>● <b>Exploration 3-</b> Folding and Faulting (pp. 434- 436)</li> <li>● <b>Exploration 4-</b> Cycles of Mountains and Sediment (p. 437)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Lesson 3- Development of Features PPT (editable)</b></li> <li>● <b>Exploration 2:</b>  <b>Hands-On Lab- Model Rising and Sinking-</b> In this lab, students model rising and sinking by placing weights on a floating wooden block.</li> <li>● <b>Exploration 3:</b>  <b>Hands-On Lab- Model Forces-</b> In this lab, students model different types of stresses on rock and make observations of the effects.</li> </ul>	
	<b>Elaborate</b>	<ul style="list-style-type: none"> <li>● <b>Continue Your Exploration- Data Analysis:</b> Forces in New Zealand (p. 438)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Continue Your Exploration:</b> <ul style="list-style-type: none"> <li>○  <b>Hands-On Lab- Model Faulting and Folding-</b> In this lab, students will construct models of different fault and fold structures, and evaluate differences in tectonic features.</li> </ul> </li> </ul>	
	<b>Evaluate</b>	<ul style="list-style-type: none"> <li>● <b>Lesson Self Check</b> (pp.439-441)- Can You Explain It- Revisit</li> <li>● <b>Make Your Own Study Guide</b> (p. 441)</li> <li>● <b>Checkpoint Questions</b> (pp. 440-441)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Can You Explain It?</b> Revisit</li> <li>● <b>Checkpoint Questions</b></li> <li>● <b>Make Your Own Study Guide</b></li> <li>● <b>Unit - Lesson 3 Quiz</b></li> </ul>	
<b><u>Thing Explainer</u></b>		<ul style="list-style-type: none"> <li>● <b>Earth's Surface</b> (Pp. 442-447)</li> </ul>		
<b><u>Enrichment: Unit Connection Activities</u></b> (Optional)		<ul style="list-style-type: none"> <li>● <b>Biology-</b> Plants and Erosion</li> <li>● <b>Engineering-</b> The Impact of Flood Control Technologies</li> <li>● <b>Social Studies-</b> Geotourism</li> </ul>		
<b><u>Unit Close</u></b>		<ul style="list-style-type: none"> <li>● <b>Synthesize the Unit</b> (p.449)</li> <li>● <b>Driving Questions</b> (revisit)</li> <li>● <b>Practice and Review Questions</b> (pp.449-450)</li> <li>● <b>Unit Project</b> Revisited (p. 450)</li> <li>● <b>Unit Performance Task</b> (p. 451)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Assessment Guide:</b> <ul style="list-style-type: none"> <li>○ Unit Test A- provides an in-depth assessment of the Performance Expectations aligned to the unit.</li> <li>○ Unit Test B can be used to assess students who need extra support</li> </ul> </li> </ul>	<p> <b>Castle Learning</b></p> <p><a href="#">HMH Earth &amp; Space Science Unit 7- Earth's Changing Surface</a></p> <p>(Editable item bank available under Public Assignments in Castle Learning)</p>

### Resources

<http://ngss.nsta.org/Classroom-Resources.aspx> - Searchable NYSSLS/NGSS aligned resources curated by NSTA

[BPS Earth Science Website](#)– BPS Earth Science curriculum resource hub

[BPS Science Department Recommended Virtual Labs](#) – Virtual lab resources with embedded links to virtual labs and student sheets. Must be logged into BPS google account through BPS Gmail account to access.

[BPS Science Department CER Student Writing Template](#) ([BPS Science Department CER Practice with a Graph](#))



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[NYSED's Office of State Assessment webpage](#) - Access to Released Regents Earth Science Examinations

[Science Learning Standards \(HS\)](#) – NYSSLs High School Standards for Earth Science

[NYSED Bilingual Glossaries](#) – NYS Statewide Language Regional Bilingual Education Resource for NYSED approved bilingual glossaries.

<p><b>English Language Learners (ELL) Enhancements</b></p> <p>To access <a href="#">hyperlinked</a> material, you must be logged into your BPS Google Drive</p>	<p><b>Listening</b></p> <ul style="list-style-type: none"> <li>● <b><a href="#">Cross- Linguistic Practices:</a></b> Gives students opportunities to make connections between what they hear and their home language (For example, allow students to listen to a passage and identify cognates.)</li> <li>● <b><a href="#">Build background knowledge</a></b></li> <li>● <b><a href="#">Activating Prior Knowledge</a></b></li> <li>● <b><a href="#">Activating prior knowledge</a></b> means both eliciting from students what they already know and building initial knowledge that they need in order to access upcoming content</li> <li>● <b><a href="#">Visuals</a></b> - GIFs, pictures- will assist students in understanding what they are listening to. <b><a href="#">Visual thinking strategies</a></b> set the lens for learning.</li> <li>● Video to review/ introduce a topic – use <b><a href="#">closed captioning</a></b> so students see the words and pronunciations while they listen to the content.</li> <li>● <b><a href="#">Word stretching / Vowel stretching</a></b> allows student to listen closely to the pronunciation words</li> <li>● <b><a href="#">Performance Level Descriptors</a></b> - this document provides teachers with a description of what output they can expect from students based on earned NYSESLAT levels in the modality of listening Scroll for grades 9-12.</li> </ul>	<p><b>Speaking</b></p> <ul style="list-style-type: none"> <li>● <b><a href="#">Sentence Frames</a></b> - to begin a sentence - such as <i>Evolution is...</i> or <i>I think that evolution is...</i></li> <li>● <b><a href="#">Academic Conversation Starters:</a></b> Have a visual of a list of academic sentence starters that students can refer to in a discussion such as <i>I expect ___ to happen.</i> or <i>My data shows that...</i> This aids students in having more science focused dialogue.</li> <li>● <b><a href="#">Choral Reading</a></b> - Build fluency, self-confidence and motivation with <b><a href="#">reading/speaking</a></b></li> <li>● Create <b><a href="#">movement</a></b> to go with the word. Movement can be a motivating factor and kinesthetic tool for conceptualizing the rhythm and flow of fluent reading while triggering brain function for optimal learning</li> <li>● <b><a href="#">Performance Level Descriptors</a></b> - this document provides teachers with a description of what output they can expect from students based on earned NYSESLAT levels in the modality of speaking. Scroll for grades 9-12</li> </ul>	<p><b>Reading</b></p> <ul style="list-style-type: none"> <li>● <b><a href="#">Supplementary Text</a></b> to reinforce concepts. If necessary, use lower Lexile levels to ensure comprehension.</li> <li>● <b><a href="#">Visual Aids</a></b> - Pictures or models to support vocabulary words/ concepts</li> <li>● Video to review introduce a topic - use <b><a href="#">closed captioning</a></b> so students can read along and listen to content</li> <li>● <b><a href="#">4 Square / Frayer models</a></b> to help students gain a deeper understanding of vocabulary.</li> <li>● <b><a href="#">Highlighting</a></b> important text to assist students in answering questions after the reading.</li> <li>● <b><a href="#">Chunking</a></b>-Break reading of text into chunks or paragraphs</li> <li>● <b><a href="#">Vocabulary Morphology</a></b>- segmenting words into affixes (prefixes/suffixes) and roots/base words. Understanding that words connected by meaning/origin can be connected by spelling can be critical to expanding a student's vocabulary.</li> <li>● <b><a href="#">Performance Level Descriptors</a></b>- this document provides teachers with a description of what output they can expect from students based on earned NYSESLAT levels in the modality of reading. Scroll for grades 9-12.</li> </ul>	<p><b>Writing</b></p> <ul style="list-style-type: none"> <li>● <b><a href="#">Sentence Frames</a></b> - to begin a sentence- such as <i>Biodiversity is...</i> or <i>An example of competition is....</i></li> <li>● <b><a href="#">Cloze passages</a></b> with word banks</li> <li>● <b><a href="#">Word banks</a></b></li> <li>● <b><a href="#">Graphic Organizers</a></b> to help break down the writing process and organize thoughts</li> <li>● <b><a href="#">Standards-based sentence stems</a></b></li> <li>● <b><a href="#">Performance Level Descriptors</a></b>- this document provides teachers with a description of what output they can expect from students based on earned NYSESLAT levels in the modality of writing. Scroll for grades 9-12.</li> </ul>	<p><b>Instructional Accommodations (depending on the student's needs)</b></p> <ul style="list-style-type: none"> <li>● <b>Extended time</b> for tests in class, projects and assignments</li> <li>● <b>Directions read.</b> Broken down as necessary</li> <li>● <b>Model</b> how to complete the activity in the lesson</li> <li>● <b>Oral simplification</b> of directions or questions</li> <li>● <b>Translated version</b> of test when available. Student may have both version English and native language version</li> <li>● Use of <b><a href="#">approved bilingual glossaries</a></b> from NYS in each subject</li> </ul>
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<p><b>Special Education Modifications</b></p> <p><b>Special Education students must have accommodations as per Individual Educational Plan (IEP)</b></p>	<p><b><u>Instructional</u></b></p> <ul style="list-style-type: none"> <li>● <b>Pre-teach</b> vocabulary</li> <li>● Use <b>picture vocabulary</b></li> <li>● Scaffold <b>Depth of Knowledge</b> questions</li> <li>● Provide copy of notes/notes in “<b>cloze</b>” form</li> <li>● Use of <b>Think, Pair, and Share</b> strategy to help process information</li> <li>● <b>Scaffold</b> written assignments with the use of <b>graphic organizers</b></li> <li>● Allow for <b>multiple ways to respond</b> (verbal, written, response board)</li> <li>● Provide <b>model of performance task</b></li> <li>● <b>Modify informational text</b> to fit the needs of the students</li> <li>● Provide a digital or paper <b>interactive notebook</b></li> <li>● Present complex <b>tasks in multiple ways</b></li> <li>● Provide <b>mnemonic strategies</b> for Living Environment concepts</li> </ul>	<p><b><u>Technology:</u></b></p> <ul style="list-style-type: none"> <li>● <b>Audio</b> reading of text</li> <li>● <b>Text to type</b> functions</li> <li>● <b>Videos</b> to clarify/visualize Living Environment concepts</li> <li>● <b>Record class lecture/discussions</b> and make accessible to student</li> <li>● <b>Nearpod</b>- interactive presentations of notes</li> <li>● <b>Playposit</b> - show a video clip about the topic and add your own questions for them to answer as they watch</li> <li>● Allow students to type answers in chat on <b>Teams</b></li> </ul> <p><b><u>Other:</u></b></p> <ul style="list-style-type: none"> <li>● Arrange seating for maximum engagement and minimum distraction</li> <li>● Accessible lab space (counter level)</li> </ul>	<p><b><u>In Class Assessments</u></b></p> <ul style="list-style-type: none"> <li>● Provide <b>review packet or review sheet</b> of concepts covered on the test</li> <li>● Practice similar questions prior to the test</li> <li>● Provide <b>multiple options</b> for projects</li> <li>● Give a <b>timeline</b> of when things are due and remind them of the process often.</li> <li>● <b>Use of timer</b> in class</li> <li>● Break all complex tasks into chunks</li> </ul>
<p><b>BPS Science K-12 Schoology Folder:</b></p> <p>9-12 Resources Earth Science Resources Curriculum Materials</p>	<p><b><u>SUTW Strategies</u></b></p> <ul style="list-style-type: none"> <li>● Informal Outline</li> <li>● Color-Coding – Informative/Explanatory Text</li> <li>● Two-column notes</li> <li>● I-V-F Topic Sentence progressing to Four Step Summary Paragraph</li> <li>● CUPS – Capitalization, Usage, Punctuation, Spelling</li> <li>● Transitions</li> </ul>		
<p><b>Culturally and Linguistically Responsive Teaching (CLRT) in the Science Classroom</b></p>	<p>Materials, resources, and/or discussions address diverse cultural backgrounds and real-world applications</p> <ul style="list-style-type: none"> <li>● Artifacts (posters, charts, etc.) in the science classroom are representative of the cultures of the student population</li> <li>● All students are given an opportunity to engage in science discourse</li> <li>● Teacher demonstrates high expectations for all students</li> </ul> <p>CLRT resources which align to Science content are denoted with a *</p>		