Background:

All matter is composed of tiny objects called atoms. An atom that is unique and not like any other atom is called an element. For example the element oxygen does not look like any other atom except for another oxygen atom.

Materials Needed:

* 6 or 8 Toothpicks per pair of students
* 6 or 8 Miniature marshmallows per pair of students.

Procedure:

1. Use the toothpicks to connect the marshmallows. Do not break the toothpicks.
2. You must connect a marshmallow to 2 toothpicks.
3. Each end of the toothpick must be connected to a marshmallow.
4. Use all of the marshmallows.
5. Use all of the toothpicks.

Diagram: Draw a detailed diagram of your creation.

Name your creation: You need to name your creation.   
The name you choose must begin with the letter “C” if you have 6 marshmallows.   
The name you choose must begin with the letter “O” if you have 8 marshmallows.

Name: \_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

When directed by your instructor, go find another pair of students that has the same number of marshmallows as you.

1. Did each of you have a similar shaped creation? \_\_\_\_\_\_\_\_ (yes or no?)
2. Using teamwork come up with a new name of your creations that begins with a   
   \_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_
3. Do you think each of your creations weighs about the same? (yes or no)
4. Place your creations side by side and draw them.

When directed by your instructor, go to another group that has a creation with a different number of marshmallows.

1. Write down the name of your creation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Write down the name of their creation. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Draw each of your creations.
4. Which creation do you think has the most mass? Why?