# BUBBLE GUM REVIEW

Purpose – to practice collecting and analyzing data while making observations

# **Activity 1 - Observations**

Materials for each student - Ruler and stick of gum



Complete the following data table to determine the type of observation being used.

	STICK OF GUM
Qualitative Observation	
Quantitative Observation	

- 1. What is the difference between qualitative and quantitative observations?
- 2. Why do you think both qualitative and quantitative observations are helpful for gathering data?

# **Activity 2 – Chomper Challenge**

Materials for group table – same stick of gum from activity 1 for each student, 1 stopwatch

For this part of the experiment, you will conduct <u>5</u> trials to determine the number of casual chomps you can do in 30 seconds. \*\*You are just casually chomping, not speed chomping\*\*

<u>Hypothesis</u> – create a hypothesis to predict about how many times you casually chomp on a piece of gum. Remember this is a complete sentence description and not just one or two words.

**Variables** – Identify the variables in this experiment

Independent -

Dependent –

Control -

<sup>\*\*</sup>When done, put rulers back into the ruler bin. Any student who cannot use the ruler for its intended use will not be able to continue with the lab\*\*

**Procedure** – use the following procedures to complete the experiment.

- 1. Put the gum in your mouth and chew for a few moments, about 30 to 45 seconds.
- 2. While chewing your gum create a data table to record your observations.
- 3. As a group, there is only 1 stopwatch, so the group will work as a team
- 4. Choose one group member to start with the stopwatch (hopefully someone who knows how to use the stopwatch).
- 5. Have the group member with the stop watch tell everyone when to <u>start</u> counting casual chomps the same time stopwatch is started and then tell the group member when to <u>stop</u> counting chomps after 30 seconds.
- 6. Only record your own number of chomps in the data table.
- 7. Hand the stopwatch to a new group member and repeat steps 4 6 until the data is collected from 5 trials.
- 8. Return the stopwatch to the teacher then create a graph to display the results.

# DATA TABLE

\*\*Hint - Independent goes on the left side and dependent on the right\*\*

<u>Graph</u> – correctly create a graph to display the results of the chomp challenge. Make sure to include a title and put the independent and dependent variables on the correct axis.

# **Analysis Questions**

- 1. What is the conclusion for this experiment? Should be a complete sentence...single words do not count.
- 2. Who was the fastest casual chomper at the group table?
- 3. Who was the slowest chomper at the group table?
- 4. What is one SEP that was used to complete this experiment?



5. What is one CCC observed in this experiment?