One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: May 24 - May 28

Reminder: Earth Sci SOL Review Part 4 Due Friday 5/28



Grade: 8th

Teacher: Mr. Kalevas

I am learning:

Weather models take observational data (such as wind speed, wind direction, air temperature, pressure, and humidity) collected from many locations and sources across a region, and use mathematical equations that represent the physics of the atmosphere to fill in the gaps between measured points. Models then use these equations to predict what will happen in the future, including the development of storms and other weather events (ES.12 d).

- describe the effect of satellite technology on weather prediction and storm tracking, including hurricanes, and evaluate the costs and benefits in terms of lives and property saved; predict the impact on storm preparedness if there were no weather satellites.
- analyze geoscience data and the results of global climate models to make an evidence-based forecast of the current rate of global and regional climate change and associated future effects on Earth systems.
- analyze the conditions that lead to severe weather events such as tornadoes and hurricanes.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: Social/Emotional Check-In	Attendance/warmup: -ASYNCHRONOUS LEARNING - SOL IN-PERSON TESTING	Attendance/warmup: -ASYNCHRONOUS LEARNING	Attendance/warmup: - Do Now: Social/Emotional Check-In	Attendance/warmup: Do Now: Social/Emotional Check-In
Whole-group:	Whole-group:	Whole-group: -Complete SOL	Whole-group:	Whole-group:

-SOL Station Rotations	-Missing Work or Grade Recovery	Review parts 3 & 4	-SOL Station Rotations	-SOL Station Rotations
		Small-group &		
Small-group &	Small-group &	independent practice:	Small-group &	Small-group &
independent practice:	independent practice:	-	independent practice:	independent practice:
-Complete SOL	-Complete SOL		-Complete SOL	-Complete SOL
Review parts 3 & 4 or	Review parts 3 & 4	Review/exit activity:	Review parts 3 & 4 or	Review parts 3 & 4 or
Missing Work or		 -	Missing Work or	Missing Work or
Grade Recovery	Review/exit activity:		Grade Recovery	Grade Recovery
1	-		1	_
Review/exit activity:			Review/exit activity:	Review/exit activity:
			 -	-

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: May 17 - May 21

Reminder: Earth Sci SOL Review Part 3 Due Friday 5/21



Grade: 8th

Teacher: Mr. Kalevas

I am learning:

 Weather models take observational data (such as wind speed, wind direction, air temperature, pressure, and humidity) collected from many locations and sources across a region,

I can:

 describe the effect of satellite technology on weather prediction and storm tracking, including hurricanes, and evaluate the costs and benefits in terms of lives and property saved; predict the impact on storm preparedness if there were no weather

- and use mathematical equations that represent the physics of the atmosphere to fill in the gaps between measured points. Models then use these equations to predict what will happen in the future, including the development of storms and other weather events (ES.12 d).
- A tornado is a narrow, violent funnel-shaped column of spiral winds that extends downward from the cloud base toward Earth. A hurricane is a tropical cyclone (counterclockwise movement of air) characterized by sustained winds of 120 kilometers per hour (75 miles per hour) or greater (ES.12 c).

- satellites.
- analyze geoscience data and the results of global climate models to make an evidence-based forecast of the current rate of global and regional climate change and associated future effects on Earth systems.
- analyze the conditions that lead to severe weather events such as tornadoes and hurricanes.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: Weather Map Practice	Attendance/warmup: -ASYNCHRONOUS LEARNING - SOL IN-PERSON TESTING	Attendance/warmup: -ASYNCHRONOUS LEARNING	Attendance/warmup: - Do Now: Severe WX Discussion Board	Attendance/warmup: -Do Now: Severe WX Discussion Board
Whole-group: -Weather Station & Forecasting Notes	Whole-group: -Missing Work or Grade Recovery	Whole-group: -Complete SOL Review parts 3 & 4	Whole-group: -Severe Weather Notes	Whole-group: -Severe Weather Notes
Small-group & independent practice: -Weather Station Forecasting and Practice	Small-group & independent practice:	Small-group & independent practice: - Review/exit activity:	Small-group & independent practice: -Severe Weather Webquest	Small-group & independent practice: -Severe Weather Webquest
Review/exit activity: -Exit Ticket: Weather Station Check for	Review/exit activity: -	_	Review/exit activity: -Exit Ticket: Severe WX (PM)	Review/exit activity: -Exit Ticket: Severe WX (PM)

Understanding		

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BACK TO SCHOOL NIGHT 9/22 LINK
Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: May 10 - May 14

Reminder: Earth Sci SOL Review Part 2 Due Friday 5/14

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- Weather models take observational data (such as wind speed, wind direction, air temperature, pressure, and humidity) collected from many locations and sources across a region, and use mathematical equations that represent the physics of the atmosphere to fill in the gaps between measured points. Models then use these equations to predict what will happen in the future, including the development of storms and other weather events (ES.12 d).
- Weather and climate are different. Both weather and climate are measurable and, to a certain extent, predictable.
 Weather describes day-to-day

- describe the effect of satellite technology on weather prediction and storm tracking, including hurricanes, and evaluate the costs and benefits in terms of lives and property saved; predict the impact on storm preparedness if there were no weather satellites.
- analyze geoscience data and the results of global climate models to make an evidence-based forecast of the current rate of global and regional climate change and associated future effects on Earth systems.

changes in atmospheric conditions.
Climate describes the typical weather
patterns for a given location over a
period of many years. Instrumentation
is used to collect weather and climate.

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Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: Weather Map Practice	Attendance/warmup: -Do Now: Weather Map Practice	Attendance/warmup: -ASYNCHRONOUS LEARNING	Attendance/warmup: - STUDENT AND STAFF HOLIDAY- DAY OFF	Attendance/warmup: -Do Now: Weather Map Practice
Whole-group: - Small-group & independent practice: -HCPS ES SGM#1 Post-Test Review/exit activity: -Continue completing SOL	Whole-group: - Small-group & independent practice: -HCPS ES SGM#1 Post-Test Review/exit activity: -Continue completing SOL	Whole-group: -Complete SOL Review part 3 Small-group & independent practice: - Review/exit activity:	Whole-group: - Small-group & independent practice: - Review/exit activity: -	Whole-group: -Weather Station Observation Notes Small-group & independent practice: -Weather Station Forecasting and Practice Review/exit activity:
Review part 2	Review part 2			-Exit Ticket: Weather Station Check for Understanding

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: May 3 - May 7

Grade: 8th

Teacher: Mr. Kalevas

Reminder: Earth Sci SOL Review Part 1 Due Wednesday 5/5

I am learning:

- Earth's atmosphere is 21 percent oxygen, 78 percent nitrogen, and one percent trace gases. The composition of the atmosphere can change due to human, biologic, and geologic activity (ES.11a).
- The ability of Earth's atmosphere to absorb and retain heat is affected by the presence of gases like water vapor and carbon dioxide (ES.11a).
- Earth's surface is much more efficiently heated by the sun than is the atmosphere. The amount of energy reaching any given point on Earth's surface is controlled by the angle of sunlight striking the surface and varies with the seasons (ES.12 a).
- Winds are created by uneven heat distribution at Earth's surface and modified by the rotation of Earth. The Coriolis effect causes deflections of the atmosphere due to the rotation of Earth. Global wind patterns result from the uneven heating of Earth by the sun and are influenced by the Coriolis effect (ES.12 b).

- describe the role of different atmospheric components in supporting life.
- explain how biologic activity, including human activities, may influence global temperature and climate.
- predict the direction of local winds and relate these to the presence of fronts and high- and/or low-pressure systems or other atmospheric phenomena.
- identify types and origins of air masses, fronts and the accompanying weather conditions.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup:	Attendance/warmup:	Attendance/warmup:	Attendance/warmup:	Attendance/warmup:

-Do Now: HCPS ES Checkpoint 6 (27 Weeks) Assessment	-Do Now: HCPS ES Checkpoint 6 (27 Weeks) Assessment	-ASYNCHRONOUS LEARNING Whole-group:	- Do Now: Ocean Acidification Jamboard	-Do Now: Ocean Acidification Jamboard
Whole-group: -Ocean Circulation and Currents Notes	Whole-group: -Ocean Circulation and Currents Notes	-Ocean Currents and Ocean Acidification Review	Whole-group: -Ocean Acidification Nearpod	Whole-group: -Ocean Acidification Nearpod
Small-group & independent practice: -Global Climates Graphing Activity	Small-group & independent practice: -Global Climates Graphing Activity	Small-group & independent practice: - Review/exit activity:	Small-group & independent practice: -Virtual Carbon Dioxide Lab	Small-group & independent practice: -Virtual Carbon Dioxide Lab
Review/exit activity: -Exit Ticket: Global Climates Review Questions	Review/exit activity: -Exit Ticket: Global Climates Review Questions	-	Review/exit activity: -Exit Ticket: Ocean pH Questionnaire	Review/exit activity: -Exit Ticket: Ocean pH Questionnaire

One Team. One Vision. BACK TO SCHOOL NIGHT 9/22 LINK Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: April 26 - April 30

Reminder: 1) HCPS Checkpoint 6 Assessment Mon. 4/26 & Tues. 4/27 2) Weathering & Erosion Project Due Thur. 4/29 & Fri. 4/30

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- The ocean is a dynamic system in which many chemical, biological, and physical changes are taking place.
- A significant amount of atmospheric CO2 is naturally absorbed by the oceans. However, scientific evidence indicates that this amount is slowly increasing as the CO2 levels in the atmosphere rise. Scientific observations have indicated potential negative impact on marine organisms with calcium carbonate skeletons and shells.
- The ocean is the single largest reservoir of heat at Earth's surface. The stored heat in the ocean drives much of Earth's weather and causes climate near the ocean to be milder than climate in the interior of continents.
- There are large current systems in the oceans that carry warm water toward the poles and cold water toward the equator.

- describe the relationship between moving continents, the presence of ice caps, and ocean circulation over long periods of time.
- analyze the role of ocean currents in the distribution of heat from the equatorial regions to the poles, and predict what changes may occur as continents move and atmospheric conditions and climate vary.
- explain the role of oceans in the extraction of atmospheric carbon dioxide and the relation to the formation of carbonates.
- investigate trends of ocean temperature and pH over time as it relates to the extraction of CO2 and the formation of carbonates.
- analyze the impact of changing ocean pH on marine organisms, carbon sequestration, and the production of atmospheric oxygen.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: HCPS ES Checkpoint 6 (27 Weeks) Assessment	Attendance/warmup: -Do Now: HCPS ES Checkpoint 6 (27 Weeks) Assessment	Attendance/warmup: -ASYNCHRONOUS LEARNING	Attendance/warmup: - Do Now: Ocean Acidification Jamboard	Attendance/warmup: -Do Now: Ocean Acidification Jamboard
Whole-group: -Ocean Circulation and Currents Notes	Whole-group: -Ocean Circulation and Currents Notes	Whole-group: -Ocean Currents and Ocean Acidification Review	Whole-group: -Ocean Acidification Nearpod	Whole-group: -Ocean Acidification Nearpod
Small-group & independent practice:	Small-group & independent practice:	Small-group & independent practice:	Small-group & independent practice:	Small-group & independent practice:

-Global Climates Graphing Activity	-Global Climates Graphing Activity	- Review/exit activity:	-Virtual Carbon Dioxide Lab	-Virtual Carbon Dioxide Lab
Review/exit activity: -Exit Ticket: Global Climates Review Questions	Review/exit activity: -Exit Ticket: Global Climates Review Questions	-	Review/exit activity: -Exit Ticket: Ocean pH Questionnaire	Review/exit activity: -Exit Ticket: Ocean pH Questionnaire

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: April 19 - April 23

Reminder: Weathering & Erosion Project Due Thur. 4/29 & Fri. 4/30

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- Earth's freshwater supply is finite.
 Geological processes, such as erosion, and human activities, such as waste disposal, can pollute water supplies.
- Earth's water cycles among the reservoirs of the atmosphere, streams, lakes, ocean, glaciers, groundwater, and deep interior of the planet.
- Permeability is a measure of the ability of a rock or sediment to transmit water

- interpret a hydrologic cycle diagram, including evaporation, condensation, precipitation, transpiration, infiltration, underground storage, and runoff.
- locate the major Virginia watershed systems on a map (Chesapeake Bay, Gulf of Mexico, and North Carolina sounds).
- utilize topographic maps, to trace and delineate a Virginia watershed.
- locate, review and point out Watersheds affecting the Chesapeake Bay, including the James River watershed, its

- or other liquids. Water does not pass through impermeable materials. A substantial amount of water is stored in permeable soil and rock underground.
- Soil is formed from the weathering of rocks and organic activity and is composed of loose rock fragments and clay derived from weathered rock mixed with organic material.
- Karst topography is developed in areas underlain by carbonate rocks, including limestone and dolomite. Karst topography includes features like caves and sinkholes and forms when limestone is slowly dissolved away by slightly acidic groundwater. Where limestone is abundant in the Valley and Ridge province of Virginia, karst topography is common.

- health and also its contribution to the health of the Chesapeake.
- interpret a simple groundwater diagram showing the zone of aeration, the zone of saturation, the water table, and an aquifer.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: USGS Survey Discussion Board	Attendance/warmup: -Do Now: USGS Survey Discussion Board	Attendance/warmup: -ASYNCHRONOUS LEARNING	Attendance/warmup: - Do Now: Permeability Jamboard	Attendance/warmup: -Do Now: Permeability Jamboard
Whole-group: -Gizmos: Water Cycle Diagram Review	Whole-group: -Gizmos: Water Cycle Diagram Review	Whole-group: -Water Cycle and Watersheds Review Small-group &	Whole-group: -Present and Review Groundwater Diagram	Whole-group: -Present and Review Groundwater Diagram
Small-group & independent practice: -Internet Scavenger Hunt: Watersheds	Small-group & independent practice: -Internet Scavenger Hunt: Watersheds	independent practice: - Review/exit activity: -	Small-group & independent practice: -Will There Be Enough Freshwater Activity	Small-group & independent practice: -Will There Be Enough Freshwater Activity

-Exit Ticket: -Exit Tic Watershed Watersh	ed ation Review	Review/exit activity: -Exit Ticket: HCPS ES Checkpoint 6 (27 Weeks) Assessment	Review/exit activity: -Exit Ticket: HCPS ES Checkpoint 6 (27 Weeks) Assessment
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BACK TO SCHOOL NIGHT 9/22 LINK
Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: March 29 - April 2

Reminder: End of 3rd Nine Weeks Friday 4/2

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- Most large scale, high-energy events of geologic activity (e.g., earthquakes, volcanoes, and mountain building) occur as a result of relative motion along plate boundaries.
- All plate boundaries show earthquake activity of varying energy levels and depths.
- A volcano is an opening where magma erupts onto Earth's surface as lava and/or other extrusive material. Most volcanic activity is associated with

- analyze data on the speed, behavior, and paths of different types of seismic waves and determine Earth layer composition, density, and viscosity.
- analyze field and laboratory evidence and construct an explanation for the various structures produced in convergent continental and oceanic plate boundaries.

plate boundaries: subduction, rifting, or seafloor spreading. Hot spot volcanic activity, such as the volcanic islands of Hawaii, is exceptional in that it is not related to plate boundaries. A hot spot is thought to be derived from a deep, localized heat source known as a mantle plume, though there is some scientific debate on this.

scientific debate on this.				
Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: Plate Movement Discussion Board	Attendance/warmup: -Do Now: Plate Movement Discussion Board	Attendance/warmup: -ASYNCHRONOUS LEARNING Whole-group:	Attendance/warmup: - Do Now: Earthquake Cross Section Discussion Board	Attendance/warmup: -Do Now: Earthquake Cross Section Discussion Board
Whole-group: -P-Wave/S-Wave and Shadow Zone Analysis	Whole-group: -P-Wave/S-Wave and Shadow Zone Analysis	Small-group & independent practice:	Whole-group: -Bill Nye Volcanoes Video	Whole-group: -Bill Nye Volcanoes Video
Small-group & independent practice: -Gizmos: Earthquake I-Recording Station Activity	Small-group & independent practice: -Gizmos: Earthquake I-Recording Station Activity	Review/exit activity:	Small-group & independent practice: -Bill Nye Volcanoes Video Handout Review/exit activity: -Exit Ticket:	Small-group & independent practice: -Bill Nye Volcanoes Video Handout Review/exit activity: -Exit Ticket:
Review/exit activity: -Exit Ticket: Earthquakes (PM) Assessment	Review/exit activity: -Exit Ticket: Earthquakes (PM) Assessment		Volcanoes (Schoology) Assessment	Volcanoes (Schoology) Assessment

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: March 15 - March 19

Reminder: Seafloor Topography Presentations Thur. 3/25 & Fri. 3/26



Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- Plate tectonic processes serve as the major driver of the transformations of rock materials represented in the traditional rock cycle. Plate tectonics drive the evolution of Earth's surface features and materials by fractionating material by chemical, mineralogical, and physical properties.
- Earth's lithosphere is divided into plates that are in motion with respect to one another. The lithosphere is composed of the crust and upper portion of the mantle. There are two different types of lithospheres—oceanic and continental—that have very different physical and mineralogical characteristics. The ocean lithosphere is relatively thin, young, and dense. The continental lithosphere is relatively thick, old, and less dense.

I can:

 comprehend and apply the details of Plate Tectonics Theory to the formation of continents, mountain chains, island arcs, deep open trenches, earthquake zones, and continental and mid-ocean volcanism.

Monday	Tuesday	Wednesday	Thursday	Friday
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Attendance/warmup: Attendance/warmup: Attendance/warmup: Attendance/warmup: Attendance/warmup: -Do Now: Seafloor -Do Now: Seafloor -ASYNCHRONOUS - Do Now: Deep -Do Now: Deep Ocean Ocean Trenches **Trenches Discussion Spreading Demo Spreading Demo LEARNING Discussion Board Discussion Board Discussion Board Board** Whole-group: Whole-group: Whole-group: Whole-group: Whole-group: -Present and Assign -Present and Assign -Seafloor -Seafloor **Seafloor Topography Seafloor Topography** Small-group & **Topography Group Topography Group Group Project Group Project** independent practice: **Presentations Presentations Expectations Expectations** Small-group & Small-group & Review/exit activity: independent practice: independent practice: Small-group & Small-group & -Seafloor -Seafloor independent practice: independent practice: **Topography Group** -Seafloor -Seafloor **Topography Group Topography Group Project Project Topography Group Presentations Presentations** Review/exit activity: Review/exit activity: -Exit Ticket: Group -Exit Ticket: Group Review/exit activity: Review/exit activity: -Exit Ticket: Seafloor -Exit Ticket: Seafloor Check-In Check-In Features (PM) Features (PM) **Assessment Assessment**

Wilder Week at a Glance

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: March 15 - March 19



Grade: 8th

Teacher: Mr. Kalevas

Reminder: Unit 6 Rocks & Minerals Test Thurs. 3/11 & Friday 3/12 Science Tutoring Thursday 3/4 @ 2 o'clock

I am learning:

- Plate tectonic processes serve as the major driver of the transformations of rock materials represented in the traditional rock cycle. Plate tectonics drive the evolution of Earth's surface features and materials by fractionating material by chemical, mineralogical, and physical properties.
- Earth's lithosphere is divided into plates that are in motion with respect to one another. The lithosphere is composed of the crust and upper portion of the mantle. There are two different types of lithospheres—oceanic and continental—that have very different physical and mineralogical characteristics. The ocean lithosphere is relatively thin, young, and dense. The continental lithosphere is relatively thick, old, and less dense.
- Earth consists of a solid, mostly iron inner core; a liquid, mostly iron outer core; a crystalline but largely plastic mantle; and a rocky, brittle crust.

- use available data (seafloor age, magnetic information, seismic profiles, laser-measured motion studies, fossil evidence, rock types, tectonic history), to support Plate Tectonics Theory.
 - analyze the composition and structure of the continental and oceanic lithosphere in terms of, topographic features, density, thickness, and rates of motion.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: Bill Nye Plate Tectonics and KWL	Attendance/warmup: -Do Now: Bill Nye Plate Tectonics and KWL	LEARNING	Attendance/warmup: - Do Now: Theory of Plate Tectonics and Questionnaire	Attendance/warmup: -Do Now: Theory of Plate Tectonics and Questionnaire
Whole-group:	Whole-group:	Whole-group: -	Whole-group:	Whole-group:

-Evidence of Plate Tectonics Notes	-Evidence of Plate Tectonics Notes	Small-group & independent practice:	-Plate Boundary Notes	-Plate Boundary Notes
Small-group & independent practice: - Plate Tectonics Webquest (Evidence & Theory of Plate Tectonics)	Small-group & independent practice: -Plate Tectonics Webquest (Evidence & Theory of Plate Tectonics)	Review/exit activity:	Small-group & independent practice: -Continue Plate Tectonics Webquest (Layers of Earth & Plate Boundaries)	Small-group & independent practice: -Continue Plate Tectonics Webquest (Layers of Earth & Plate Boundaries)
Review/exit activity: -Exit Ticket: Plate Tectonics (PM)	Review/exit activity: -Exit Ticket: Plate Tectonics (PM)		Review/exit activity: -Exit Ticket: PT Webquest Check for Understanding Section	Review/exit activity: -Exit Ticket: PT Webquest Check for Understanding Section

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: March 8 - March 12

Reminder: Unit 6 Rocks & Minerals Test Thurs. 3/11 & Friday 3/12 Science Tutoring Thursday 3/4 @ 2 o'clock

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Grade: 8th

Teacher: Mr. Kalevas

I am learning:

 Rocks can be identified by mineral content and texture.

I can:

• plan and conduct an investigation to identify an unknown rock sample based on chemical and physical characteristics.

		 classify rock type 	es as igneous, metamorp	phic, or sedimentary.
Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: 3 Types of Rocks Discussion	Attendance/warmup: -Do Now: 3 Types of Rocks Discussion	Attendance/warmup: -ASYNCHRONOUS LEARNING	Attendance/warmup: - Unit 6 Test Review	Attendance/warmup: -Unit 6 Test Review
Board	Board	Whole-group:	Whole-group: -	Whole-group:
Whole-group: -Review Rock ID Virtual Lab	Whole-group: -Review Rock ID Virtual Lab	Small-group & independent practice:	Small-group & independent practice: -Unit 6 Rocks and	Small-group & independent practice: -Unit 6 Rocks and
Small-group & independent practice: - Rock Identification Virtual Lab	Small-group & independent practice: -Rock Identification Virtual Lab	Review/exit activity:	Minerals Test/HCPS Checkpoint 5 22.5 Weeks Assessment	Minerals Test/HCPS Checkpoint 5 22.5 Weeks Assessment
Review/exit activity: -ES Mid-Year SGM#2 Cornerstone Assessment	Review/exit activity: -ES Mid-Year SGM#2 Cornerstone Assessment		Review/exit activity: -Unit 7 Geologic Processes Vocabulary Rank & Define	Review/exit activity: -Unit 7 Geologic Processes Vocabulary Rank & Define

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: March 1 - March 5

Grade: 8th

Teacher: Mr. Kalevas

Reminder: Science Tutoring Thursday 3/4 @ 2 o'clock

I am learning:

- Generally, clastic, sedimentary rocks are made up of fragments of other rocks.
- Sedimentary rocks may be formed by many different processes; thus, some rock types don't fit neatly into a standard classification, such as clastic or chemical.
- Chemical sedimentary rocks are formed through predominantly inorganic, chemical means (e.g., precipitation).
- Biochemical or biological sedimentary rocks are formed from the stratified remains of plant material or carbonate-shelled organisms.
- Metamorphic rocks form when any rock is changed by the effects of heat, pressure, or chemical action. Foliation in metamorphic rocks includes slaty cleavage, schistosity, and mineral banding. Non-foliated metamorphic rocks have little or no mineral banding and are relatively homogenous.

- describe identifying features of metamorphic and sedimentary rocks.
- differentiate between clastic and non-clastic (chemical, and biological/organic) sedimentary rocks.
- differentiate between the structure of foliated and non-foliated metamorphic rocks.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: Sedimentary Rocks	Attendance/warmup: -	-ASYNCHRONOUS	Attendance/warmup: - Do Now: Metamorphic Rocks	Attendance/warmup: -

Video and Review Quiz	Whole-group:	Whole-group:	Video and K-W-L Chart	Whole-group:
Whole-group: -Nearpod: Sedimentary Rocks Review Small-group & independent practice: - Sedimentary Rocks Drag-N-Drop Check for Understanding Review/exit activity: -Sedimentary Rocks Schoology Exit Ticket	Small-group & independent practice: - Review/exit activity: -	Small-group & independent practice: - Review/exit activity: -	Whole-group: -Nearpod: Metamorphic Rocks Review Small-group & independent practice: Metamorphic Rocks Drag-N-Drop Check for Understanding Review/exit activity: -Metamorphic Rocks Assessment (PM)	Small-group & independent practice: - Review/exit activity: -

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: February 22 - February 26

Reminder: Science Tutoring Thursday 2/25 @ 2 o'clock

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- The processes by which rocks are formed define the three major groups of rocks.
- The traditional rock cycle is a model that shows the processes by which all rocks are formed and shows how basic Earth materials are recycled through time. The rock cycle does not show the evolutionary nature of processes that yield the increased volume of less-dense, silica-rich rocks and continental crust over time.

- explain how the model of the rock cycle demonstrates conservation of matter and energy.
- relate the size of igneous crystals (texture) with rate and location of cooling.
- compare and contrast distinguishing characteristics of the crystal structure and textures of extrusive and intrusive igneous rocks.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: Bill Nye Video and KWL Chart	Attendance/warmup: -	Attendance/warmup: -ASYNCHRONOUS LEARNING	Attendance/warmup: - Do Now: Igneous Rocks Video and	Attendance/warmup:
	Whole-group:		Review Quiz	Whole-group:
Whole-group:	-	Whole-group:		-
-Nearpod: Rock		-	Whole-group:	
Cycle Review	Small-group & independent practice:	 Small-group &	-Newsela: Hawaiian Islands Reading	Small-group & independent practice:
Small-group &	-	independent practice:	Comp	-
independent practice:	Review/exit activity:	-	Small-aroup S	Review/exit activity:
- Rock Cycle Processes Activity	-	Review/exit activity:	Small-group & independent practice: -CK12 Intrusive and	-
Review/exit activity: -Rock Cycle			Extrusive Igneous Rock Review	
Drag-N-Drop Check for Understanding			Questions	
ioi oiidoiotailailig			Review/exit activity: -Igneous Rocks Assessment (PM)	

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: February 15 - February 19

Grade: 8th

Teacher: Mr. Kalevas

Reminder: HCPS Ckpt 4 (18 weeks) Quiz Fri 2/12 Day 1

I am learning:

- Soil, rocks, and minerals provide essential materials for agriculture, manufacturing, and building.
- The processes by which rocks are formed define the three major groups of rocks.
- The traditional rock cycle is a model that shows the processes by which all rocks are formed and shows how basic Earth materials are recycled through time. The rock cycle does not show the evolutionary nature of processes that yield the increased volume of less-dense, silica-rich rocks and continental crust over time.

- explain the uses and importance of ore minerals.
- explain how the model of the rock cycle demonstrates conservation of matter and energy.
- relate the size of igneous crystals (texture) with rate and location of cooling.
- compare and contrast distinguishing characteristics of the crystal structure and textures of extrusive and intrusive igneous rocks.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Do Now: Mineral Memory Game	Attendance/warmup: -Unit 5 & 6 Review for HCPS Checkpoint 4	Attendance/warmup: -Do Now: Bill Nye Video and KWL Chart		Attendance/warmup: -Do Now: Igneous Rocks Video and

Whole-group: -Mineral Uses Choice Activity	Whole-group: -HCPS Checkpoint 4 Assessment	Whole-group: -Nearpod: Rock Cycle Review	Whole-group: -Mineral Uses Choice Activity	Review Quiz Whole-group: -Newsela: Hawaiian Islands Reading
Small-group &	Small-group &	Small-group &	Small-group &	Comp
independent practice: - Mineral Uses Choice Activity	independent practice: -Unit 6 Rocks Vocabulary Sort & Define	independent practice: -Rock Cycle Processes Activity	independent practice: -Minerals Business/Real Estate Pitch	Small-group & independent practice: -CK12 Intrusive and
Review/exit activity: -Mineral Groups Partner Activity Part 2	Review/exit activity: -Present Minerals Business/Real Estate	Review/exit activity: -Rock Cycle Drag-N-Drop Check for Understanding	Review/exit activity: -Minerals Business/Real Estate	Extrusive Igneous Rock Review Questions
	Pitch		Pitch Part 2	Review/exit activity: -Igneous Rocks Assessment (PM)

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK
Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: February 8 - February 12

Grade: 8th

Teacher: Mr. Kalevas

Reminder: HCPS Ckpt 4 (18 weeks) Quiz Thur 2/11 Day 2 & Fri 2/12 Day 1

I am learning:

 Soil, rocks, and minerals provide essential materials for agriculture,

I can:

• relate how the structure and composition determine the

•	manufacturing, and building. In Virginia, major rock and mineral
	resources include coal and natural gas,
	gravel and crushed stone, silica,
	titanium, and limestone

- properties of silicates, carbonates, and oxide minerals.
- utilize a table of mineral properties to identify and/or classify an unknown mineral.
- explain the uses and importance of ore minerals.

		<u> </u>		
Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Minerals Physical Characteristics Review	Attendance/warmup: -Mineral in your Cellphone Discussion Board	Attendance/warmup: -Mineral in your Cellphone Discussion Board	Attendance/warmup: - Unit 5 & 6 Review for HCPS Checkpoint 4	Attendance/warmup: -Unit 5 & 6 Review for HCPS Checkpoint 4
Whole-group: -Assign Mineral Groups Partner	Whole-group: -Finish the Mineral Groups Partner	Whole-group: -Finish the Mineral Groups Partner	Whole-group: -HCPS Checkpoint 4 Assessment	Whole-group: -HCPS Checkpoint 4 Assessment
Activity	Activity	Activity	Small-group & independent practice:	Small-group & independent practice:
Small-group & independent practice: - Mineral Groups Partner Activity	Small-group & independent practice: -VA Mining Activity	Small-group & independent practice: -VA Mining Activity	-Minerals Business/Real Estate Pitch	-Minerals Business/Real Estate Pitch
Review/exit activity: -Mineral Groups Partner Activity Check-In	Review/exit activity: -Mineral Uses Performance Matters	Review/exit activity: -Mineral Uses Performance Matters	Review/exit activity: -Minerals Business/Real Estate Pitch Check-In	Review/exit activity: -Minerals Business/Real Estate Pitch Check-In

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: February 1 - February 5

Grade: 8th

Teacher: Mr. Kalevas

Reminder:

I am learning:

- Different minerals have different internal arrangements of atoms, with certain minerals having planes of weaker bonds in one or more directions. When hit, some minerals may tend to break regularly along planes of weakness.
- Earth materials take many different forms as they cycle through the geosphere.
- The major elements found in Earth's crust are oxygen, silicon, aluminum, and iron

- relate how the structure and composition determine the properties of silicates, carbonates, and oxide minerals.
- plan and conduct an investigation to identify minerals based on their physical and chemical properties, such as hardness, color, luster, density (specific gravity), cleavage, fracture, streak, and effervescence.
- utilize a table of mineral properties to identify and/or classify an unknown mineral.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Minerals Physical Characteristics Discussion	Attendance/warmup: -Minerals Physical Characteristics Discussion	Attendance/warmup: -Mineral I.D. Discussion	Attendance/warmup: -Mineral I.D. Discussion	Attendance/warmup: -Mineral Streak Test Demonstration Q&A
Whole-group: -Mineral/Gem Video and Characteristics Activity	Whole-group: -Mineral/Gem Video and Characteristics Activity	Whole-group: -CK12 Mineral Identification Reading Comprehension	Whole-group: -CK12 Mineral Identification Reading Comprehension	Whole-group: -Assign Mineral Groups Partner Activity
Small-group &	Small-group &	Small-group &	Small-group &	Small-group & independent practice:

	s It a Mineral?	independent practice: -Gizmos: Mineral I.D. Virtual Lab	independent practice: -Gizmos: Mineral I.D. Virtual Lab	-Mineral Groups Partner Activity
-Performance -Performance Matters Mineral Characteristics Ch	Performance atters Mineral naracteristics	Review/exit activity: -Performance Matters Mineral Identification Assessment	Review/exit activity: -Performance Matters Mineral Identification Assessment	Review/exit activity: -Mineral Groups Partner Activity Check-In

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BACK TO SCHOOL NIGHT 9/22 LINK
Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: January 25 - January 29

Reminder: Asynchronous Recovery Days Thursday 1/28 & Friday 1/29

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

 A mineral is a naturally occurring, inorganic, solid substance (at room temperature), with a definite chemical composition and a defined geometric arrangement of atoms (a crystalline structure). A mineral can be identified by its specific chemical and physical properties. The appearance and

- relate how the structure and composition determine the properties of silicates, carbonates, and oxide minerals.
- relate cleavage patterns of minerals to atomic structure and bonding arrangement.

properties of the mineral can vary due					
to inclusion of other elements, rate of					
cooling/crystallization, and space.					

 Different minerals have different internal arrangements of atoms, with certain minerals having planes of weaker bonds in one or more directions. When hit, some minerals may tend to break regularly along planes of weakness.

Monday	Tuesday	Wednesday	Thursday	Friday	
Attendance/warmup: -Demonstrate Mineral Fracture and Cleavage	Attendance/warmup: -Demonstrate Mineral Fracture and Cleavage	Attendance/warmup: -Unit 5 Resources Test Review Whole-group:	Attendance/warmup: -Asynchronous Recovery Check-In: Construct a Topographic Map	Attendance/warmup: -Asynchronous Recovery Check-In: Construct a Topographic Map	
Whole-group: -Mineral Groups Review	Whole-group: -Mineral Groups Review	-Review Recovery Work and Remediation Folders	Profile Whole-group:	Profile Whole-group:	
Small-group & independent practice: -Mineral Groups Webquest	Small-group & independent practice: -Mineral Groups Webquest	Small-group & independent practice: -Students will be alloted time in class to complete recovery	- Small-group & independent practice: -Complete Recovery Work	- Small-group & independent practice: -Complete Recovery Work	
Review/exit activity: -Mineral Groups Webquest CER	Review/exit activity: -Mineral Groups Webquest CER	and remediation assignments (No Homework) Review/exit activity: -	Review/exit activity:	Review/exit activity: -	

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: January 11 - January 15

Grade: 8th

Teacher: Mr. Kalevas

Reminder:

I am learning:

• Topographic maps and satellite imagery are 2-D models that provide information defining 3-D landforms. They contain extensive information related to geographic as well as human structures and changes to the land surface and are useful in understanding geologic processes.

- interpret landforms, water features, elevation and elevation changes, and other pertinent features on topographic maps.
- construct profiles from topographic contours.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -VA Provinces and Geology Discussion Board	Attendance/warmup: -Trouble With Topographic Maps Discussion Board	Attendance/warmup: -Trouble With Topographic Maps Discussion Board	Attendance/warmup: -Trouble With Topographic Maps 2 Discussion Board	Attendance/warmup: -Trouble With Topographic Maps 2 Discussion Board
Whole-group: -Topographic Maps Nearpod	Whole-group: -Contour Maps Review	Whole-group: -Contour Maps Review	Whole-group: -Counselor Nill Presentation	Whole-group: -Counselor Nill Presentation
Small-group & independent practice: -Continue Reviewing Contour Maps in Nearpod with	Small-group & independent practice: -Gizmos: Reading a Topo Map	Small-group & independent practice: -Gizmos: Reading a Topo Map	Small-group & independent practice: -Topo Maps Drag and Drop Activity	Small-group & independent practice: -Topo Maps Drag and Drop Activity
embedded Activities	Review/exit activity:	Review/exit activity:	Review/exit activity:	Review/exit activity:

Review/exit activity:
-Schoology Topo
Maps Exit Ticket

-Performance Matters Topographic Maps Exit Ticket -Performance Matters Topographic Maps Exit Ticket -Schoology Topographic Maps Exit Ticket -Schoology Topographic Maps Exit Ticket

Wilder Week at a Glance

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: January 4 - January 8

Grade: 8th

Teacher: Mr. Kalevas

Reminder:

I am learning:

- Virginia has many natural resources to include both renewable and non-renewable.
- Virginia has five physiographic/geologic provinces produced by past episodes of tectonic activity and continuous geologic activity. The five physiographic provinces (landforms) correspond very closely, but not completely, to the geologic provinces (underlying rocks and structures) of the state.
- In Virginia, major rock and mineral resources include coal and natural gas for energy, gravel and crushed stone for road and building construction, silica for electronics, zirconium and

- label on a map the physiographic provinces of Virginia.
- analyze the geology of Virginia in terms of the rock structures, types, ages, and topography represented in the five physiographic provinces and reconstruct a geologic history.
- analyze data concerning a range of emerging energy and mineral resources in Virginia in terms of costs and benefits and create an-evidence-based forecast of trends and impact on the environment and economy.
- analyze how Virginia's production and use of various natural resources has changed over the last 150 years.
- interpret landforms, water features, elevation and elevation changes,

titanium for advanced metallurgy, and limestone
for making concrete.

 Topographic maps and satellite imagery are 2-D models that provide information defining 3-D landforms. They contain extensive information related to geographic as well as human structures and changes to the land surface and are useful in understanding geologic processes. and other pertinent features on topographic maps.

understanding geologic processes.					
Monday	Tuesday	Wednesday	Thursday	Friday	
Attendance/warmup: -Welcome Back & Review Class Expectations	Attendance/warmup: -Welcome Back & Review Class Expectations	Attendance/warmup: -VA Energy Profile Discussion Board	Attendance/warmup: -VA Energy Profile Discussion Board	Attendance/warmup: -Yosemite Topographic Map Discussion Board	
-VA Provinces Discussion Board	-VA Provinces Discussion Board	Whole-group: -Nearpod: VA Resources Notes	Whole-group: -Nearpod: VA Resources Notes	Whole-group: -Nearpod:	
Whole-group: -Review VA Provinces Notes and	Whole-group: -Review VA Provinces Notes and	Small-group & independent practice:	Small-group & independent practice:	Topographic Maps Notes	
Associated Table Small-group &	Associated Table Small-group &	-VA Resources Investigation	-VA Resources Investigation	Small-group & independent practice -Gizmos: Reading	
independent practice: -VA Provinces and	independent practice: -VA Provinces and	Review/exit activity: -VA Resources	Review/exit activity: -VA Resources	Topographic Maps	
Resources Map Activity	Resources Map Activity	Investigation CER	Investigation CER	Review/exit activity: -Schoology Topographic Maps	
Review/exit activity: -Performance Matters VA Provinces	Review/exit activity: -Performance Matters VA Provinces			Exit Ticket	

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: December 14 - December 18

Reminder: HCPS 13.5 Weeks Assessment 12/15 (Day 1) 12/16 (Day 2)

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- Virginia has many natural resources to include both renewable and non-renewable.
- Renewable resources can be replaced by nature at a rate close to the rate at which they are used.
 Renewable resources include vegetation, sunlight, and surface water.
- Nonrenewable resources are replenished very slowly by natural processes or not at all.
 Nonrenewable resources include coal, oil, and minerals.
- Technologies that harness renewable energy still require an initial energy and materials investment, thus long-term cost-and-benefit analyses need to be considered.
- In Virginia, major rock and mineral resources include coal and natural gas for energy, gravel and crushed stone for road and building construction, silica for electronics, zirconium and titanium for advanced metallurgy, and limestone for making concrete.

- assess the role of fossil fuels and renewable energy sources in the future and compare and contrast the environmental benefits and costs among the various options.
- analyze data concerning a range of emerging energy and mineral resources in Virginia in terms of costs and benefits and create an-evidence-based forecast of trends and impact on the environment and economy. (6d)
- analyze how Virginia's production and use of various natural resources has changed over the last 150 years. (6c)

Monday	Tuesday	Wednesday	Thursday	Friday
-	_	-	-	

Attendance/warmup: Attendance/warmup: Attendance/warmup: Attendance/warmup: Attendance/warmup: -Virginia Resources -Where Do Countries -Geologic Time & -Geologic Time & -Virginia Resources Natural Resources Natural Resources **Discussion Board Discussion Board Stand? Discussion** Review **Board** Review Whole-group: Whole-group: Whole-group: Whole-group: Whole-group: -Virginia Energy -Virginia Energy -Discuss Natural -HCPS 13.5 Weeks -HCPS 13.5 Weeks **Resources Notes Resources Nearpod** Resources Instagram **Notes** Assessment Assessment **Specifications** Small-group & Small-group & Small-group & independent practice: Small-group & Small-group & independent practice: independent practice: **-VA Resources Cost** independent practice: independent practice: -Recommence -Recommence and History Activity -VA Geology -Natural Resources **Natural Resources Natural Resources** Webquest Review/exit activity: **Instagram Design** Instagram Design Instagram Design **-VA Resources Cost** Review/exit activity: Review/exit activity: Review/exit activity: Review/exit activity: -VA Resources Cost and History CER -Natural Resources and History CER Instagram Design **Response Questions**

Wilder Week at a Glance

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: Earth Science

Week of: December 7 - December 11



Grade: 8th

Teacher: Mr. Kalevas

Reminder:

I am learning:

- Clean water resources, while renewable, are directly impacted by human activity through extraction and pollution.
- Virginia has many natural resources to include both renewable and non-renewable.
- Renewable resources can be replaced by nature at a rate close to the rate at which they are used.
 Renewable resources include vegetation, sunlight, and surface water.
- Nonrenewable resources are replenished very slowly by natural processes or not at all.
 Nonrenewable resources include coal, oil, and minerals.
- Technologies that harness renewable energy still require an initial energy and materials investment, thus long-term cost-and-benefit analyses need to be considered.
- Fossil fuels are nonrenewable in human timescale, create carbon dioxide when burned, and may cause pollution, but they are relatively cheap and easy to use once they are extracted.
 New sources of energy and methods of resource extraction, such as hydraulic fracturing, create new economic and environmental tradeoffs.
- Renewable energy resources include biomass, geothermal, hydropower, and solar and wind power. Although these are renewable resources, there are still costs and benefits associated with each type of energy.

- determine the sources of clean water in their community, analyze consumption and supply data, and forecast potential issues related to sustainability.
- research and analyze various types of recent data (climate, agriculture and biomass production, etc.) and evaluate Virginia's potential as a producer of renewable energy sources.
- assess the role of fossil fuels and renewable energy sources in the future and compare and contrast the environmental benefits and costs among the various options.
- relate the formation of fossil fuels (coal and natural gas) in terms of the rock cycle to ancient biologic and atmospheric/climatic conditions and changes within Virginia.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Absolute Dating	Attendance/warmup:	Attendance/warmup:	Attendance/warmup:	Attendance/warmup:
	-Absolute Dating	-Electricity Usage	-Electricity Usage	-Where Do Countries

Review Discussion Board	Review Discussion Board	Discussion Board	Discussion Board	Stand? Discussion Board
Whole-group: -How Much Water Does it Take? Activity -CK12 Video on Water	Whole-group: -How Much Water Does it Take? Activity -CK12 Video on Water	Whole-group: -Natural Resources Nearpod	Whole-group: -Natural Resources Nearpod	Whole-group: -Finish Presentations on Natural Resources
Scarcity	Scarcity	Small-group & independent practice: -Partner Up 4	Small-group & independent practice: -Partner Up 4	Small-group & independent practice:
Small-group & independent practice: -USGS Water Survey and Responding Questions	Small-group & independent practice: -USGS Water Survey and Responding Questions	Resources Research Review/exit activity: -Partners Present Assigned Natural	Resources Research Review/exit activity: -Partners Present Assigned Natural	-VA Natural Resources Persuasive Poster Review/exit activity:
Review/exit activity: -Water Resources Exit Ticket	Review/exit activity: -Water Resources Exit Ticket	Resources	Resources	-VA Natural Resources Persuasive Poster Response Questions

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: Earth Science

Week of: November 30 - December 4

Reminder:



Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- The history of Earth and the ages of rocks can be investigated and understood by studying rocks and fossils.
- Relative time places events in a sequence without assigning any numerical ages. Fossils, superposition, and cross-cutting relations are used to determine the relative ages of rocks.
- Absolute time places a numerical age on an event. Radiometric dating is used to determine the absolute age of rocks by measuring the products of radioactive decay of certain elements.

- describe how life has changed and become more complex over geologic time.
- construct an explanation for short and long term global occurrences and assess proposed explanations as they relate to mass extinctions
- analyze and interpret complex cross sections using both relative and absolute dating to sequence and define the geologic history of the section.
- analyze data and graphs concerning the ratio of parent isotopes to daughter decay products present in a rock to calculate the age of the material based on absolute dating, and assess how radioactive decay provides a reliable method to determine the age of many types of organic and inorganic materials.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Interpreting Graph of Mass Extinction and Corresponding Questions	Attendance/warmup: -Who's Dunnit Mystery Game Discussion Board	Attendance/warmup: -Who's Dunnit Mystery Game Discussion Board	Attendance/warmup: -Absolute Dating Video Discussion Board	Attendance/warmup: -Absolute Dating Video Discussion Board
Whole-group: -Geologic Time and Rock Deposit TedTalk	Whole-group: -Note-taking on Relative Dating	Whole-group: -Note-taking on Relative Dating	Whole-group: -Radiometric Dating Game via Carbon-14 and Uranium-238	Whole-group: -Radiometric Dating Game via Carbon-14 and Uranium-238
Video	Small-group & independent practice:	Small-group & independent practice:	Introduction Video	Introduction Video
Small-group & independent practice: -Geologic Time Scale	-Practice Relative Dating Sequencing and Index Fossils	-Practice Relative Dating Sequencing and Index Fossils	Small-group & independent practice: -Radiometric Dating	Small-group & independent practice: -Radiometric Dating
Activity	Review/exit activity:	Review/exit activity:	Game via Carbon-14 and Uranium-238	Game via Carbon-14 and Uranium-238
Review/exit activity: -History of the Earth	-Claim, Evidence, Reason on Relative	-Claim, Evidence, Reason on Relative	Review/exit activity:	Review/exit activity:

One Pager	Dating	Dating	-Radiometric Dating	-Radiometric Dating
_			Game and Response	Game and Response
			Questions	Questions

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: Earth Science

Week of: November 23 - November 24

Reminder:

I am learning:

• The history of Earth and the ages of rocks can be investigated and understood by studying rocks and fossils.



Grade: 8th

Teacher: Mr. Kalevas

- describe how life has changed and become more complex over geologic time.
- construct an explanation for short and long term global occurrences and assess proposed explanations as they relate to mass extinctions

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Environmental Evolution Card Sort	Attendance/warmup: -Interpreting Graph of Mass Extinction	Attendance/warmup: -	Attendance/warmup:	Attendance/warmup:
Discussion Board	and Corresponding Questions	Whole-group:	Whole-group:	Whole-group:
Whole-group: -Newsela: Antarctica	Whole-group:	Small-group &	Small-group &	Small-group &

and Fossil Evidence Article	-Geologic Time and Rock Deposit TedTalk Video	independent practice:	independent practice:	independent practice:
Small-group & independent practice: -NATGEO Mass Extinction and Geologic Time	Small-group & independent practice: -Geologic Time Scale Activity	Review/exit activity:	Review/exit activity:	Review/exit activity:
Review/exit activity: -Mass Extinction Meme or Instagram	Review/exit activity: -History of the Earth One Pager			

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: Earth Science

Week of: November 9 - November 13

Grade: 8th

Teacher: Mr. Kalevas

Reminder:

I am learning:

- The tides are the periodic rise and fall of water level caused by the gravitational pull of the sun and moon.
- Earth revolves around the sun while tilted on its axis. The axial tilt is responsible for the incidence

- create a three-dimensional scale model of Earth and the orbiting moon, and demonstrate and explain the resulting progression of moon phases.
- explain tidal changes and how they relate to the phases of the moon.
- create a model showing the position of Earth, moon, and sun during a

and duration of sunlight striking a given hemisphere that varies during the Earth's revolution around the sun, thus causing seasons. Equinoxes and solstices represent distinct, quarterly points signaling the cyclic change of seasons.

• The moon revolves around Earth, creating moon phases and eclipses. Solar eclipses occur when the moon blocks sunlight from Earth's surface, while lunar eclipses occur when Earth blocks sunlight from reaching the moon's surface.

solar and lunar eclipse.

• relate the moon's orbit and tilt to type and frequency of eclipses.

			,	,
Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Planets and Small Bodies Review for Unit 3 Quiz	Attendance/warmup: -Planets and Small Bodies Review for Unit 3 Quiz	Attendance/warmup: -Solar Eclipse Blackout Demo	Attendance/warmup: -Solar Eclipse Blackout Demo	Attendance/warmup: - Whole-group:
Whole-group: -Nearpod: Eclipses Crash Course	Whole-group: -Nearpod: Eclipses Crash Course	Whole-group: -Present and Describe Moon Phases/Eclipses/Tide s Project	Whole-group: -Present and Describe Moon Phases/Eclipses/Tide s Project	Small-group & independent practice:
Small-group & independent practice: -Unit 3 Solar System Quiz Review/exit activity: -Eclipse Map of the United States and corresponding questions	Small-group & independent practice: -Unit 3 Solar System Quiz Review/exit activity: -Eclipse Map of the United States and corresponding questions	Small-group & independent practice: -Begin planning and constructing Project Review/exit activity: -Provide a review of project and help answer questions and misconceptions	Small-group & independent practice: -Begin planning and constructing Project Review/exit activity: -Provide a review of project and help answer questions and misconceptions	Review/exit activity:

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BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: Earth Science

Week of: November 2 - November 6

Grade: 8th

Teacher: Mr. Kalevas

Reminder:

I am learning:

- Moons are natural satellites of planets that vary widely in composition and in method of formation.
- Earth revolves around the sun while tilted on its axis. The axial tilt is responsible for the incidence and duration of sunlight striking a given hemisphere that varies during the Earth's revolution around the sun, thus causing seasons. Equinoxes and solstices represent distinct, quarterly points signaling the cyclic change of seasons.
- The moon revolves around Earth, creating moon phases and eclipses. Solar eclipses occur when the moon blocks sunlight from Earth's surface, while lunar eclipses occur when Earth blocks sunlight from reaching the moon's surface.

- explain why solar and lunar eclipses do not occur each month.
- create a three-dimensional scale model of Earth and the orbiting moon, and demonstrate and explain the resulting progression of moon phases.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Review Exit Ticket	Attendance/warmup:	Attendance/warmup: -Review Exit Ticket	Attendance/warmup: -Moon Phases	Attendance/warmup: -Moon Phases

Question most missed on meteors	Whole-group:	Question most missed on meteors	Discussion Board	Discussion Board
Whole-group: -Provide update on Planets Comparison Chart	Small-group & independent practice:	Whole-group: -Provide update on Planets Comparison Chart	Whole-group: -Nearpod Video Questionnaire -Lunar Phase Simulator Practice	Whole-group: -Nearpod Video Questionnaire -Lunar Phase Simulator Practice
Small-group & independent practice: -Gizmos: Planets Task Card	Review/exit activity:	Small-group & independent practice: -Gizmos: Planets Task Card	Small-group & independent practice: -CK12 Lunar Phases and Demonstration Activity	Small-group & independent practice: -CK12 Lunar Phases and Demonstration Activity
Review/exit activity: -PM: Planets Exit Ticket		Review/exit activity: - PM: Planets Exit Ticket	-Lunar Phases Simulator Diagram Review/exit activity: -Lunar Phase Simulator	Review/exit activity: -Lunar Phase Simulator

One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: Earth Science

Week of: October 26 - October 30

Reminder:



Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- There are countless fragments comprised of rock and dust floating throughout the solar system. Those that enter Earth's atmosphere are known as meteors. Meteors that are large enough to pass through the atmosphere contain information regarding the age, composition, and evolution of our solar system, as well as potential signs of life having developed extra-terrestrially.
- There are essentially two types of planets in our solar system. The four inner (terrestrial) planets consist mostly of rocky outer layers and have cores of metallic elements. The four outer planets are gas giants, consisting mostly of hydrogen and helium. The nature of the gas planets' interiors is subject to ongoing research.
- The dwarf planet, Pluto, is about two-thirds the diameter of Earth's moon and probably has a rocky core surrounded by a mantle of water ice. It is part of the Kuiper Belt.
- Moons are natural satellites of planets that vary widely in composition and in method of formation.

- I can compare and contrast the defining characteristics among moons, comets, meteoroids, and asteroids.
- I can compare the classification of the dwarf planet Pluto to the planets in relation to its orbit, and its similarity to other objects in the Kuiper Belt.
- I can explain the role of the position of Earth in the Solar System.
- I can predict what conditions would need to be in place for another celestial object to support life.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -What Happens when a Meteorite Strikes the Earth	Attendance/warmup: -Exoplanets Discussion Board	Attendance/warmup: -Exoplanets Discussion Board	Attendance/warmup: -Solar System 101 Nat Geo Discussion Board	Attendance/warmup: -Solar System 101 Nat Geo Discussion Board
Discussion Board Whole-group: -What's the	Whole-group: -Kepler's Exoplanet Graph and Survey Activity	Whole-group: -Kepler's Exoplanet Graph and Survey Activity	Whole-group: -Solar System Notes: Breakdown of each planet within our	Whole-group: -Solar System Notes: Breakdown of each planet within our
Difference? Small Bodies in Solar System Comparison	Small-group & independent practice:	Small-group & independent practice:	Solar System Small-group &	Solar System Small-group &

Chart

Small-group & independent practice: - Challenge: **Asteroids-Build the Future of Space Exploration** Interactive; **Orientation &**

Review/exit activity:

Missions 1

-PM: Small **Bodies/Dwarf Planets Exit Ticket**

-Challenge: **Asteroids-Build the Future of Space Exploration Interactive**; Missions 2&3

Review/exit activity: -PM: Small

Bodies/Dwarf Planets Exit Ticket

-Challenge: Asteroids-Build the **Future of Space Exploration Interactive**; Missions 2&3

Review/exit activity: - PM: Small **Bodies/Dwarf Planets Exit Ticket**

independent practice: -Planets Speed Dating Jamboard; Students will be grouped and will research a particular

planet. Then share facts on a shared Jamboard for the entire class.

Review/exit activity: -Finish Challenge: **Asteroids-Build the Future of Space Exploration Interactive**; Missions 2&3

independent practice:

-Planets Speed **Dating Jamboard**; Students will be grouped and will research a particular planet. Then share facts on a shared Jamboard for the entire class.

Review/exit activity: -Finish Challenge: **Asteroids-Build the Future of Space Exploration Interactive**; Missions 2&3

Wilder Week at a Glance

One Team. One Vision. BACK TO SCHOOL NIGHT 9/22 LINK Updated Bell Schedule 9/29

Content: Earth Science

Week of: October 19 - October 23

Reminder: Unit 2 Test Monday 10/19 (Day 1) & Tuesday 10/20 (Day 2)



Grade: 8th

Teacher: Mr. Kalevas

I am learning:

• There are countless fragments comprised of rock and dust floating throughout the solar system.

I can:

• I can compare and contrast the defining characteristics among moons. comets, meteoroids, and asteroids.

Those that enter Earth's atmosphere are known as
meteors. Meteors that are large enough to pass
through the atmosphere contain information
regarding the age, composition, and evolution of
our solar system, as well as potential signs of life
having developed extra-terrestrially.

- Asteroids are usually leftover debris from the formation of the solar system, or creations from the collisions of other asteroids.
- Comets orbit the sun and consist mostly of frozen gases.

• I can compare the classification of the dwarf planet Pluto to the planets in relation to its orbit, and its similarity to other objects in the Kuiper Belt.

gases.				
Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -Review Most Missed Questions from Exit Tickets during Unit 2	Attendance/warmup: -Review Most Missed Questions from Exit Tickets during Unit 2	Attendance/warmup: -A Dwarf Planet Within our Solar System Discussion Board	Attendance/warmup: -A Dwarf Planet Within our Solar System Discussion Board	Attendance/warmup: -What Happens when a Meteorite Strikes the Earth Discussion Board
Whole-group: -Unit 2 Review: Density, Space Exploration, Star Composition, Big Bang, Redshift,	Whole-group: -Unit 2 Review: Density, Space Exploration, Star Composition, Big Bang, Redshift,	Whole-group: -Nearpod: Small Bodies in Space Notes	Whole-group: -Nearpod: Small Bodies in Space Notes	Whole-group: -What's the Difference? Small Bodies in Solar System Comparison
Doppler Effect, H-R Diagram	Doppler Effect, H-R Diagram	Small-group & independent practice: -Challenge:	Small-group & independent practice: -Challenge:	Chart Small-group &
Small-group & independent practice: -PM: Unit 2 Cosmology Test	Small-group & independent practice: -PM: Unit 2 Cosmology Test	Asteroids-Build the Future of Space Exploration Interactive;	Asteroids-Build the Future of Space Exploration Interactive;	independent practice: -Challenge: Asteroids-Build the Future of Space
Review/exit activity:	Review/exit activity:	Orientation & Mission	Orientation & Mission	Exploration Interactive; Missions 2 & 3
		Review/exit activity: - Challenge	Review/exit activity: -Challenge Asteroids	Review/exit activity:

	Asteroids Pre-lab Questions	Pre-lab Questions	-PM: Small Bodies/Dwarf Planets Exit Ticket
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One Team. One Vision.

BACK TO SCHOOL NIGHT 9/22 LINK

Updated Bell Schedule 9/29

Content: Earth Science

Week of: October 12 - October 16

Reminder: Unit 2 Test Monday 10/19 (Day 1) & Tuesday 10/20 (Day 2)

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- The solar nebular theory is science's best current idea for the formation of stars and planetary systems. The nebular theory explains that stars form through the condensation of the nebula. Photographic images show likely examples of stellar nurseries and star formation within the galaxy (i.e., Crab Nebula).
- Stars have finite lifetimes and go through changes over time. The mass of a star controls its evolution, lifespan, and fate. Stars form by condensation and gravitational compression of interstellar gas and dust.
- The Hertzsprung-Russell diagram illustrates the relationship between the absolute magnitude or luminosity of a star and the surface temperature of stars. As stars age, their position on the

- Analyze the variations in chemical compositions of stars of different masses and relate to the process of fusion and the star's stage in its stellar evolution.
- Understand the connection between fusion of elements in stars and the presence and abundance of elements that make up our solar system and its contents, including living organisms.
- Compare the characteristics and evolution of more massive stars to that of the sun.
- Use the Hertzsprung-Russel diagram to classify stars and use this classification to determine the projected stellar life cycle.

Hertzsprung-Russell	diagram changes.			
Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -What does a Black Hole Look Like Discussion Board	Attendance/warmup: -How Space Telescopes break down light Discussion Board	Attendance/warmup: -How Space Telescopes break down light Discussion Board	Attendance/warmup: -Stars and Galaxies H-R Diagram Video and Question Responses	Attendance/warmup: -Stars and Galaxies H-R Diagram Video and Question Responses
Whole-group: -Discuss the Characteristics of Stars	Whole-group: -Reading Comprehension Activity on Star	Whole-group: -Reading Comprehension Activity on Star	Whole-group: -HR Diagram Notes and Interactive	Whole-group: -HR Diagram Notes and Interactive
Small-group & independent practice: -Part 2 of Virtual Lab: The Big Bang	Spectra Small-group & independent practice: -Gizmos: Star	Spectra Small-group & independent practice: -Gizmos: Star	Small-group & independent practice: -HR Diagram Star in a Box Interactive Activity	Small-group & independent practice: -HR Diagram Star in a Box Interactive Activity
Review/exit activity: -Virtual Lab Responses	Spectra; Students will determine a Stars Composition, How to classify, and Look into Unusual Star Spectra	Spectra; Students will determine a Stars Composition, How to classify, and Look into Unusual Star Spectra	Review/exit activity: -PM: H-R Diagram Exit Ticket	Review/exit activity: -PM: H-R Diagram Exit Ticket
	Review/exit activity: -PM: Star Composition Exit Ticket	Review/exit activity: - PM: Star Composition Exit Ticket		

One Team. One Vision. BACK TO SCHOOL NIGHT 9/22 LINK Updated Bell Schedule 9/29

Content: Earth Science

Week of: October 5 - October 9

Grade: 8th

Teacher: Mr. Kalevas

Reminder: Thursday 10/8 Earth Sci. 4.5 Week Assessment

I am learning:

- The universe is a dynamic system of interacting components that is vast in size, still expanding, and about 13.8 billion years old.
- The big bang theory states that the universe began in a very hot, dense state that expanded and eventually condensed into galaxies.
- Stars have finite lifetimes and go through changes over time. The mass of a star controls its evolution, lifespan, and fate. Stars form by condensation and gravitational compression of interstellar gas and dust.

- Describe the Big Bang Theory and provide evidence used to support the theory.
- Compare the characteristics and evolution of more massive stars to that of the sun.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup:	Attendance/warmup:	Attendance/warmup:	Attendance/warmup:	Attendance/warmup:
-Starry Night	-	-PM: Earth Sci. 4.5	-	-What does a Black
Discussion Board -		Weeks Assessment		Hole Look Like
Students create	Whole-group:		Whole-group:	Discussion Board
observations/questio	-	Whole-group:	-	
ns of Hubble galaxies		-Present The Doppler		Whole-group:
photo	Small-group &	Effect, Red Shift, and	Small-group &	-Discuss the
-	independent practice:	Big Bang Virtual Lab	independent practice:	Characteristics of
Whole-group:	-		- '	Stars
-Discuss Big Bang		Small-group &		
Theory Notes	Review/exit activity:	independent practice:	Review/exit activity:	Small-group &
,	-	-Part 1 of Virtual Lab:	-	independent practice:

Small-group & independent practice:	Colors in Space	-Part 2 of Virtual Lab: The Big Bang
-Big Bang Theory	Review/exit activity:	
Claim-Evidence-Rea	- Virtual Lab	Review/exit activity:
soning	Responses	-Virtual Lab
Review/exit activity: -PM: Big Bang Theory Exit Ticket		Responses

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BACK TO SCHOOL NIGHT 9/22 LINK
Updated Bell Schedule 9/29

Content: GYSA Earth Science

Week of: September 29 - October 2

Reminder: Lab Safety Projects Due Tuesday 9/29 (DAY 1) and

Wednesday 9/30 (DAY 2)

Grade: 8th

Teacher: Mr. Kalevas

I am learning:

- Getting familiar with Claims, Evidence, and Reasoning (CER) process in a science class.
- How mass, volume, and density are measured and calculated.
- How early contributions to space exploration has helped pave the way for further space exploring.

- calculate density and relate density to other major Earth Science themes.
- describe how the role of technology (Galileo's telescope, Hubble telescope, planetary orbiters, landers/rovers) has contributed to our scientific understanding of the cosmos.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup:	Attendance/warmup: -Review Scientific Investigation and	Attendance/warmup: -Review Scientific Investigation and	Attendance/warmup: -Future Space Exploration	Attendance/warmup: -Future Space Exploration
Whole-group:	Density	Density	Discussion Post	Discussion Post
Small-group & independent practice:	Whole-group: -Nearpod: Early Space Exploration	Whole-group: -Nearpod: Early Space Exploration	Whole-group: -Space Exploration Mission Details Assigned	Whole-group: -Space Exploration Mission Details Assigned
Review/exit activity:	Small-group & independent practice: - Scientific Investigation, Claim, Evidence, Reason and Density Quiz	Small-group & independent practice: -Scientific Investigation, Claim, Evidence, Reason and Density Quiz	Small-group & independent practice: -Students will be assigned a Space Exploration Mission to research and post	Small-group & independent practice: -Students will be assigned a Space Exploration Mission to research and post
	Review/exit activity: -End of Class Review of Early Space	Review/exit activity: -End of Class Review of Early Space	on a class-shared google slide.	on a class-shared google slide.
	Exploration	Exploration	Review/exit activity: -Performance Matters Exit Ticket	Review/exit activity: -Performance Matters Exit Ticket

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BACK TO SCHOOL NIGHT 9/22 LINK

Content: GYSA Earth Science

Week of: September 21 - September 25

Reminder: Lab Safety Projects Due Tuesday 9/29 (DAY 1) and

Grade: 8th

Teacher: Mr. Kalevas

Wednesday 9/30 (DAY

I am learning:

- Getting familiar with Claims, Evidence, and Reasoning (CER) process in a science class.
- How mass, volume, and density are measured and calculated.

- ask questions and define problems
- construct and critique conclusions and explanations
- calculate density and relate density to other major Earth Science themes.

Monday	Tuesday	Wednesday	Thursday	Friday
Attendance/warmup: -A little about me CER	Attendance/warmup: -Density Discussion Board	Attendance/warmup: -Density Discussion Board	Attendance/warmup: -Loom video of Orange Density Demo	Attendance/warmup: -Loom video of Orange Density Demo
Whole-group:	Whole-group:	Whole-group:		
-Discuss CER terms	-Nearpod: Density	-Nearpod: Density	Whole-group:	Whole-group:
and Sentence	' '	' '	-CK12 Density	-CK12 Density
Starters	Small-group & independent practice:	Small-group & independent practice:	Flexbook	Flexbook
Small-group & independent practice: -A little about me: Student Version CER	- Newsela: Density and Buoyancy Reading and Writing Prompt	-Newsela: Density and Buoyancy Reading and Writing Prompt	Small-group & independent practice: -Gizmos: Density Virtual Lab CER	Small-group & independent practice: -Gizmos: Density Virtual Lab CER
Review/exit activity: -CER Quizizz	Review/exit activity: -Density Kahoot	Review/exit activity: -Density Kahoot	-Density Calculations Practice	-Density Calculations Practice
-	,	,	Review/exit activity: -Schoology Quiz	Review/exit activity: -Schoology Quiz