A Puzzling Look at the Scientific Method

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

1. The puzzle pieces in front of you represent scientific data points. Make a perfectly

symmetrical shape using the pieces. All pieces must be touching, but not overlapping. Sketch a

diagram of your completed puzzle below:

2. When you have completed step 1, you will receive a 5th puzzle piece from your teacher- this

represents a new piece of data discovered about the same topic. Create a new perfectly

symmetrical shape using all 5 pieces, where all pieces touch but do not overlap. Sketch a diagram of your completed puzzle below:

3. Think about trying to piece together the puzzle pieces, then having to repeat the process when

new data was discovered. How does this relate to the process of “doing” science?

4. What was the most difficult part of assembling the puzzle? How do you think this relates to

science in the real world?

5. Describe an example of scientific thought that has changed over time.

6. List the steps of the scientific method you used to solve the puzzle. You probably did not use

every step. Also, include any steps you may have repeated or re-visited.

7. Based on your answer to question 6, is the scientific method linear or non-linear?