

Unit 6.1. How is matter measured? (pages 67-68)

1. Unscramble the sentence about volume.

amount   Volume   takes up.   space   of   is   matter   that

---

---

2. Which equation is used to find a volume of a solid object? Circle your answer.

- a)  $\text{Volume} = \text{cm} \times \text{mm} \times \text{km}$
- b)  $\text{Volume} = \text{length} \times \text{width} \times \text{height}$
- c)  $\text{Volume} = \text{Volume C} - \text{Volume A}$
- d)  $\text{Volume} = 8 \text{ cm}^3 - 5 \text{ cm}^3$

3. Can you find the volume of a box, if its length is 10 cm, width is 5 cm, and the height is 20 cm? Write your answer in cubic centimeters ( $\text{cm}^3$ ). \_\_\_\_\_

4. Read the statements about the volume of liquids. Write in a suitable word for each statement.

- 1) To measure a liquid, you use a measuring container, such as a \_\_\_\_\_.

A) graduated cylinder      B) ruler      C) pan balance

2) Some metric units used to measure volume of liquids are the \_\_\_\_\_, and liter (L).

A) millimeter (mm)      B) milliliter (mL)      C) milligram (mg)

3) One liter is equal to \_\_\_\_\_ milliliters.

A) 1,000      B) 100      C) 10

4) A volume of 1 mL is the same as \_\_\_\_\_  $\text{cm}^3$ .

A) 100      B) 10      C) 1

5. The volume of the water is 35mL. The volume of a ball and the water is 50mL. The volume of the ball is \_\_\_\_\_ mL or \_\_\_\_\_  $\text{cm}^3$ .

Unit 6.2. What are mixtures? (pages 69-71)

6. Read and circle True (T) or False (F).

1) A mixture is a combination of two or less substances.      T      F

2) Substances in a mixture cannot be separated.      T      F

3) There are no chemical changes in a mixture.      T      F

4) Substances in a mixture have the same properties whether mixed together or separate.      T      F

7. How can you separate a mixture? Unscramble the words then fill in the gaps.

lFitionrat

gaMsneitm

noontiCsaden|

Eavtoinrapo

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- 1) You can separate the nails from the other objects in a drawer using the property of \_\_\_\_\_.
- 2) The process of separating substances with a filter is called \_\_\_\_\_.
- 3) 4 \_\_\_\_\_ is the change from a liquid into a gas. It is used to separate salt from salty ocean water.
- 4) \_\_\_\_\_ is the process of a gas changing into a liquid. On a warm day, the water vapor separates from the other gases in the air. Then it condenses as beads of water on a cold glass of lemonade.

8. Circle correct answer.

- 1) The salt and the water form a special kind of mixture called a ...

**Solvent**

**Solution**

**Solute**

**Solubility**

- 2) In a solution, the substance that is dissolved is the ...

**Solvent**

**Solution**

**Solute**

**Solubility**

- 3) A ... is the substance that takes in, or dissolves, the other substance.

**Solvent      Solution      Solute      Solubility**

4)... is a measure of the amount of a substance that will dissolve in another substance.

**Solvent      Solution      Solute      Solubility**

Unit 6.3. How does matter change? (pages 72-73)

**9. Write CC (chemical change) or PC (physical change).**

- 1) It does not change the particles that make up matter. \_\_\_\_\_
- 2) It produces a completely different kind of matter. \_\_\_\_\_

---

- 3) Some evidence of this change are colors, smells, textures, light, etc. \_\_\_\_\_
- 4) This change can be related to size, shape, or state of matter. \_\_\_\_\_
- 5) A banana decaying \_\_\_\_\_
- 6) Cutting an apple \_\_\_\_\_
- 7) Burning wood \_\_\_\_\_
- 8) Folding paper \_\_\_\_\_

10. Read then fill in the blanks.

1) _____ is energy the form of vibration passing through matter.	sound wave
2) A _____ is a quick back-and-forth movement.	sound
3) A _____ is a disturbance that moves sound energy through matter.	vibration
4) The _____ of a wave is the number of waves that pass a point in a certain amount of time.	wavelength
5) _____ is a distance between a point on one wave and a similar point on the next wave.	amplitude
6) _____ is how high or low a sound is.	pitch
7) _____ is a measure of how strong a sound seems to us.	frequency
8) _____ is a height of a wave measured from its midline.	volume