Name_____

The Scientific Method

Number the steps of the scientific method in the proper order.

_____ Organize and analyze data.

_____ State a hypothesis.

_____ Identify the problem.

_____ State a conclusion.

_____ Design and carry out an experiment.

_____ Make observations and record data.

_____ Gather information.

Match the term with its definition.

1. theory _____
2. law _____
3. hypothesis _____
4. experiment _____
5. variable _____
6. control _____
7. data _____
8. conclusion _____
9. application _____

a. suggested explanation to a problem or observation based upon known information

b. used to test a hypothesis

c. anything that can affect the results of an experiment

d. observations and measurements made during an experiment

e. part within the experiment that is maintained without change to provide a comparison for the part of the experiment containing the variable

f. hypothesis that has been tested and supported by a great amount of evidence over a long period of time

g. statement describing (but not explaining) a natural event or phenomenon

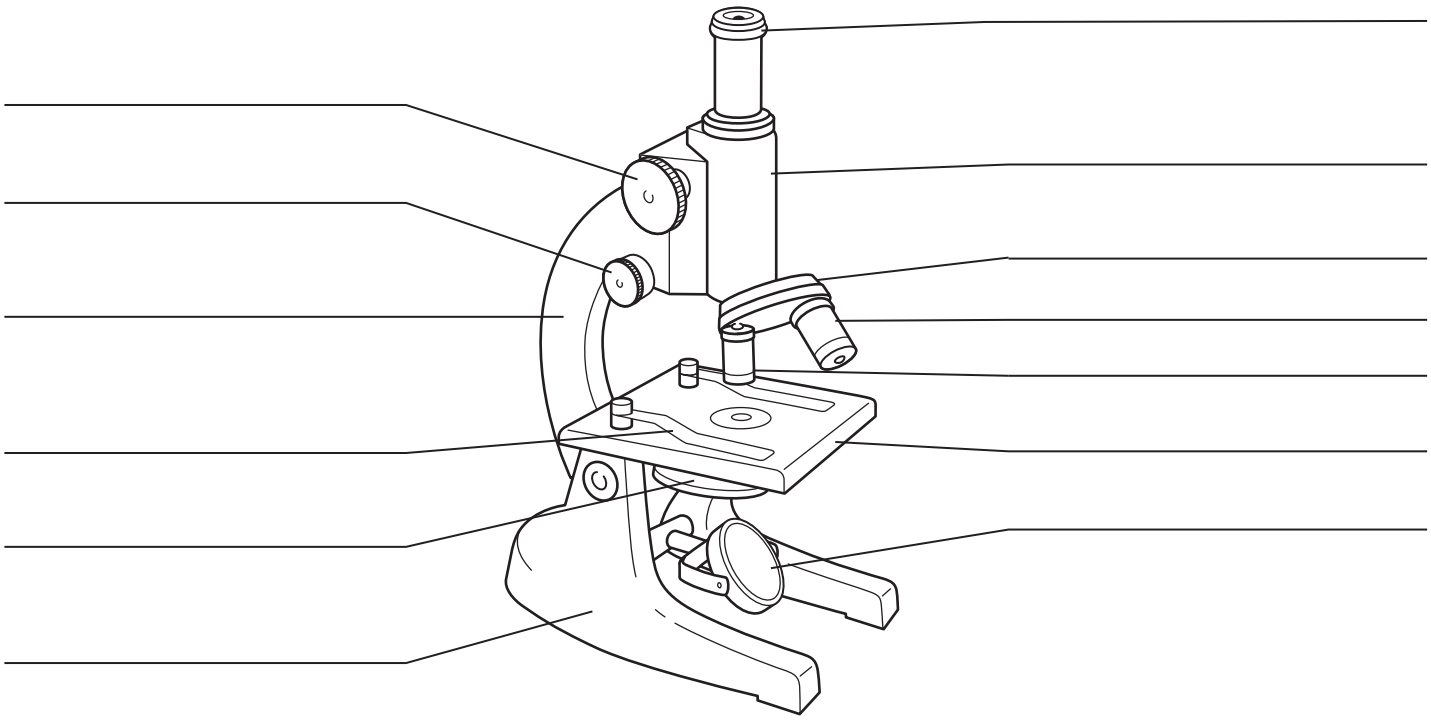
h. new use to which results are put or new technique developed

i. summary that explains whether the data support the hypothesis

Name_____

The Compound Microscope

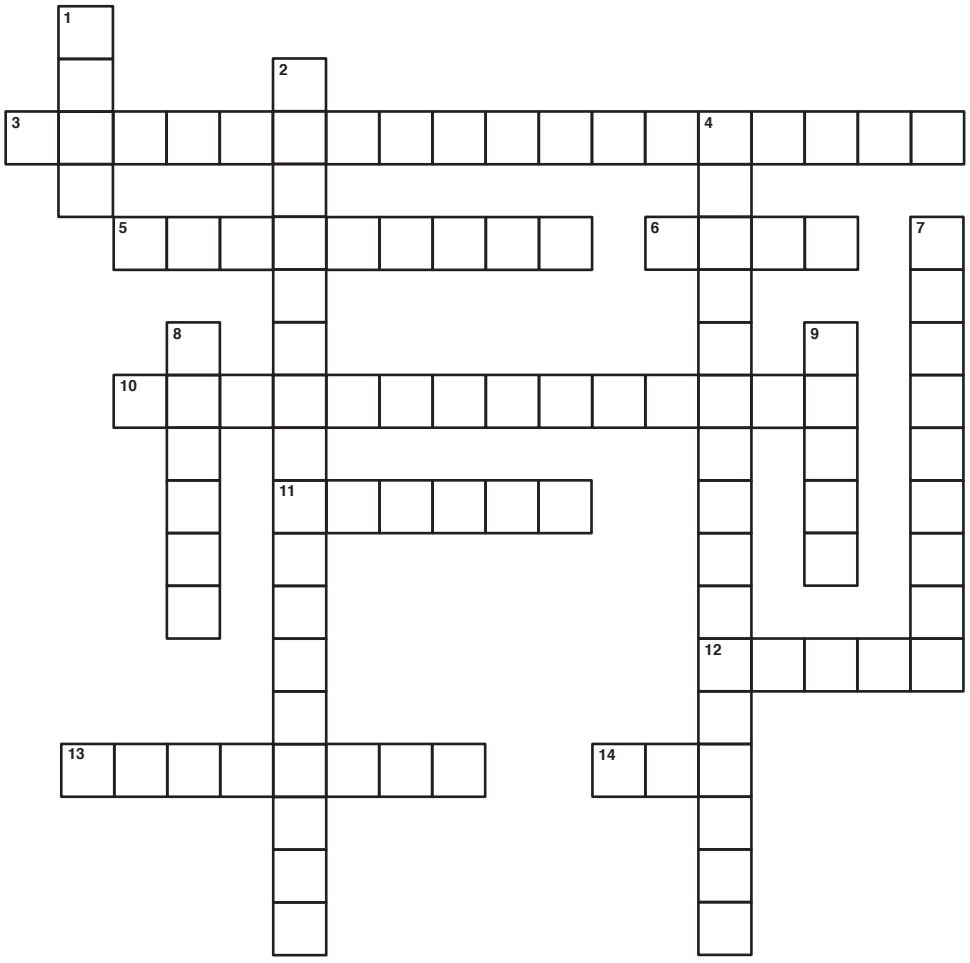
Label each part on the compound microscope. Describe the purpose or use of each part.



1. base _____
2. mirror _____
3. stage _____
4. arm _____
5. fine adjustment _____
6. coarse adjustment _____
7. ocular/eyepiece _____
8. body tube _____
9. nosepiece _____
10. high power objective _____
11. low power objective _____
12. clip _____
13. diaphragm _____

Name_____

Microscope Crossword



Across

3. Lens that allows greater magnification
5. Regulates the amount of light
6. The microscope rests on this
10. Used for detailed focusing
11. Eyepiece
12. Platform upon which to mount the slide
13. Holds eyepiece lens at top and objective lens at bottom
14. Holds the tube and stage and attaches them to the base; part by which microscope should be carried

Down

1. Holds the slide in place
2. Lens used to locate the specimen on the slide
4. Used for initial focusing
7. Rotating piece that holds objective lens
8. Reflects light through the stage
9. Chemical sometimes used to make the specimen visible