**Animal Adaptations**

An **adaptation** is anything about an animal that helps it live or survive in its environment.

Animals are always in danger of being eaten and have developed many ways of protecting themselves from hungry animals.

Animals may find winter shelter in holes in trees or logs, under rocks or leaves, or tunnel underground.

If animals do not adapt to their environment, they die!

* Camouflage
* Migrate
* Body Coverings
* Hibernate
* Estivate

1. **Camouflage** is when the animal blends in with the surrounding environment to help it hide. Some animals’ fur or skin can change color. This helps to protect them.
2. **Migration** Some animals travel to faraway places. This is called migration.

* Animals move from one habitat to another to survive.
* Animals are looking for warmer weather or searching for food.
* Many birds migrate in the fall. Birds can fly very long distances.
* Many fish migrate. They may swim south, or move into deeper, warmer water.
* Many insects also migrate.
* Whales, butterflies, bats, hummingbirds, robins, geese, ducks, salmon are some animals that migrate.

1. **Body Coverings** Some animals will grow new, thick fur in the fall to keep warm in the winter.

* An armadillo has a covering of hard plates to protect its body.
* The porcupine uses its quills for defense. A turtle can pull its head, feet, and tail inside its shell for protection.

1. **Hibernation** is when an animal goes through the winter into a long, deep sleep.

* One way animals can adapt to the changing environment is by hibernating.
* Some animals hibernate for part or all of the winter. The animal's body temperature drops, and its heartbeat and breathing slow down. It uses very little energy. In the fall, these animals get ready for winter by eating extra food and storing it as body fat. They use this fat for energy while hibernating. Some also store food like nuts or acorns to eat later in the winter. Bears, skunks, chipmunks, and some bats hibernate.
* Insects look for winter shelter in holes in the ground, under the bark of trees, deep inside rotting logs or in any small crack they can find.

1. **Estivate** is when an animal sleeps during the summer.

What causes an animal to estivate?

* Ground squirrels in the desert will estivate in their burrows to get out of the heat.
* Some toads estivate to escape the hot, dry summer.
* Many amphibians and reptiles estivate, as do some insects, snails, and fish.

**How do plants help animals?**

1. Plants provide food and shelter for many animals.
2. Plants are used to make medicines to fight disease and illnesses.
3. Animals use plants for shelter. For example, birds build nests and beavers build dams.
4. Plants provide oxygen that we need to live.
5. Plants provide protection for animals hiding.

**How do animals help plants?**

1. Animals help spread seeds.
2. Some animals, like squirrels, bury seeds when they store them and forget to go back to get them. Some of these seeds that are left in the ground will germinate.
3. Seeds attach to animals that have fur. Later the seeds will fall off the animal and grow in a new place.
4. Insects and birds help pollinate flowers.