

## Scientific Instruments, Part 2

How are length, temperature, time, and direction measured?

A **meterstick** is used to measure length or distance. The main unit of length is the **meter**. Shorter lengths may be measured in **centimeters** or **millimeters** using a **metric ruler**. Long distances are measured in **kilometers**.

A **thermometer** measures temperature. In science, temperature is usually measured in **degrees Celsius**.

The main unit of time is the **second**. Time may be measured with a **stopwatch**. A stopwatch has buttons that allow you

to reset and start the time at zero. Other buttons are used to start and stop your time measurements as needed. You then read the display to see how much time passes in minutes, seconds, and parts of a second.

A **compass** measures direction. A compass has four main points: N for North, S for South, E for East, and W for West. Directions between these points can include NE for northeast, NW for northwest, SE for southeast, and SW for southwest. The needle of a compass always points north.

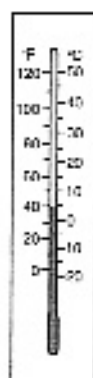
Metric ruler



Stopwatch



Thermometer



Measuring tools in use

### Show What You Know

Use the measuring tools shown to answer the questions.

1. What is the length of the paper clip in centimeters? \_\_\_\_\_
2. What time is shown by the stopwatch in minutes, seconds, and hundredths of seconds? \_\_\_\_\_
3. What temperature is shown on the thermometer? \_\_\_\_\_