Name _____

Period _____

Scientific Method & Experimental Design Notes

Put the steps of the Scientific Method in order:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

7. What is the helpful hint you have been given to remember the steps in order?

_____

8. Which step involves making observations? _____

9. Which step makes a prediction about what will happen and why? _____

10. Which step is stated in the form of a question? _____

11. In what step will your hypothesis be accepted, rejected and your opinion about the experiment stated? _____

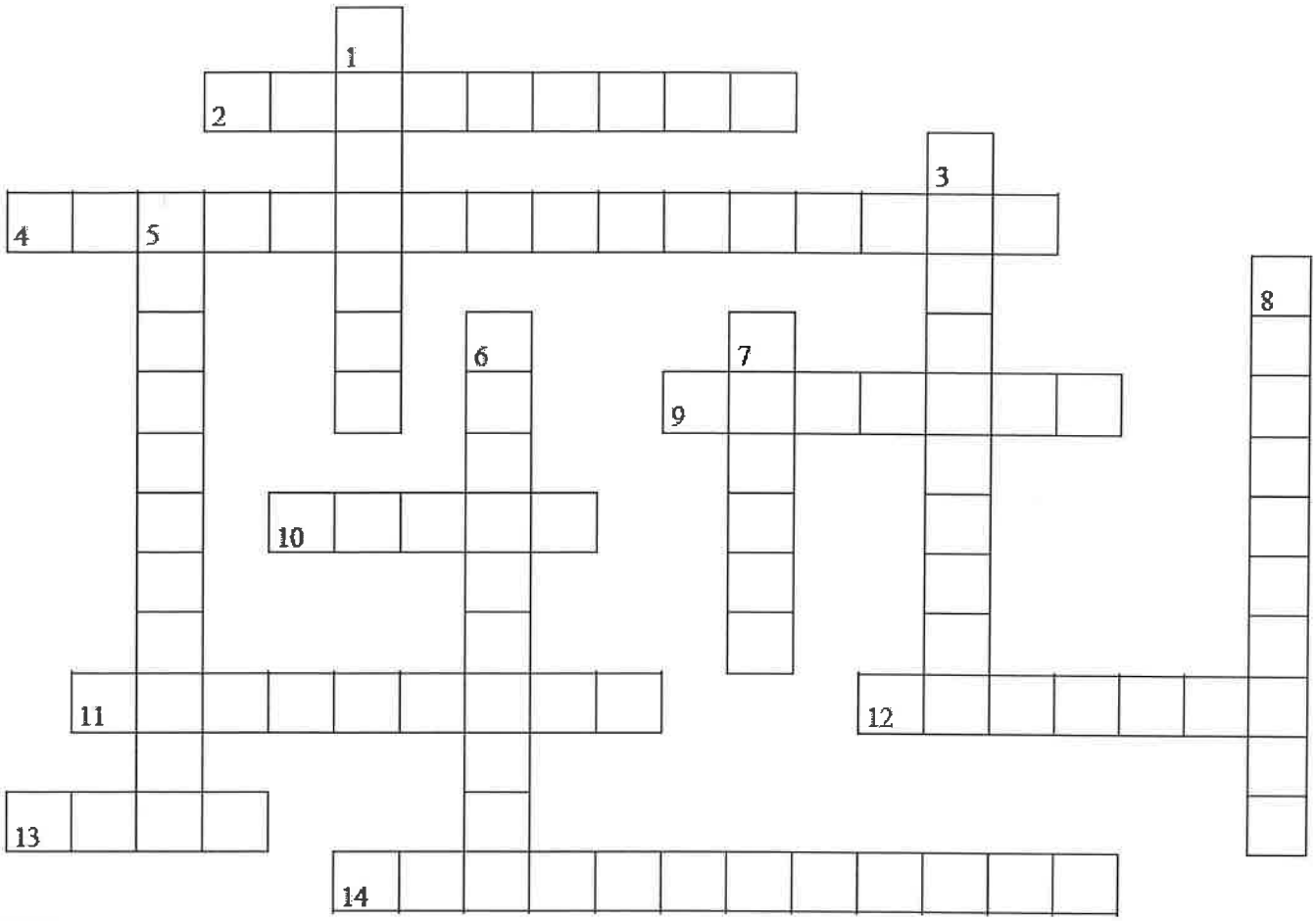
12. Which group stays the same in your experiment? _____

13. Which group changes in your experiment? _____

14. What change relies on another change to occur? _____

15. Quantitative data is based on what? _____

16. Qualitative data is based on what? _____



Clues:

1. The __?__ is the part of an experiment that is not being tested and is used for comparison.

2. The __?__describes the steps you use during an experiment.
3. After an experiment, scientists write a__?__which summarizes their experiment and results.

4. The __?__is a process used by scientists to find answers to questions or solve a problem.

5. The __?__variable is the part of the experiment that is being tested or the part that is changed by the person doing the experiment.

6. The __?__is an educated guess.

7. Scientists use their data to make charts and __?__to communicate the results of an experiment.

8. After the scientist makes a hypothesis, they perform an __?__to collect data.
9. The first step of the scientific method is to define or identify the __?__.
10. Sometimes scientists make a mistake, or __?__and need to do an experiment again.
11. The __?__variable is the part of the experiment that is affected by the independent variable.

12. After the experiment, scientists organize and __?__the data.
13. The information collected during an experiment is called __?__.
14. Scientists make __?__to help them make a hypothesis or collect data during an experiment.