

Unit: Classification

Reading Study Guide Chapter 2 Living Things

2-2 Classifying Organisms (pp.42-49)

Why Do Scientists Classify (p.43)

1. What is the definition of classification?

The process of grouping things based on similarities

2. Name one way the beetles on page 43 have been grouped. Size

3. Why do biologists use classification? So things are easier to study

4. The scientific study of how living things are classified is called taxonomy

The Naming System of Linnaeus (p.44-45)

5. The naming system of Carlos Linnaeus is called Binomial Nomenclature

6. What does *binomial* mean? two names

7-9. Match these animals by their scientific names to their common names.

<i>Felis domesticus</i>	<u>B</u>	A. Marbled Cat
<i>Felis concolor</i>	<u>C</u>	B. House Cat
<i>Felis marmorata</i>	<u>A</u>	C. Puma

10. If an animal is a *Felis* what characteristic does it have? claws, fur, whiskers, tail

True or False about binomial nomenclature. (p.45)

11. T Scientific names are written in italic type.

12. F Both words of a scientific name are capitalized.

13. T Scientific names are written in the Latin language.

14. F Binomial nomenclature makes it hard for scientists to communicate.

15. If you saw the animal on page 45 what would you call it? Woodchuck

Levels of Classification (p.45-46)

16-23 Name the eight levels (groups) of classification.

- A. Domain
- B. Kingdom
- C. Phylum
- D. Class
- E. Order
- F. Family
- G. Genus
- H. Species

Look at the classification chart on page 46.

24. All birds belong to what Class. Aves

25. Is a an owl more closely related to a dragonfly or a lizard? Lizard

26. Name the order that has only owls as it members. Strigiformes

Domains and Kingdoms (p.47)

27-29. List the three domains of living things

- A. Bacteria
- B. Archaea
- C. Eukarya

30-32. Organisms are placed into domains and kingdoms based on:

- A. Cell Type
- B. Ability to make food
- C. # of cells in their body

33. What is the definition of prokaryotes organisms who lack a nucleus

34-36. Name three places you can find members of the domain Archaea.

- A. Hot Springs
- B. very salty water
- C. Intestines of cows

Domain Eukarya (p.48-49)

37-40. Name the four kingdoms of the domain Eukarya.

- A. Protists
- B. Fungi
- C. Plants
- D. Animals

41. Name one reason Protists are called the "odds and ends" kingdom.

members are very different from one another

42. Mushrooms, molds, and mildew belong to the fungi kingdom.

True or False

43. F Plants are unicellular and multicellular. All are multicellular

44. T There are unicellular and multicellular fungi.

45. F There are some unicellular animals. All multicellular

46. T Not all plants produce flowers.

47. T All animals are heterotrophs.

48. T Seaweed is an example of a protist.

Section 2-2 SELF-CHECK

Suppose someone tells you a pantherramas is classified in the same genus as a house cat.

49. What characteristics do you think a pantherramas would have?

fur, tail, whiskers, claws

50. What genus name would you expect a pantherramas to have? Felis

51. Circle the kingdom you belong to? Bacteria Protist Fungi Plant Animal