

Chapter 18 Classification

Section 18–1 Finding Order in Diversity (pages 447–450)



TEKS FOCUS: 8B Analyze relationships among organisms

This section explains how living things can be organized for study.

Why Classify? (page 447)

1. Why do biologists use a classification system to study the diversity of life?

2. The science of classifying organisms and assigning them universally accepted names is known as _____.

3. Is the following sentence true or false? In a good system of classification, organisms placed into a particular group are less similar to each other than they are to organisms in other groups. _____

Assigning Scientific Names (page 448)

4. Why is it confusing to refer to organisms by common names? _____

5. Circle the letter of each sentence that is true about early efforts at naming organisms.

- a. Names were usually in English.
- b. Names often described detailed physical characteristics of a species.
- c. Names could be very long.
- d. It was difficult to standardize the names.

6. The two-word naming system developed by Linnaeus is called _____.





























7. Circle the letter of each sentence that is true about binomial nomenclature.

- a. The system is no longer in use today.
- b. Each species is assigned a two-part scientific name.
- c. The scientific name is always written in italics.
- d. The second part of the scientific name is capitalized.

8. What is the genus of the grizzly bear, *Ursus arctos*? _____

Linnaeus's System of Classification (pages 449–450)

9. A group or level of organization in taxonomy is called a taxonomic category, or _____.
10. The largest taxonomic category in Linnaeus's system of classification is the _____, and the smallest is the _____.
11. What two kingdoms did Linnaeus name? _____
12. Fill in the name of each missing taxonomic category in the chart below.

Grizzly bear	Black bear	Giant panda	Red fox	Abert squirrel	Coral snake	Sea star	
							KINGDOM Animalia
<hr/>							
							Chordata
<hr/>							
						Mammalia	
<hr/>							
					Carnivora		
<hr/>							
				Ursidae			
<hr/>							
			Ursus				
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		SPECIES Ursus arctos					

Reading Skill Practice

Taking notes can help you identify and remember the most important information when you read. Take notes on Section 18–1 by writing the main headings and under each heading listing the most important points. Include in your notes the boldface terms and sentences. Do your work on a separate sheet of paper.