

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

## Balancing Act – An Exploration

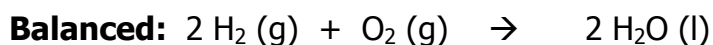
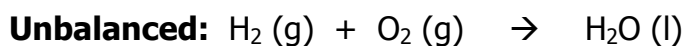
**Question:** What does it mean to say that an equation is “balanced”?

**Objective:** Be able to balance chemical equations using the law of conservation of matter.

**Materials:** wooden atomic model kits

### Background:

A balanced equation shows the same number of atoms of each element before and after the arrow, even though the atoms are rearranged into new molecules during the chemical reaction. Let's look at an example.



### Procedure:

At each lab station, you will find a bag of atomic model equipment and a card telling the names of the elements the models represent. Your job is to first build models of the reactants and then build models of the products. Use these models to write the balanced equation for the chemical reaction. *Remember, you must have the same number of atoms of each element before and after the reaction!*

### For each lab station:

- Draw a picture of the models you make – be accurate!
- Balance the equation.
- Write the name of each compound below the balanced equation.