

The environment consists of many types of **organisms** including **plants** and **animals**.

- Organisms depend on the land, water, and air to live and grow.
- Plants need water and light to make their own food.
- Animals cannot make their own food and get energy from other sources.
- All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air. Ex: Turtle shell, crab claws, thorns, roots

Animal external structures examples:

Insects: have antennae, three body parts and six legs; usually have wings ex: ants, bees, butterflies- not spiders

Fish: have fins, live in water, breathe through gills Ex: sharks

Amphibians: have moist skins, no scales, live on land and in water, most lay eggs in water

Reptiles: have scales or rough, dry skin Ex: turtles, snakes, lizards

Birds: have a bill or beak, feathers , wings, and lay eggs

Mammals: have fur or hair, usually give birth to live young and can nurse their young with milk

Plant Terms and external structures:

Germination : process in which a plant begins to sprout or grow from the seed

Growth : process of getting larger in size and developing from a seedling to a mature plant

Fruit: part of flowering plant that helps the plant make new plants like itself.

Stem: part of the plant that grows out of the ground, supports the leaves, flowers, and fruit; carries water and nutrients from roots to rest of plant.

Leaf: flat, usually green part of the plant that grows from the stem.

Flowers : part of the plant that makes pollen; flowers have to receive pollen to make seeds; most flowers have special characteristics (color, scent) which attracts insects

Seeds: what flowering plants grow from; contains the "baby" plant and the food it will need to grow

Patterns in parent and offspring **behavior** that help offspring survive such as:

- Signals that offspring make (such as crying, cheeping, or other vocalizations) and the responses of the parents (such as feeding, comforting, or protecting the offspring).
- Behaviors of animal parents that help offspring survive (Ex: keeping offspring safe from predators by circling the young, feeding offspring, etc.)

Young plants and animals of the same type have similar, but not identical **external features** (for example: size and shape of body parts, color and/or type of any hair, leaf shape, stem rigidity, etc.) like their parents.

Earth's Place in the Universe

Objects in the Sky:

Moon: ball of rock that moves around Earth.

Sun: a star in the daytime sky that provides energy in the form of heat and light.

Moon phases: as the moon moves around Earth, it appears to change shape.

The moon reflects light from the sun and just like Earth, half of the moon is always lit by the sun.

Use observations of the sun, moon, and stars to describe patterns that can be predicted.

- The Sun appears to move across the sky during the day. It is lower in the sky in the morning (**sunrise**) and in the evening (**sunset**).
- Patterns during the year: Sunrise and sunset do not occur at the same times during the year.
- Seasons: fall, winter, spring, summer (different amounts of sunlight) Summer- when tilt is toward the sun Winter- when tilt is away from sun

