For Creative Minds

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How Animals Use Their Tails

1 beaver

2 earwig

3 field cricket

4 coyote

5 red-tailed hawk

A My tail helps me fly. My short, wide tail feathers catch the wind and let me steer as I soar through the sky.

B My tail is for protecting myself. I have pincers on my tail to protect me from predators. Sometimes I use these pincers to attract a mate or fight over food with other animals like me.

C I use my tail to keep warm at night. When the weather gets cold, I curl up and sleep with my nose tucked into my tail. The soft, fluffy fur helps me stay warm even in snowy weather.

D I use my tail to lay eggs. I have a long, tube-like tail called an "ovipositor." This helps me lay my eggs inside plant stems or in the dirt.

E *Smack*. My tail slaps against the water with a booming sound. Other animals like me hear the sound and know a threat is nearby. They dive for cover. When I swim, I use my tail to steer.

Answers: 1-E, 2-B, 3-D, 4-C, 5-A

Match the Tail

Match each animal with its tail. Answers are below.

mallard

1

2

painted turtle

flying squirrel

3

4

hairy-tailed mole

woodchuck

5

6

fisher

Answers: 1-woodchuck, 2-mallard, 3-fisher, 4-flying squirrel, 5-hairy-tailed mole, 6-painted turtle

Tail Adaptations

Adaptations help animals to live in their habitat. Adaptations help them to get food and water, to protect themselves from predators, to survive weather, and even to help them make their homes. Adaptations can be physical or behavioral.

Body parts, body coverings, and camouflage are all **physical adaptations**. A bat's ears are adapted so that it can listen for echoes to "see" its surroundings at night. A toad's brown, bumpy skin helps it blend in with soil and leaves.

Instincts and habits learned from other animals are **behavioral adaptations**. Some animals hibernate through the winter to conserve energy while other animals may migrate to warmer locations where they can find food. An opossum faints and looks like it is dead so predators won't eat it.

Are the animal tails in this section examples of physical or behavioral adaptations?

Even though they are called flying squirrels, these small rodents do not fly, or propel themselves through the air. Instead, they glide from a spot on one tree to a lower spot on another tree, or the ground. Flying squirrels run up a tree, jump into the air and stretch out their feet, using the flap of skin (patagium) that goes from their front feet to their hind feet as a parachute. While gliding downwards, they use their tail to keep from wobbling back and forth in the air and as a brake to slow down before they reach their landing spot. Flying squirrels can glide more than 150 feet in one glide.

Most salamanders have tails which they can shed when attacked by a predator. When the predator grabs a salamander by the tail, the tail separates from the salamander, allowing it to escape. The salamander's tail grows back in a few months. Sometimes a salamander's tail that has been shed will continue to wiggle, fooling the predator into watching it, rather than chasing after the salamander that shed it.

Salamanders that live in the water move their tails from side to side, propelling them through the water. Some salamanders that live on land and climb trees can grasp the bark with their tail. Still other salamanders use their tails when attracting a mate or for storage of food.

Fireflies, also called lightening bugs, do not have a real tail. What they do have is a special tip at the end of their abdomen that they can light up. When we want to say “hello” to someone who is not right next to us, we wave to them. When a firefly wants to say “hello” to another firefly, it flashes the tail-like tip of its body. There are many kinds (species) of fireflies, and most are active at night when they cannot see each other very well. A firefly can light up the tip of its body and turn it on and off like a flashlight to signal to another firefly. Each species of firefly has a certain pattern of flashes that it uses, so even in the dark fireflies can tell if they have found another firefly like themselves. Males and females of the same species flash back and forth to each other if they want to get to know each other better.

Some bats don’t have tails. But most do. In some species, the tail extends beyond the skin (membrane) that connects its thighs. This looks something like a mouse’s tail. Sometimes these bats use their tails to feel their way as they back into a crack. In other species, the tail runs just to the edge of the membrane. Whether a bat’s tail is short or long, the bat uses it to take off into the air, to fly, to change direction while flying, and to sweep prey up into its mouth.

A North American river otter’s tail is about one-third the length of its body. It is very long, very wide and very muscular. An otter uses its tail to help it swim fast through the water. It also uses its tail to steer when swimming slowly and to help prop itself up when it is standing on its hind legs.

These are all physical adaptations.