## Chemistry

 This equation describes the chemical reaction that occurs during photosynthesis:

$$6CO_2 + 6H_2O \rightarrow C_6H_{12}O_6 + 6O_2$$

How many carbon atoms are represented on the product side in the reaction?

- A. 1
- B. 2
- C. 6
- D. 12
- 2.  $C_3H_5(NO_3)_3$  is an interesting, multi-purpose chemical compound called Nitroglycerin. Also called Nitro, it is a heavy, colorless, poisonous, oily explosive. As a prescribed drug, it helps relax and dilate blood vessels and is often used in treating chest pain. It is also used in the manufacture of explosives, specifically dynamite, and is frequently used in construction and demolition projects.

How many atoms of oxygen are in a molecule of nitroglycerin?

- A. 1
- B. 3
- C. 6
- D. 9

3. The following chemical reaction shows the decomposition of a substance called potassium permanganate, a type of acid.

$$4KMnO_4 \rightarrow 2K_2O \,+\, 4MnO \,+\, 5O_2$$

Which of the following chemical formulas represents a single element?

- A. 4KMnO<sub>4</sub>
- B. 2K<sub>2</sub>O
- C. 4MnO
- D. 50<sub>2</sub>

