

Chapter 2

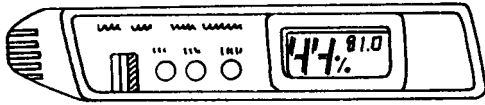
ENRICHMENT

Use with Section 1

• Description and Measurement

Weather Instrument Precision

The symbol \pm is used to show precision in measuring devices. For example, $\pm 3^{\circ}\text{C}$ means that the actual temperature may be 3°C greater or 3°C less than the temperature shown on the instrument.

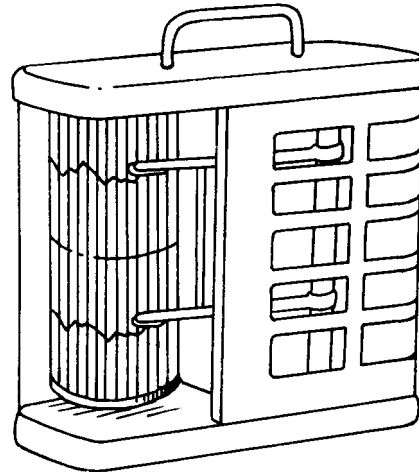


Max/Min Thermohygrometer

Digitally displays relative humidity and temperature

Measures relative humidity from 25% to 95% with precision $\pm 5\%$ RH

Measures temperature 0°C to 50°C with precision $\pm 2^{\circ}\text{C}$



Battery Operated Hygrothermograph

Measures relative humidity and temperature and records them on a chart

Measures relative humidity from 5% to 99% with $\pm 3\%$ RH precision

Measures temperature from -10°C to 50°C with $\pm 1^{\circ}\text{C}$ precision

Answer the following questions, using complete sentences.

1. Describe ways these two instruments are alike.

2. Describe the differences between these two instruments.

3. How precise are the measurements for each instrument?

4. If the display on the thermohygrometer shows 15°C , between what temperatures might the actual temperature fall? How do you know?

5. Suppose the thermohygrometer shows 52% relative humidity and at the same time the hygrothermograph shows 55% relative humidity. What would you expect to be the actual relative humidity? Why?
