





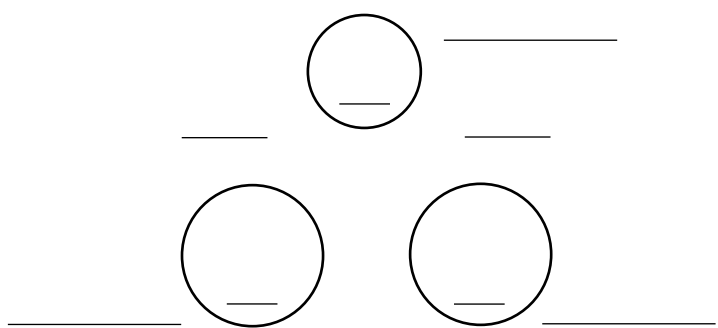
Introduction:

Everything is made up of atoms. Different atoms make different elements and when different atoms come together they make molecules of different things. For this activity, we are going to create a water molecule, H_2O .

Draw the correct atom, bonds, and labels in the correct spaces provided to complete the diagram of a water molecule below. Each item can be used more than once.

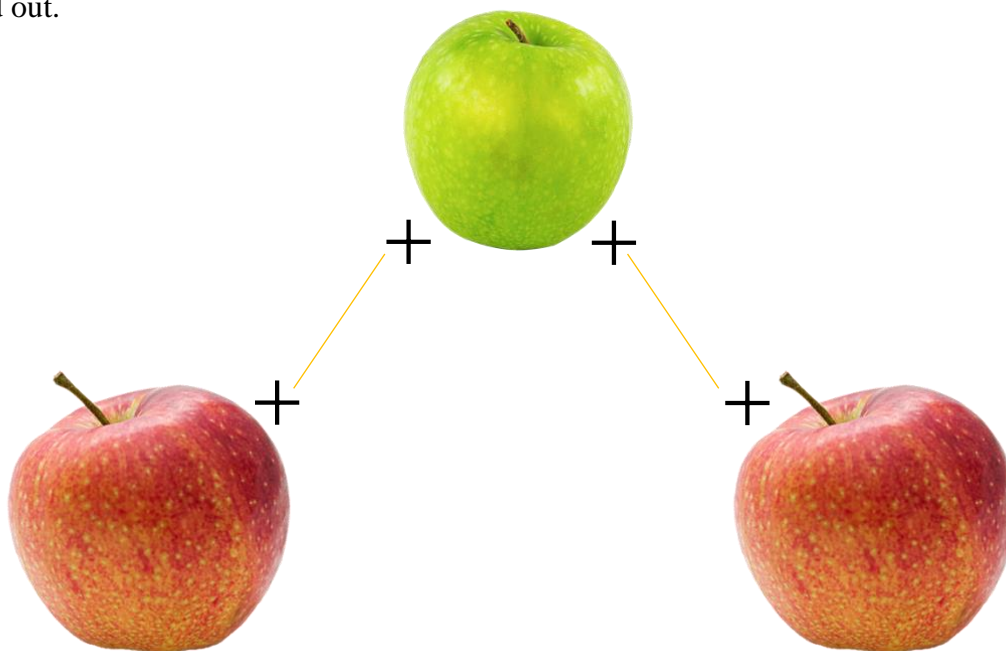
ITEMS/LABELS

	Hydrogen Atom
	Oxygen Atom
	Bond
	Bond



Plan and Carry Out:

The Introductory Activity above pretty closely replicates what will happen in Part 1 of the demonstration. Refer to the diagram below to see how Part 2 of the demonstration will be carried out.



Collect Data:

Part 1:

Color of Paper	What it Represents

Number of Oxygen Atoms in a Water Molecule	
Number of Hydrogen Atoms in a Water Molecule	
Number of Bonds in a Water Molecule	
Atomic Radius of Hydrogen Atom	
Atomic Radius of Oxygen Atom	
Angle in Between Bonds	

Part 2:

Apple Color	Apple Size	What it Represents

Analyze Data:

1. What atom is bigger, a hydrogen atom or an oxygen atom?
2. What is the angle between hydrogen atoms in a water molecule?
3. What subatomic particle influences the shape of a water molecule have a bent shape?

Explain:

1. What was done in the demonstration to help more accurately represent the proportion of atom sizes in a water molecule?
2. What did the demonstrations teach you about the structure of molecules?