Paper Folding Activity

Name:_____**Date:**_____**Period/Block:**_____

Experimental Question: How many times can one sheet of 21.6cm x 28cm computer paper be folded in half?

1. Write your **prediction** on the line:_____.

2. Compare your prediction with the person next to you. Discuss the reasons for your prediction.

3. After your discussion, work together to fold the paper in half as many times as possible.

4. Record the number of folds on the line. Be prepared to show evidence of your response. _____

5. Compare the actual number of folds to you predicted number of folds. _____

6. Why do you think there was such a difference between the number of folds that you predicted and the number of actual folds you were able to get?
   _____
   _____

7. What factors or **properties** do you think have an effect on the number of folds?

   _____

8. From the list of factors you just created, pick one and write a hypothesis as an "if-then" statement. (Example hypothesis: <u>*If*</u> I study more <u>*then*</u> I will get better grades.)

   _____

9. Test your hypothesis by experimenting with the various papers provided by your teacher. The factor you are changing is referred to as the **independent variable**. After changing the <u>one</u> factor, fold the paper as many times as possible and record the number of folds on the line.
   _____

10. Why is "one" underlined in the previous question?
    _____
    _____

11. With your partner, discuss the results from your experiment. Were they what you expected? How much on effect did the factor have?

12. Choose another factor to test and write it on the line. _____
    How many folds did you get? _____

13. Compare all of the results and discuss them with your partner.

14. The dependent variable in an experiment is something that responds or is measured or

    counted. What was the dependent variable in this experiment?_____

15. When considering your experimentation, how could your results become more **valid**?

_____

_____

_____

_____

16. In class we will watch a short video clip that will show the experiment you just performed. Why was the video not play at the beginning of class?_____
_____
_____
_____

17. Define bias in your own words:

_____

_____

Define these words in your own words:

1. Prediction-

2. Properties-

3. Independent Variable-

4. Valid-