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:

* Numerous toothpicks per pair of students
* Same number of miniature marshmallows as the toothpicks 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.

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

1. Using teamwork come up with a new name of your creations that begins with the same letter each of you chose. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Compare and contrast your creations. How are they alike? How are they different?
3. 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. Compare and contrast your creations. How they are alike? How are they different?
4. Draw each of your creations.
5. Which creation do you think has the most mass? Why?

INFORMATION FOR NAMING YOUR CREATION….CLASS SET….. DO NOT MARK

* If your creation had 4 marshmallows then the name of it must begin with a “B….” (The second letter of your creation may not be an “a” or “e” or “h” or “I” or “r”)
* f your creation had 5 marshmallows then the name of it must begin with a “Be….”
* If your creation had 6 marshmallows then the name of it must begin with a “C….” (The second letter of your creation may not be an “a” or “d” or “e” or “f” or “l “ or “m” or ”n” or “o” or “r” or “s” or “u”
* If your creation had 7 marshmallows then the name of it must begin with a “N….” (The second letter of your creation must not begin with an “e” )
* If your creation had 8 marshmallows then the name of it must begin with an “O….” (The second letter of your creation must not begin with an “s”)
* If your creation had 9 marshmallows then the name of it must begin with a “F….” (The second letter of your creation must not begin with an “e” or “l” or “r”)