

Peer to Peer Meteorology

Unit 1 Senses and Weather

Estimated Time Frame for sections	Big Ideas	Essential Question	Concept (Know) Main idea	Competency (Do) objectives	Suggested Resources	Vocabulary	PA Content / Keystone Standard	Suggested Lessons & Activities
20 Days	Weather patterns can be observed, analyzed and predicted. Our senses and the weather.	Name some things you can see. Name some things you can feel. Names some things you can hear. Now, let's think of the types of weather we can see, feel, and hear. Which senses can you use to learn about	Using our senses we can gather information	To investigate three senses (seeing, feeling, and hearing). To relate three senses to weather. To investigate hot and cold temperatures. To compare hot and cold weather.	Weather bug	Fog Hail Lightning Rain Snow Thunder Celsius	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Our senses and the weather lesson plans and interactive Create a thermometer Read a thermometer Temperature lesson plans Temperature interactive Rain mobs Rain coloring sheets

		weather? Give examples of the senses you use to experience different types of weather.						
	Weather patterns can be observed, analyzed and predicted. Weather in a picture	Can a picture taken outside tell us something about weather? What types of things can you look for in a picture that tells us there is weather in a picture?	Using our senses we can gather information	To find weather in a picture To relate pictures to rain, snow, sunshine, and wind	Weather bug	Rain Snow Sleet wind	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	weather in a picture lesson plans interactive lesson Create a collage of pictures
	Weather patterns can be observed, analyzed and predicted. What should I wear today?	What is temperature? What types of clothing do you wear in cold weather? What types of clothing do	Using our senses we can gather information	To define temperature. To explore what clothing goes with different weather	Weather bug	Temperature weather	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	What should I wear today? Lesson plans and interactive lesson.

		you wear in cool weather? What types of clothing do you wear in warm weather? What types of clothing do you wear in hot weather?						
Unit 2 Precipitation								
Estimated Time Frame for sections	Big Ideas	Essential Question	Concept (Know) Main idea	Competency (Do) objectives	Suggested Resources	Vocabulary	PA Content / Keystone Standard	Suggested Lessons & Activities
55 Days	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Snow, snow, snow	What is snow? How does snow start? How can snow be fun? What things do you like to do in the snow?	Exploring precipitation.	To define snow To explore snow.	Weather bug	Clouds Currents snow	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Snow snow snow lesson plans Pictures of snow flakes Writing snow makes me feel ... Winter storms

		What would you like to do in the snow?						Bill and Maria learn about winter weather
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Blizzard	What is a blizzard? Tell me more about blizzards. Why is it dangerous to be outside during a blizzard? What can cause frostbite? How can I avoid frostbite?	Exploring precipitation	To define blizzard. To explore the effects of a blizzard. To use the wind chill chart.	Weather bug	Freeze Wind chill	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Blizzard lesson plan
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate.	What is wind chill? Why should we care about wind chill?	Exploring precipitation	To define wind chill. To read a wind chill chart. To investigate	weatherbug	Effects Frostbite hyperthermia	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	windchill

	Wind chill			the effects of low temperatures and wind speed.				
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. precipitation	What is precipitation? What is Rain? What is snow? What is dew? What is fog?	Exploring precipitation	To determine the definition of precipitation. To identify several forms of precipitation, such as rain, snow, hail, and sleet.	WeatherBug	Rain Snow Dew Fog precipitation	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Precipitation lesson plans
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Rain rain rain	What is rain? What is drizzle? What is a rainstorm? What is freezing rain? What are puddles? What is a rainbow and when can you	Exploring precipitation	To define rain and related words. To explore the results of rain.	WeatherBug	Lightning Thunder wind	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Rain rain rain lesson plans and interactive

		see it in the sky?						
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Rain falls from the sky	What is rain? Look at the rain falling from the sky. Rain falls from the clouds in the sky Rain drops leave puddles on the ground Rain helps the flowers and trees grow	Exploring precipitation	To define rain. To explore the effects of rain.	Weather bug	clouds	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Rain falls from the sky
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Three general cloud types	What does it look like? How can you remember it?	Exploring precipitation	To identify and name three general cloud types.	Weather bug	Cirrus Cumulus Stratus	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Clouds lesson plans
	The composition,	What is a thunderstorm?	Exploring precipitation	To define	Weather bug	Electricity hail	3.3.10.A5	Thunderstorm

	structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Thunderstorms	What is lightning? What is thunder? What is a severe thunderstorm? What three things are needed to make a thunderstorm? Should you be outside during a thunderstorm? Why or why not?		thunderstorm. To explore what makes up a thunderstorm			3.3.10.A8 3.3.12.A4 3.3.12.A6 3.3.12.A4 3.3.12.A6	Billy Maria and the thunderstorm Leon the lightning safety lion
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Flash floods	What is a flash flood? What causes a flash flood? Where do flash floods usually occur? Are flash floods	Exploring precipitation	To define flash flood. To explore the effects of flash floods.	Weather bug	Canyons Valleys Mountains lowlands	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Flash floods

		dangerous? Should people drive through flash floods?						
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Rainbows Primary and secondary	What is a rainbow? How are rainbows formed? When can you see a rainbow?	Exploring precipitation	To define rainbow. To explain how primary and secondary rainbows form	Weather bug	Rainbow Bend Arc reverse	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Rainbows lesson plans And interactive lesson Coloring pages
	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Dew point	What is dew point temperature? What is dew?	Exploring precipitation	To define dew point temperature. To define dew. To investigate how certain dew point temperatures feel on a typical summer day.	Weather bug	Condense Dew Point Fog. Frost	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	

	The composition, structure, and properties of Earth's atmosphere form the basis of Earth's weather and climate. Water cycle	How does the water cycle work? How does the water cycle help the earth?	Exploring precipitation	To explore the water cycle	Weather bug	Atmosphere Condensation Evaporate. Precipitation Renewable Resource	3.3.10.A5 3.3.10.A8 3.3.12.A4 3.3.12.A6	Water cycle lab Water cycle song worksheets
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Unit 3 Extreme Weather

Estimated Time Frame for sections	Big Ideas	Essential Question	Concept (Know) Main idea	Competency (Do) objectives	Suggested Resources	Vocabulary	PA Content / Keystone Standard	Suggested Lessons & Activities
15 Days	The exchange of thermal energy in the atmosphere sometimes occurs with great violence that varies in form, size, and duration. Tornado	What is a tornado? How fast are the winds of a tornado? How is a tornado's strength measured? What is the Fujita Scale?	Extreme weather	To define tornado. To explore the effects of a tornado.	Weather bug	Meteorologist rotate	3.3.10.A8 3.3.12.A4 3.3.12.A6	Tornado lesson plans Tornado safety book

		What are some objects that a strong to violent tornado can move?						
	The exchange of thermal energy in the atmosphere sometimes occurs with great violence that varies in form, size, and duration. Hurricane	What is a hurricane? How does a hurricane form? When is hurricane season?	Extreme weather	To define hurricane. To explore the effects of a hurricane.	Weather bug	Category Circulation - Rotate Tropics	3.3.10.A8 3.3.12.A4 3.3.12.A6	hurricane