

**FLPS**

**Name** \_\_\_\_\_

**English**

**Transition English Exam**

**MP 2**

# Measuring Temperature

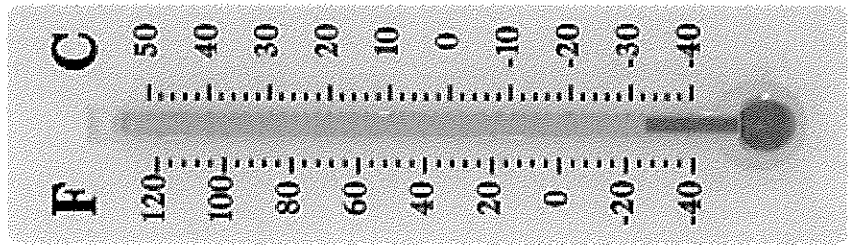
## Cross-Curricular Focus: Physical Science

The thermometer is the most common tool for measuring temperature. Many thermometers use two different temperature scales: Fahrenheit and Celsius. You may have wondered how they relate to each other. Both scales were invented in the 1700's and are named after their inventors.

The Fahrenheit scale was invented by Gabriel Fahrenheit. He set the boiling point for water at 212°, and the freezing point at 32°. Temperatures are measured all along the scale, much like a number line or ruler. The unit of measurement for temperature is a degree, instead of an inch on a ruler.

Anders Celsius invented the Celsius scale after the Fahrenheit scale. He kept Fahrenheit's anchor points. The anchor points are the temperatures at which water would freeze or boil. Celsius however, changed the numbers of his temperature scale. Under the Celsius scale, water freezes at 0° and boils at 100°. This numbering scale has been adopted for most scientific purposes. It works well with the metric system.

Many thermometers work because liquid changes its volume, or the amount of space it takes up, based on its temperature. When a liquid is cold, it takes up less space than it does when it is warm. Many of the changes in temperature are very small. Thermometers use a large bulb filled with liquid and a very narrow tube to show the changes. The markings on the thermometer are based on the freezing point and boiling point of water. Why? Because Gabriel Fahrenheit chose them as conditions that are easy to recreate. Anders Celsius agreed. Sometimes, inventors set the standard for everyone.



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) Which scale came first: Fahrenheit or Celsius? \_\_\_\_\_

2) Why do scientists use the Celsius scale? \_\_\_\_\_

3) Why do many thermometers use liquid? \_\_\_\_\_

4) What is the unit of measurement for temperature? \_\_\_\_\_

5) Which temperature would be more comfortable for most people: 80° Fahrenheit or 80° Celsius? \_\_\_\_\_



# Ecology: Taking Care of Earth

**Cross-Curricular Focus: Life Science**

The term **ecology** comes from a Greek word that means "the study of the house." Ecology is the study of how all living things interact with their environments. In a way, Earth is the house of all living things. We all live together on this planet and it is our home. Today, we also understand ecology to mean taking care of the Earth so that humans, plants and animals can all thrive. However, we can damage the environment. Sometimes the damage is **irreversible**.

Ecology is a huge area of study. It covers every part of a living creature's ecosystem that affects its ability to live. Ecology considers how a living thing reacts to climate, soil conditions. It also studies how much clean water is available and the amount natural resources. By learning about how living things, including humans, affect each other, we can make smart decisions that protect all living things and the resources they need.

There are many things that children can do to help make sure that their world stays healthy. The decisions you are making today can affect the future.

Conservation is one area of ecology where we can all make a difference. It does not matter how old we are or where we live. Conservation means using Earth's limited resources wisely so that they don't run out. When you are home, take a moment to think about how you use resources. Many people waste resources. Leaking toilets, half-filled dishwashers or clothes washers, and unattended hoses all waste precious water. If you leave lights on and appliances running in rooms where they are not being used, you are wasting energy.

There's another way we can help conserve Earth's resources. We can show our support of businesses that make their products using methods and materials that do not damage Earth. By buying their products, we are telling them that we appreciate their efforts to be Earth-friendly.

We need to take the time to learn about how to save resources. More importantly, we must then put into practice what we learn. Children can do their part. They can show their families some ways to save resources. Together, we can all make a difference.

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) The passage compares Earth to a house. How are they alike?  
 \_\_\_\_\_  
 \_\_\_\_\_

2) What does ecology study?  
 \_\_\_\_\_  
 \_\_\_\_\_

3) Sometimes Earth-friendly products are a little more expensive. Why should you buy them anyway?  
 \_\_\_\_\_  
 \_\_\_\_\_

4) Why do you think people leave lights on when they are not using them?  
 \_\_\_\_\_  
 \_\_\_\_\_

5) What is one thing that you, personally, could do today to help conserve resources?  
 \_\_\_\_\_  
 \_\_\_\_\_