

Chapter 14: Animals and Behavior

Section 1: What is an Animal?

What do you think of when you hear the word *animal*?

Animals come in many shapes and sizes.

- Some have four legs and fur while others do not.
- Some are too small while others are bigger than a school bus
- All part of the animal kingdom (review 7 parts)

Animals:

- Examples: spiders, fish, birds, slugs, kangaroos, monkeys, cats, dogs, corals, feather stars

Vertebrate: an animal that has a backbone


- Fishes, amphibians, reptiles, birds, mammals
 - Humans are one of the 5000 species of mammals
- Most familiar
- Minority...5% of known animal species are vertebrates

Invertebrate: an animal that does not have a backbone

- Insects, snails, jellyfish, worms
- Beetles make up 30% of animal species

Animal Characteristics:

- *Multicellular*: made of many cells
- *Eukaryotic*: has a nucleus
- Animals don't have cell walls but cell membranes

- Almost all animals reproduce sexually
 - Have sex cells – egg and sperm
 - When these join during fertilization, they form the first cell of a new organism
 - This cell divides into many cells to form an embryo
 - **Embryo:** an organism at an early stage of development
- Some animals can reproduce asexually
 -  Hydras can reproduce by budding
 - *Budding:* part of an organism breaks off and develops as a new organism
- Animal's cells develop into special cells like skin, muscle, nerve, or bone cells
 - These cells form tissues, organs, and so on
 - *Tissues:* collection of similar cells
 - *Organ:* a group of tissues that carry out a special function of the body
 - Heart, lungs, and kidneys
- Most animals move from place to place
 - Use movement to search for food, shelter, or mates at some stage of life
 - Some swim during early stages of their life
 - Some are stationary on rocks or the ocean floor
- Animals cannot make our own food like plants
- **Consumer:** an organism that eats other organisms
 - Herbivores: animals that eat plants
 - Carnivores: animals that eat meat
 - Omnivores: animals that eat both plants and meat