

Chem / Envsty L111: Quiz 1 Key

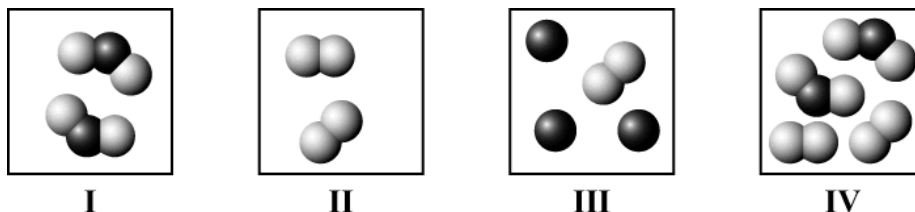
1. What is the primary component of an exhaled breath? **Only 5/23 people answered correctly!**

- a. N_2 Even though exhaled breath is higher in CO_2 than inhaled air, the exhaled breath is still 75% N_2 .
- b. O_2
- c. CO_2
- d. H_2O

2. The quantity 0.0000064 g expressed in scientific notation is **19/23**

- a. $6.4 \times 10^6 \text{ g}$
- b. $6.4 \times 10^{-6} \text{ g}$ You need to move the decimal place 6 places to the right in order to get to 6.4, which means multiplying by 10^{-6}
- c. $6.4 \times 10^7 \text{ g}$
- d. $6.4 \times 10^{-7} \text{ g}$

3. Which diagram(s) best characterize a mixture? **16/23**



- a. I and III only I contains 2 of the same kind of molecule, and is a compound. II contains 2 molecules of a diatomic element. But III and IV each contain two different kinds of molecules.
- b. III and IV only
- c. I, II and III only
- d. IV only

4. What are the products of the complete combustion of ethane?

(Note that this question was not scored, as we had not yet finished covering combustion)

- a. carbon monoxide and oxygen
- b. carbon monoxide and hydrogen
- c. carbon dioxide and oxygen
- d. carbon dioxide and water

5. Which substance is an element? **21/23**

- a. NO_2
- b. NaCl
- c. N_2 This is the only answer which contains only one **kind** of atom
- d. CH_4