

BIOLOGY 40A PLACEMENT SAMPLE QUESTIONS

1. You need to know what 25% of 275 is. Which of the following equations will give you that information?
 - a. 25×275
 - b. $.25 \times 275$
 - c. 25×27.5
 - d. $275 / 25$
2. Magnesium has an atomic number of 12. How many electrons are in the outer shell of Mg^{++} ?
 - a. 2
 - b. 4
 - c. 8
 - d. 10
3. A molecule from which 2 hydrogen atoms have been removed has been
 - a. hydrolyzed
 - b. ionized
 - c. oxidized
 - d. reduced
4. One liter contains approximately the same volume as one:
 - a. cup
 - b. gallon
 - c. pint
 - d. quart
5. In the following oxidation-reduction reaction – $2FeCl_2 + Cl_2 = 2FeCl_3$ - Iron (Fe) is
 - a. oxidized
 - b. reduced
6. In simple diffusion
 - a. the movement of the molecules is controlled by temperature and pressure
 - b. the direction of movement is random
 - c. the movement of molecules of one substance is independent of the movement of any other substance
 - d. the net movement is away from the region of highest concentration
 - e. all of the above

Answers:

- | | |
|------|------|
| 1. b | 4. d |
| 2. d | 5. a |
| 3. c | 6. e |