

Miss Lowe's
Scientific-Method Homework Assignment of Joy

You have until _____ to complete this. This is worth 30 points (quite a bit). I will remind you several times that this will be due, but you are responsible for getting this in ON TIME, which is before 3:30 on that day.

INSTRUCTIONS –

Learn something you didn't know before about the world. Observe whatever you like, but you need to observe it for at least 30 minutes. Write down what you notice. Continue observing until you can formulate a question based on your observations. You need to come up with a hypothesis that will answer your question, and then create an experiment to help you determine if your hypothesis is right. Follow all the steps of the scientific method and complete the other side of this paper. Be SURE to evaluate your work.

RULES –

1. Nothing dangerous. This means no fire or mixing chemicals without adult supervision. If you do such things, you need a **parent signature**. Assignments will receive no points if this rule is violated.
2. No death. You may not kill or maim any living animal as a result of your experiment. You should not wantonly destroy plants. You may experiment on plants and remove leaves, etc., but destruction solely for the sake of destruction is not allowed. If you violate this rule, you get no credit.
3. Avoid old experiments. Don't do it if you already know the answer. For example, we all have seen what happens if you put vinegar in baking soda. That is not an experiment. When conducting an experiment, do not repeat an act you have seen someone else do. It will bore me and you won't get the grade you desire. Don't look online for ideas. **DO NOT COPY OTHERS.**
4. No experimenting on humans. Even if your experiment is safe, new and harmless, I don't want you to experiment on people. Humans tend to react differently than natural organisms. When you start experimenting on humans, you must take psychology into consideration, and we aren't discussing that as a part of our science class.

SUGGESTIONS –

1. Start early. Some experiments take time. Also, if you have an experiment that didn't work, you will have time to try out another experiment. Please don't procrastinate and turn in lousy work at the last minute. Teachers can tell.
2. Remember to use all your senses. The more you discover the better your question (your problem) will be.
3. Don't limit yourself. Nature is all around you. The air, the water, the soil, the plants and the animals all qualify. Perhaps there is a whole ecosystem in your yard or maybe you have to find a dark corner of a basement, but there are thousands of things to discover. A kitchen cupboard can hold the mysteries of the universe. An old carrot can reveal wonders.
4. Remember LARE. Don't start experimenting before you look, ask and use your own reasoning capabilities.
5. Have fun. Although this is required schoolwork, please enjoy the opportunity to figure something out on your own.

Name _____ Class Period _____

Miss Lowe's Scientific Method Homework Assignment of Joy

1. State the problem _____

2. Make observations _____

3. Formulate a hypothesis _____

4. Experiment _____

5. Review your results _____

6. Propose a theory _____

7. Evaluate your work _____
