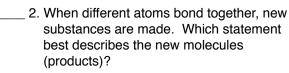
Brainpop—Chemical Equations

Name: Period:

Watch the Brainpop	on the chemica	l equations, the	en answer the c	questions below.

1. In the equation $2H_2 + O_2 \rightarrow 2H_2O$, what are the reactants?
a. hydrogen atoms
b. hydrogen and oxygen molecules
c. water molecules
2. When different atoms hand together, now



- a. the products usually weigh more than the original reactants
- b. the products often have completely different properties than the reactants
- c. the products usually have more atoms than the reactants
- d. the products are usually more toxic than the reactants

- a. 2H₄SO
- b. H₄S₂O
- c. H₂SO₄
- d. H₂S₂O₄

4. What is the problem with this unbalanced chemical equation?

$$H_2 + O_2 -> H_2O$$

- a. a hydrogen is missing from the reactants
- b. an oxygen is missing from the product
- c. an extra oxygen is in the product
- d. an extra hydrogen is in the reactants
- _ 5. Which reactant is missing from the following equation?

$$? + PO_4 -> H_3PO_4$$

- a. one hydrogen atom (H)
- b. one phosphorus atom (P)
- c. one oxygen atom (O)
- d. three hydrogen atoms (H₃)
- e. four oxygen atoms (O₄)
- _____ 6. What is the product of the following equation?

$$2Na + S_2O_3 -> ?$$

- a. NaS₂O₃
- b. NaS₄O₃
- c. Na₂S₂O₅
- d. Na₂S₂O₃

Determine if the statement is true or false. If false, replace the word in **bold** with the correct word on the line. If true, write "true" on the line. Possible word choices are provided below:

atoms molecules properties

1. _____ Atoms bond together into **PAIRS**.

2. _____ When different atoms bond together, they make substances with new SIZES.

3. _____ A chemical equation is balanced if it has equal numbers of **MOLECULES** on each side.

Look at this chemical equation: $C_6H_{12}O_6 + O_2 -> CO_2 + H_2O$ Is it balanced, or not? Explain your answer.

I know that the chemical equation (is/is not) _____ balanced because...