

## Biology Lab Notebooks:

A pre-lab write-up is required for each lab report (except those in which the entire lab is to be completed at home), due the day the experiment will be performed in class. The pre-lab includes the experimenter's name, experiment title, the date experiment will be performed, materials, and objective. The pre-lab must be done before class and counts as 15 of the possible 65 lab report points. If the pre-lab is not completed before the day the experiment is to be performed, the student can make, at most, only 50 out of 65 possible points on that report.

**The procedure, observations, and conclusion sections each count for 15 possible points.** These sections are to be written in 3<sup>rd</sup> person, past tense. The report is to be written in enough detail that someone who knows nothing about the lab can easily duplicate it. Overall appearance is worth the remaining 5 points.

Students are encouraged to take notes and make drawings in class during the experiments, and write up the lab report as soon as possible after class is over. We will not take the time to write the reports in class.

Attached is a sample lab report which should be used as a guideline for writing all lab reports for this class. Please keep this sample report so you can refer to it as you write your reports.

Lab reports may be hand written or typed. They can be in a composition notebook or a separate 3-ring binder. It is mandatory that the lab report is easily legible. If it is difficult to read the report, the grade will be greatly reduced. Lab reports must be written in black pencil, black ink, or blue ink, however drawings using markers or colored pencils is encouraged in the Observations section.

Kathy Swanner  
(1 point)

August 26, 2011  
(1 point)

Using a Biological Key  
(2 points)

Materials: (6 points)

Photos on pp. 25-26 of Exploring Creation with Biology, 2<sup>nd</sup> Edition  
Biological key in Figure 1.7 of same book

Objective: (5 points)

To identify 15 living things as closely as possible using the biological key in the text book.

Procedure: (15 points)

Students used the biological key to identify the 15 living things presented as specimens for the lab. Beginning at the top of the key, each question was answered, then the students proceeded to the number that followed that characteristic. Students continued in this manner until a classification was reached that was not followed by a number.

Observations and Data: (15 points)

Number	Specimen	Specimen Classification	Numbers Used from the Key
Example	Elephant	K.Animalia C.Mammalia P.Chordata O.Proboscidea	1,3,5,6,22,23,26,28,29,31,33,35
1	Butterfly	K.Animalia C.Insecta P.Arthropoda O.Lepidoptera	1,3,5,6,7,9,14,16,17,19
2	Chipmunk	K.Animalia C.Mammalia P.Chordata O.Rodentia	1,3,5,6,22,23,26,28,29,31,33,34
3	Grapevine	K.Plantae C.Dictyoyledonae P.Anthrophyta O.	1,3,4
4	Swan	K.Animalia C.Aves P.Chordata O.	1,3,5,6,22,23,26,28
5	Spider	K.Animalia C.Arachnida P.Arthropoda O.	1,3,5,6,7,9,14,15
6	Tiger	K.Animalia C.Mammalia P.Chordata O.Carnivora	1,3,5,6,22,23,26,28,29,31,32
7	Corn	K.Plantae C.Monooyledonae P.Anthrophyta O.	1,3,4
8	Fish	K.Animalia C.Osteichthyes P.Chordata O.	1,3,5,6,22,23,24,25
9	Paramecium	K.Protista C. P. O.	1,2
10	Mushrooms	K.Fungi C. P. O.	1,3,5
11	Frog	K.Animalia C.Amphibia P.Chordata O.Anura	1,3,5,6,22,23,26,27
12	Bacteruim	K.Monera C. P. O.	1,2
13	Bison	K.Animalia C.Mammalia P.Chordata O.Artiodactyla	1,3,5,6,22,23,26,28,29,30
14	Grasshopper	K.Animalia C.Insecta P.Arthropoda O.Orthoptera	1,3,5,6,7,9,14,16,17,19,20
15	Baboon	K.Animalia C.Mammalia P.Chordata O.Primates	1,3,5,6,22,23,26,28,29,31,33,35

Conclusion: (15 points)

Fifteen living organisms were observed and classified as well as the given key allowed. Most organisms were classified down to the Order level, while a few could only be classified to the Kingdom level. Furthermore, a few were classified to the Class level. This was a good exercise to learn the science of Taxonomy with respect to living creatures.

(Overall appearance – 5 points)