

## SECTION

## 2

## Reinforcement

## Standards of Measurement

**Directions:** Complete the table below by supplying the missing information.

| Measurement | Base unit | Symbol |
|-------------|-----------|--------|
| 1.          | meter     | 5.     |
| mass        | 3.        | 6.     |
| 2.          | second    | 7.     |
| temperature | 4.        | 8.     |

**Directions:** In each of the following, circle the units that would most likely be used to express each kind of measurement. You may circle more than one answer for each term.

9. volume of a solid: mL m<sup>3</sup> cm<sup>3</sup> L
10. volume of a liquid: mL mg cm<sup>3</sup> L
11. density of a material: g g/cm<sup>3</sup> kg/m<sup>3</sup> L
12. temperature: °K K °C Kg
13. mass: kg K cm<sup>3</sup> mg
14. time: kg K s mm
15. length: K km m cm

**Directions:** For each pair of equations, write the letter of the equation that expresses an equal value.

- \_\_\_\_\_ 16.      a. 1 L = 1 dm<sup>3</sup>                      b. 1 L = 1 cm<sup>3</sup>
- \_\_\_\_\_ 17.      a. 1 mL = 1 cm<sup>3</sup>                      b. 1 cm<sup>3</sup> = 1 L
- \_\_\_\_\_ 18.      a. 0°C = -273 K                      b. 0 K = -273°C
- \_\_\_\_\_ 19.      a. 1 kg = 100 g                      b. 1,000 g = 1 kg
- \_\_\_\_\_ 20.      a. 400 cm = 4.0 m                      b. 400 cm = 0.40 m
- \_\_\_\_\_ 21.      a. 1 dm = 10 m                      b. 1 dm = 0.10 m
- \_\_\_\_\_ 22.      a. 100°C = 373 K                      b. 373 K = 10°C

**Directions:** Calculate the volume of the box in the diagram.

23. \_\_\_\_\_

