

Name _____

Observing, Inferring, and Predicting with Candy

Purpose: 1) To practice observing, inferring, and predicting. 2) To distinguish between an observation, inference, and prediction.

Materials:

3 pieces of candy	Metric ruler	Triple beam balance
Hand lens	Plastic knife	Map pencils

What to do:

1. Work with a partner.
2. Observe your candy. Record **qualitative** observations in the data chart. Include a colored diagram as part of your observations.
3. Use the tools you have to make **quantitative** observations. Record this data below.
4. Use the plastic knife to cut the candy in half to observe the inside. Record your observations.

Candy	Diagram	Qualitative Observations	Quantitative Observations
1			
2			
3			

5. Based on your observations and previous knowledge, what do you **infer** about the color of candy and the flavor of candy?

6. Based on your observations and previous knowledge what do you **predict** the flavor of each candy will be?
 - a. Candy 1 _____
 - b. Candy 2 _____
 - c. Candy 3 _____
7. Test your prediction by tasting each candy.
8. Get a second cup of candy from your teacher.
9. Make and record observations as before.

Candy	Diagram	Qualitative Observations	Quantitative Observations
1			
2			
3			

10. Based on your observations and previous knowledge what do you **predict** the flavor of each candy will be?

- Candy 1 _____
- Candy 2 _____
- Candy 3 _____

11. Test your predictions by tasting each candy.

Questions:

1. How did using **tools** help you make observations in this investigation?

2. Which type of observation, qualitative or quantitative, was most useful in making inferences and predictions?
Why?

3. Given the information in the graphic below, make one observation, one inference, and one prediction.



Observation _____

Inference _____

Prediction _____
