

# Problems Solved: Measurements & Calculations



## Unit Conversion Problems

1. The length of a rope is 500 centimeters. Convert this length to meters.
  - Answer: \_\_\_\_ m
2. A cyclist travels 45 kilometers per hour. Convert this speed to meters per second.
  - Answer: \_\_\_\_ m/s
3. The mass of a sugar packet is 200 grams. Convert this mass to kilograms.
  - Answer: \_\_\_\_ kg
4. The area of a carpet is 3500 square centimeters. Convert this area to square meters.
  - Answer: \_\_\_\_ m<sup>2</sup>
5. The volume of a liquid is 1500 milliliters. Convert this volume to liters.
  - Answer: \_\_\_\_ L
6. A hiker walks a distance of 10 miles. Convert this distance to kilometers (1 mile = 1.60934 km).
  - Answer: \_\_\_\_ km
7. The pressure in a gas cylinder is 50 pounds per square inch (psi). Convert this pressure to pascals (1 psi = 6894.76 Pa).
  - Answer: \_\_\_\_ Pa
8. A tank holds 6000 milliliters of oil. Convert this volume to liters.
  - Answer: \_\_\_\_ L
9. The power consumption of a device is 2500 joules. Convert this energy to kilojoules.
  - Answer: \_\_\_\_ kJ
10. The density of an object is 1.2 grams per cubic centimeter. Convert this density to kilograms per cubic meter.
  - Answer: \_\_\_\_ kg/m<sup>3</sup>

1. 5 m
2. 12.5 m/s
3. 0.2 kg
4. 0.35 m<sup>2</sup>
5. 1.5 L
6. 16.0934 km
7. 344,738 Pa
8. 6 L
9. 2.5 kJ
10. 1200 kg/m<sup>3</sup>