Skill Practice 1

Experimental Design

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

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: \_\_\_\_\_

1. If scientists want to determine if a skin cream is affective against fighting acne, what would be the independent variable?
2. A “double blind study” in which the researchers themselves do not even know which group is the placebo group and which group is a medicated group is more accurate than one in which the researches know what the participants are getting. Why?
3. In each group of questions, circle the question that you think is the best scientific question.
4. “What are the ingredients in the bread?” OR “What causes bread to rise?”
5. “Is this juice acidic or basic?” OR “What kind of fruit is this juice from?”
6. “What is the purpose of my life?” OR “What conditions are necessary for life?”
7. A tire company wants to determine what kind of rubber will last the longest for their tires. What are some variables that the researchers will want to make controlled variables?
8. Scientists want to measure how sugar affects the behavior of children at a preschool. They give one class sugary kool-aid and cookies for their snack time. Another class is given water and crackers and cheese for their snack. After snack time, the researchers observe their behavior to see how consuming sugar affects their hyperactivity.
9. What is the independent variable in this study?
10. What is the dependent variable?
11. How could the researchers make their study better?