

Key

AP Chemistry 2016-17

Unit 1: Matter and Measurement Quiz

Multiple Choice Questions – 10 questions - 15 minutes

1. Which measurement below is NOT written with FOUR significant digits?

(A) 2.000 cm

(B) 0.0003 L

(C) 5500. g

(D) 12.70 mm

2. A metal sample weighing 30.9232 grams was added to a graduated cylinder containing 23.26 mL of water. The volume of water plus the sample was 24.85 mL. Which setup will result in the density of this metal?

(A) $30.9232 \times (24.85 - 23.26)$

(B) $(24.85 - 23.26) / 30.9232$

(C) $30.9232 / (24.85 - 23.26)$

(D) $30.9232 \times (23.26 / 24.85)$

3. The number of significant digits in 0.30500 is

(A) 1

(B) 4

(C) 2

(D) 5

4. A student does a calculation using her calculator and the number 280.27163 is shown on the display. If she her answer only allows THREE significant figures, how should she show the final answer?

(A) 280

(B) 2.80×10^{-2}

(C) 280.3

(D) 2.80×10^2

5. The number 6.33×10^{-2} equals,

(A) 6.33

(B) 633

(C) 0.633

(D) 0.0633

6. All the following are characteristic properties of phosphorus. Which one is a chemical property?

(A) Both red phosphorus and white phosphorus exist in solid allotropic forms.

(B) The red form melts at about 600°C and the white form melts at 44°C .

(C) The white form is soluble in liquid carbon disulfide, but is insoluble in water.

(D) When exposed to air, white phosphorus will burn spontaneously, but red phosphorus will not.

7. When a pure solid substance was heated, a student obtained *another* solid and a gas, each of which was a pure substance. From this information which of the following statements is ALWAYS a correct conclusion?

(A) The original solid is not an element.

(B) Both products are elements.

(C) The original solid is a compound and the gas is an element.

(D) The original solid is an element and the gas is a compound.

8. The prefix "micro-" corresponds to what multiplication factor?

(A) 10^6

(B) 10^3

(C) 10^{-3}

(D) 10^{-6}

9. A solution of sugar water may be defined as a

- (A) heterogeneous mixture
- (B) homogeneous mixture
- (C) heterogeneous compound
- (D) homogeneous compound

10. The marks on the following target represent someone who is:

- (A) precise, but not accurate
- (B) accurate, but not precise
- (C) both accurate and precise
- (D) neither accurate, nor precise



