

Name: _____ Date: _____ TOC #: _____

Notes from Section 2 Chapter 1: Pages 16-19
Classifying Organisms

Anticipatory Set

1. In your own words explain why you think scientist organize living things into groups. _____

2. Do you think it is easy to classify living things into groups? _____
Explain your answer _____

3. Do you think scientists have ever made a mistake when classifying living things into groups? _____ If you responded yes, how do you think the scientist would fix the mistake. _____

Outline Notes:

1. Why do scientist _____?
 - a. Scientist have classified more than _____ specific organisms
 - b. Each organism is placed into a _____.
 - c. The groups are _____.
 - i. _____: the process of grouping things based on their similarities.
 - ii. This makes organisms easier to study.
 - iii. Taxonomy: The scientific study of _____ are _____
 1. This is useful. Once an organisms is classified scientists _____.
 2. This also involves _____.
2. The Naming System of Linnaeus
 - a. Carolus Linnaeus

- i. Swedish _____
- ii. Devised a system of _____
- iii. _____ naming system started
- iv. Placed organisms in _____ based on their
_____ features.
- v. Gave each organism a unique, _____
scientific _____
- vi. _____
 1. Bi: _____
 2. Nominal: _____

b. Binomial _____

- i. First word: _____
 1. Genus: classification _____ that
contains similar, closely related _____
 2. Organisms with the same genus share

- ii. Second word: _____
 1. Describes a distinctive _____ of
the _____
 - a. Such as _____
 - b. Such as _____
 2. Species: a group of _____ organisms
that can mate with each other and _____
offspring that can also mate and _____

c. Using Binomial Nomenclature

- i. Complete scientific name is written in _____
- ii. Only the _____ word in the scientific name is

- iii. Contains _____ words
 1. Latin was the language that _____

 2. Latin is still used today and considered the
_____ language of the classification
system
- iv. Makes it easy for scientist to communicate
 1. Everyone uses the same _____
for the same _____

Questions or clarity needed from the FLIP?

Summarize the main ideas in this section.

Challenge:

Perognathus californicus, *Perognathus nelsoni*, *Perognathus spinatus* are North American field pocket mice.

1. What genus/genera do these animals belong to?
2. What are the species of these mice?
3. Using the three different mice describe them or give a detail that separates them from the others.
 - a. *Perognathus californicus*
 - b. *Perognathus nelsoni*
 - c. *Perognathus spinatus*