

Chapter 18

Systematics: Seeking Order Amidst
Diversity

18.1 How Are Organisms Named and Classified?

- The branch of biology that is concerned with naming and classifying organisms is known as **taxonomy**
 - Modern taxonomy was established by the Swedish naturalist Carolus Linnaeus
 - Linnaeus introduced the two-part scientific name to all organisms

- The two-part **scientific name** of an organism is formed from the genus and species
 - A **genus** is a group that includes a number of very closely related species
 - A **species** within a genus includes populations of organisms that can potentially interbreed under natural conditions
 - The genus *Sialia* (bluebirds) includes three species
 - *Sialia sialis* (the eastern bluebird)
 - *Sialia mexicana* (the western bluebird)
 - *Sialia currucoides* (the mountain bluebird)