

Activity 4 – 4th Grade Animal Behavior & Adaptations Definitions

The vocabulary from Activity 1 on the scientific method is important for all your science lessons. Review the Activity 1 vocabulary, with emphasis on the words *analyze*, *control*, *dependent variable*, *experiment*, *experimental error*, *hypothesis*, *independent variable*, *inference*, *observation*, and *scientific method*.

Adaptation – Physical or behavioral changes in an individual or species that enhance its chances of survival in its habitat.

Annelida – A phylum of organisms that have joined segmented body parts; earthworms are Annelids.

Annuli – The narrow, band-like segments of an earthworm’s body.

Behavior – The way that animals react to situations in their environment.

Burrows – Holes that animals dig into the ground for shelter.

Castings – An earthworm’s waste products.

Clitellum – The swollen ring around the earthworm’s body that secretes mucus necessary for fertilization and for releasing egg cases.

Cocoon – A structure that surrounds the larval stage of worms.

Community – Different species of plants and animals living in the same ecosystem.

Consumers – Animals, and in rare cases plants, that eat other animals and/or plants to fulfill their own nutritional energy requirements.

Earthworm – A terrestrial invertebrate of the phylum Annelida that has a cylindrical segmented body and that eats organic matter in the soil as it burrows into the ground.

Ecosystem – A specific geographic region characterized by the local landforms, the various plants and animals that live there, and the prevailing climatic conditions such as temperature and rainfall.

Food chain – The pathway by which organisms obtain, use, and transfer energy (Example—plants are eaten by a grazing animal, and a larger predator eats the grazer; grass→rabbit→bobcat).

Gizzard – A section of the earthworm’s digestive tract where food is ground up.

Instinct – Behavior that is unlearned and helps an organism survive and adapt to changing conditions.

Invertebrate – Animals lacking backbones or spinal columns, such as worms, mollusks, insects, and spiders.

Learning – A process of acquiring information through trial and error.

Migration – The movement of organisms from one habitat to another based on changes in weather, seasons, and/or resources.

Mucus – A thick, moist, slimy substance produced by the earthworm's skin.

Nocturnal – Being active during the night.

Obstacle – Anything that gets in the way; an obstruction.

Odor – The smell of something as sensed through the nose.

Oligochaetologists – Scientists who study earthworms of the class Oligochaeta.

Omnivore – Animal that is able to eat plants and animals as food.

Phylum – One of the levels of classification of organisms; a category of classification that groups “classes” of organisms together based on their physical traits. Example—The rat snake I saw today is in the **kingdom** Animalia, the **phylum** Chordata, the **class** Reptilia, the **order** Squamata, the **family** Colubridae, the **genus** *Elaphe*, and the **species** *obsoleta*.

Population – The total number of individuals of a given species living in the same area.

Predators – Organisms that obtain their nutritional energy by killing and eating other organisms.

Prefer/preference – To select one thing over another; to choose.

Prey – Any creature that is hunted and eaten for food.

Reaction – The response to a stimulus.

Setae – Short, stiff hairs or bristles; earthworms have four pairs located on each segment of their body to help them move.

Stimulus – Something that can cause a reaction or response.

Vibration – Movements that can be felt through the ground by earthworms.