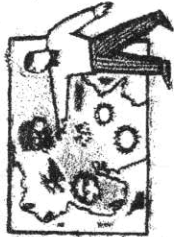


Meteorologists

Cross-Curricular Focus: Earth Science



Meteorology is the scientific study of the weather. The scientists who specialize in this area are called **meteorologists**. Their job is to collect data, make observations about the data, and interpret the data (say what it means). Their goal is to make informed predictions about what kind of weather we can expect. Technological advances over the years has made the work of the meteorologists more and more respected, as they are better able to make fairly accurate predictions. Using computers, meteorologists are able to design and print maps that show approaching weather patterns and how they are likely to behave by the time they reach us. Their maps are filled with colorful symbols that represent different strengths and temperatures of wind, cloud formations, and storm systems. Most weather systems in the United States move across our nation from the west to the east. By tracking weather patterns to the west, meteorologists can be reasonably sure of the kind and severity of the weather that is approaching the areas that lie to the east.

Doppler radar stations provide meteorologists with radar images of weather all over the entire United States. They make it possible to anticipate weather systems sooner, and to understand their likely intensity. Weather balloons can be sent up into the higher levels of the atmosphere to gather data and take pictures. Satellites have been equipped to relay weather data down to reporting stations from high above Earth.

In addition to their high-tech computers and radar systems, meteorologists have some basic weather instruments that have been around for many years. We are all familiar with the first one: a thermometer. A thermometer allows us to measure the air temperature using either Celsius or Fahrenheit scales. In the United States, we use the Fahrenheit scale. An anemometer is used to measure the speed of the wind as it blows. A weather vane, or wind vane, is used to show the direction the wind is blowing. A barometer measures air pressure. In spite of all these tools, there is always a little bit of mystery involved in the weather. Meteorologists are part scientists, and part fortune tellers.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) Being a meteorologist requires a unique set of skills. How would you characterize someone who chooses meteorology for a career? _____

2) Do you think it is easier or harder than it used to be to be a meteorologist? Explain your thinking. _____

3) How does a meteorologist's work differ from that of another research scientist, such as an archaeologist? _____

4) What is the purpose of this reading passage? How do you know? _____

5) What is one problem you can anticipate with using a weather balloon? _____