

Science

Weather Study Guide

Essential Questions

What is the Water Cycle?

Water moves in a regular cycle that influences the weather. Evaporation, condensation, precipitation, runoff, groundwater, transpiration. Draw the water cycle and/or label a diagram with the changes water goes through during its cycle.

What Are Types of Weather?

Explain three types of precipitation and how they are formed.

How is Weather Predicted?

Explain the differences between air masses and fronts.

How Can We Observe Weather Patterns?

Describe tools we use to measure weather conditions.

Vocabulary

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| Weather The condition of the atmosphere at a certain place and time | Air mass A large body of air with the same temperature and humidity throughout |
| Air pressure The weight of the atmosphere pressing down on Earth's surface | Atmosphere The mixture of gases that surround Earth What are the two most plentiful gases in Earth's atmosphere? |
| Condensation The process by which a gas changes into a liquid. Clouds are formed by condensation. | Humidity The amount of water vapor in the air. Talked about as dew point in percentages. |
| Precipitation Water that falls from clouds to Earth's surface | Runoff Water that cannot soak into the ground and instead flows across Earth's surface |
| Sea breeze Cooler, higher-pressure air flows from over the water to the land, forming a sea breeze. | Land breeze Cooler, higher-pressure air flows from the land toward the sea, forming land breeze |

Science

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| Meteorologist A person who studies weather and the atmosphere | Front A boundary between two air masses |

Study the packets that come home. There will be an “open book” test at the end of this unit. The unit will also be supported with an internet program called BrainPOP and links on my science web page.

Science tools: barometer, thermometer, anemometer, weather vane, weather satellites

Why is predicting hurricanes important? Where do hurricanes form? What is different about predicting tornadoes?

Students will use this information to work with a partner in Writing Workshop to report on an extreme form of weather. Nonfiction books in our classroom will also be used for research.