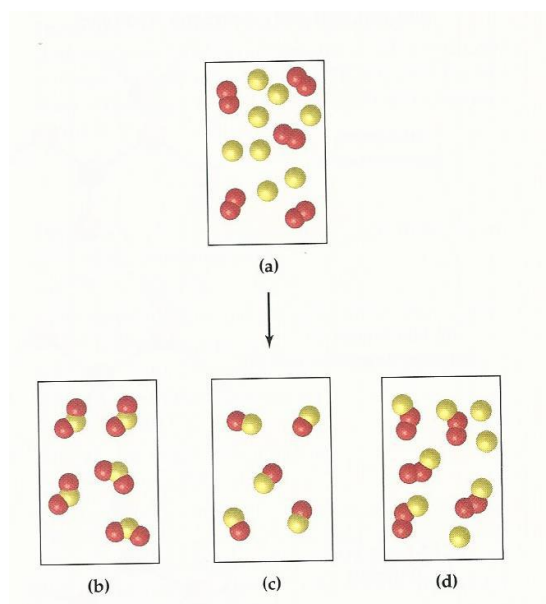


REVIEW QUESTIONS

Chem 65 Quiz

1. Normal human blood has a cholesterol concentration of about 200 mg/100 mL. How much total cholesterol (in g) does a person have if the normal blood volume in the body is 5 L?
2. Sulfuric acid is produced in larger amounts than any other chemical—9536 lb in 1995. What is the volume of this amount in liters if density of sulfuric acid is 15.28 lb/gal?
3. If the mixture of substances in drawing (a) represents the mixture before reaction, which of the drawings (b)–(d) represent the mixture after reaction has completed. Provide an explanation for our choice.



4. Tellurium, a group 6 element, forms the oxoanions TeO_4^{2-} and TeO_3^{2-} . What are the likely names for these anions? Which other group 6 oxoanions are these similar to?

5. An average cup of coffee contains about 125 mg of caffeine, $\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$. How many molecules of caffeine are in a cup of coffee?

6. A physician orders isotonic sodium lactate 5 mL/kg body mass to be delivered by IV for a 164-lb patient with severe acidosis. The IV tubing delivers at the rate of 20 drops/mL and set for a flow rate of 15 drops/min. How long (hrs & min) should the IV be set to run for this patient?

7. To prevent bacterial infection, a doctor orders 4 tablets per day of amoxicillin for 10 days. If each tablet contains 250 mg of amoxicillin, how many ounces of medication are given in 10 days? (1 oz = 28 g)

ANSWERS

- 1) 10 g
- 2) 2.362×10^{10} L
- 3) No answer provided
- 4) No answer provided
- 5) 3.88×10^{20} molecules
- 6) 8 hr 17 min
- 7) 0.36 oz