

Chemical Equations

1. Use your model pieces to form as many molecules of H_2 as you can. Use your model pieces to form as many molecules of N_2 as you can. Use these molecules of H_2 and N_2 to form molecules of ammonia (NH_3). You may use as many N_2 and H_2 molecules as you want, but you may not have any single atoms of either element left over. Also, you cannot use any single atoms of H or N as reactants.

Use what you learned from experimenting with the models to balance the following chemical equation:



2. Use your model pieces to make a molecule of Cu_2O . This chemical reacts with carbon to form CO_2 and copper metal (Cu). Use your models to show this reaction. Then balance the following equation:



3. If you needed to get six atoms of copper out of the reaction you modeled in step 2, how many molecules of Cu_2O would you need to start with?

4. Complete this sentence:
In a chemical reaction, the number of atoms of an element in the reactants must equal

5. Which of the substances that you modeled today are atoms? Which are molecules?
