

PREDICTING WEATHER Study Guide



- A **meteorologist** is a person who studies and predicts weather.
- **Weather** is what the air is like at a certain time and place.
- The **atmosphere** is a blanket of gases and tiny bits of dust that surround Earth.

• Air temperature, precipitation, humidity, wind and air pressure describe the weather.

- **Temperature** is the measurement of how hot or cold something is. A **thermometer** measures temperature.

- **Precipitation** is water that falls to the ground from the atmosphere.

Types of precipitation are rain, snow, sleet and hail.

A **rain gauge** measures the amount of rain that has fallen over a certain period of time.

- **Humidity** is the amount of moisture in the air.

A **hygrometer** measures how much humidity is in the air.

- **Wind** is moving air.

A **wind vane** tells the direction of the wind.

An **anemometer** measures wind speed.

- **Air pressure** is the weight of air pressing down on Earth.

A **barometer** measures air pressure.

Weather balloons measure weather conditions and gather data from the atmosphere.

- **Weather satellites** photograph and track weather from above Earth's surface.
- **Radar** helps track precipitation and storms.



- To make a weather **forecast**, meteorologists will organize their data in different ways.

- A **weather data chart** can help show trends or patterns that allow you to make general weather predications. A **weather data chart** can also be used to compare weather in different cities.
- **Weather maps** are useful in predicting weather conditions such as temperature and precipitation.