

Name \_\_\_\_\_

## How do Thermometers Measure Temperature?

### Short Answer Key

1. A liquid-in-glass thermometer measures temperature by using the expansion and contraction of liquid inside a glass tube, which moves a scale with temperature readings.
2. A digital thermometer measures body temperature by sending an electric current through a sensor, which detects changes in electrical conductivity as the temperature changes.
3. An infrared thermometer measures temperature without touching the object by capturing the infrared radiation emitted by the object and converting it into a temperature reading.
4. The "Seebeck effect" in thermocouples involves generating a tiny electric voltage when two different metals are joined together, and this voltage is proportional to the temperature difference between the hot and cold ends of the thermocouple.
5. Thermocouples are commonly used in laboratories, industries, and appliances like ovens and grills.

