



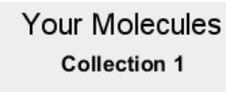
Build a Molecule Student Guide

Name: _____

- Start:**
1.
 2. Click on the first link
 3. Click on the **Run Now!** button

4.  Explore the simulation. Be sure to click on everything.

Discuss how you and your partner will build the molecules using the 3 kits of atoms.

5.  Build all of the molecules in the collection.

6.  Choose one of the molecules from your collection and draw it in the box.

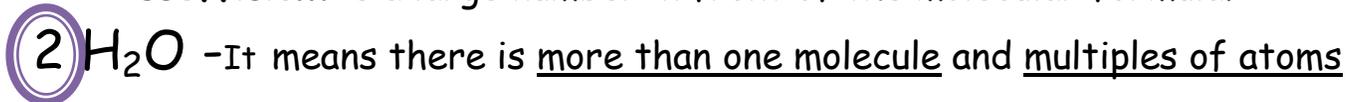
Name of molecule: _____

-it is made up of _____ atom(s) and _____ atom(s)

7.  Ask the teacher to check your work before going on!!

-  Talk with your partner about the following:

A **coefficient** is a large number in front of the molecular formula.



In this case: **2 water molecules** with **4-hydrogen atoms** and **2-oxygen atoms**.

8. Click on the  tab at the top of the screen.

- ✓ Choose collection 1 or 2 and build the entire "collection" with your partner.
- ✓ Be on the lookout for the , it means you have the collection completed.



9.  Discuss which atoms you would need to build 2CO_2 molecules in collection 1.

a.  What is the **name of the molecule** when 2- oxygen atoms bond with 1- carbon atom? _____

b. If you have 2CO_2 molecules, how many **different types of atoms** are there? _____

c.  Fill in the chart to help you organize the type of atom(s) and the number present in the 2 molecules of CO_2 .

Name of atom in molecule	Number of atoms present

Larger Molecules

10. In _____ section, Find the kit you will need to build a SiH_4 molecule.



What is the name of this molecule? _____



-----You are Finished!



Still want more??



Larger Molecules

Build a few molecules in the _____ .

Use the kits and put atoms together to build actual molecules.

Name of molecule:

The name of the molecule will appear when you have built a known molecule. In the box to your left, draw a molecule that you built and write its name. (You can draw more on back if you want to!)

Write one thing you noticed about building molecules?
