

Energy & Food Chains

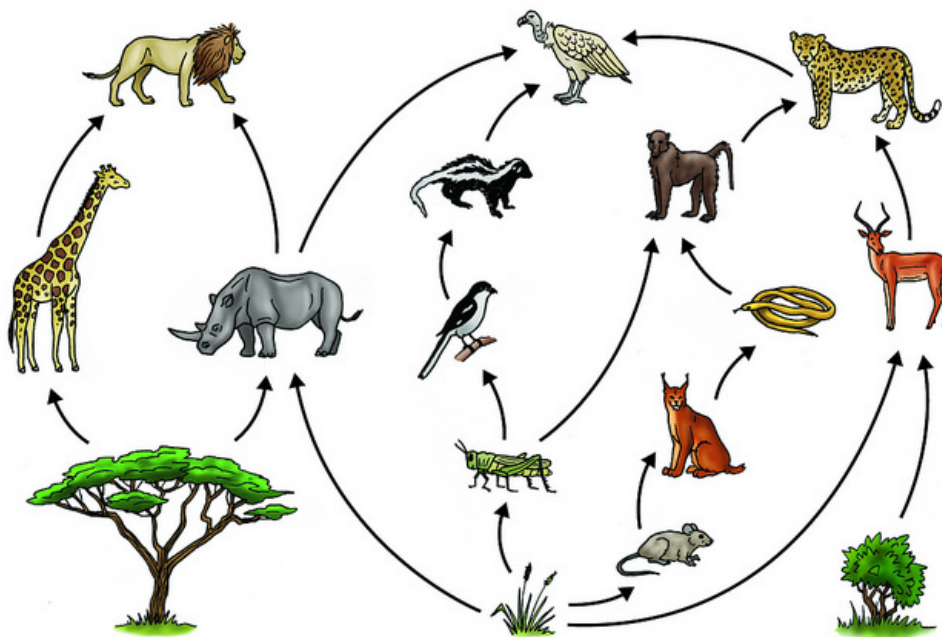
In this lesson, students will learn about predator/prey relationships and how energy is transferred throughout a food chain. Activities will include playing a game to see who can make the longest food chain and tracing last night's dinner all the way to the sun!

5-PS3-1 Energy

Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

Teacher preparation prior to the lesson:

- Divide students into groups of 2-3 students/group to play a game when it is time
- Make copies of the food chain card game attached. If you can copy on cardstock, it will be much better than paper. Each group will need a set of cards. Please make sure they are cut out ahead of time to save time.
- Ensure that students each have a blank sheet of printer paper and a pencil for an activity.



Program Connection Information

Please use an external microphone (conference style) rather than the integrated one in the computer for the audio for your class and locate it centrally in the room. It can be difficult for the Greenbush teacher to hear the students using the computer microphone and therefore it reduces the interactive nature of the lesson. It is fine to use the computer webcam for your video source.

All classes will take place using Zoom desktop video. If your building is already set up to use a desktop video application with a computer, simply open a browser and enter <https://greenbush.zoom.us/j/2326746414> in the URL space. You may need to download Zoom launcher software (free download) if you don't already have it. This needs to be done in advance of the lesson.

If using a Polycom video conferencing unit (or any legacy type video conferencing unit) to connect to a ZOOM conference, make sure the unit is in "encrypted mode" then dial the following IP on the internet: 162.255.37.11 or 162.255.36.11 and once connected, they will ask for a MEETING ID: enter 232 674 6414 (for Lisa at Science Center).

It's always a good idea to touch base with your district technology facilitator prior to your program to make sure all systems/equipment are in place and operational and that there aren't any firewalls in place that might prevent you from connecting to Zoom.

Once you connect, you will enter a Zoom waiting room. Your Greenbush teacher will admit you into the final meeting room.

If you have questions, please email me at lisa.little@greenbush.org

Jumping Spider



I pounce on insects that spend time on the ground. I eat crickets, ants, cockroaches, caterpillars and even daddy long legs.

Fence Lizard



I eat ants, beetles, crickets, caterpillars, cockroaches, pill bugs, snails, and spiders.

Dead Leaves



I may not look tasty but I'm just what some animals want for lunch!

Mouse



Mice eat human food when they can find it. I also eat seeds, nuts, or snack on vegetables like zucchini or tomatoes. Sometimes I eat crickets and beetles.



Piegon

You can feed me popcorn, bread crumbs and peanuts. But when no one gives me human food, I eat seeds and berries – plus snails, earthworms and crickets.

Web-spinning Spider



I eat flying insects. House flies, butterflies, and even honeybees can get caught in my web. Dinner is served!

Crow

I eat almost anything: acorns, fruits, seeds and



human food. I like beetles, crickets, and cockroaches. I hunt for animals like frogs, moles, mice, and lizards. I even steal eggs from the nests of robins, sparrows and pigeons.

House Cat



I eat cat food, but I like to hunt too. I prey on mice, gophers, squirrels, and all birds and even lizards!

Swallowtail Butterfly



I drink nectar from flowers and I'm not picky about what flowers. I'm happy in a flower garden, vegetable garden or a clover patch. Even a parsley plant is fine with me.

Sparrow



I eat seeds, grains, grass and berries. I'll also eat bread crumbs if they are around. Sometimes I'll snack on ants.

Clover



I have leaves flowers and small seeds. They are a great snack if you like that sort of thing.

Opossum



I eat all sorts of things. I catch frogs, moles, snakes, mice and salamanders. I snack on beetles cockroaches, earthworms, crickets and snails. I'm also happy to eat vegetables, seeds and even human food.

Snail



I eat soft green plant leaves – lettuce, parsley, flower leaves, clover and even green grass. Oak leaves are too tough for me, but if I'm hungry I'll nibble on dead leaves.

Cricket



I eat seeds, small fruits, and leaves – either fresh off the plant or dead on the ground! And I'm always hungry! Every day, I eat my own body weight in food.

Lunch Leftovers



I'm the lunch some kid didn't finish – half a peanut butter sandwich and an apple with a bite out of it. That's ok – I'm the perfect treat for some hungry animal.

Robin



I hop around searching for worms, caterpillars, snails, beetles, crickets, ants, spiders and even daddy long legs. I'll also eat fruits and berries off bushes and trees.

Caterpillar of a Moth



I chow down on rotting wood and dead leaves. That's why you can usually find me hiding under a rotting log.

Beetle



I eat caterpillars. In fact, some people call me the caterpillar hunter. I'll also eat earthworms and snails.

Rotting Log



I'm where hungry animals can find rotting wood, bark and dead leaves. I'm tasty eating for the right critter!

Raccoon



Sometimes I raid your trash can for foods you threw away. In the wild I eat nuts, fruits, beetles, worms, frogs, salamanders, mice, moles and snakes.

Salamander



I eat nice crunchy beetles, ants, crickets, long with snails, spiders, ants, and pillbugs. Want to join me for lunch?

Frog



I eat insects with my long sticky tongue – beetles, cockroaches, crickets, houseflies, butterflies, and even bees. I'll also snack on earthworms, snails, and pillbugs! YUM!

Parsley Plant



I'm where animals can find leaves, flowers and small seeds. I'm one of the only plants that swallowtail caterpillars eat! Bragging rights!

Hawk



I swoop down and grab small animals with my sharp claws. I eat gophers, mice, pigeons, robins, sparrows, even lizards and snakes!

Daddy Longlegs



I eat insects of all kinds – along with worms, snails, and pill bugs. I’m not a spider, but I eat spiders when I catch them.

Cockroach



I eat many things including bark, paper, leaves (living and dead), and any human food I can find. I’m particularly fond of cheese.

Coyote



I’m a hunter and scavenger that eat anything from frogs, lizards, fish, fruit and carrion. Grasshoppers and other insects are important to juveniles learning the stalk and pounce method of hunting!

Oak Tree



Some animals are nuts about me! After all, I provide lots of acorns – along with leaves and bark.

Mole



I chow down underground (and under logs). I’ll eat beetles, earthworms, pill bugs, and crickets. I stay hidden in my tunnel, safe from hawks & housecats!

Ant



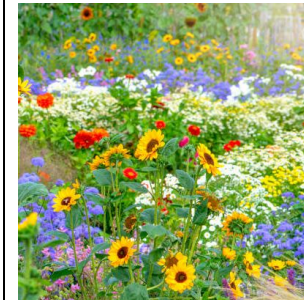
I’m happy to eat human food like peanut butter, but when that’s not around I’ll eat nectar from flowers, seeds from grasses, and any dead insects I find lying around.

Gopher



I tunnel underground and gnaw the roots of plants – any plants! Sometimes I leave my hole to snack on leaves – keeping an eye out for animals that want to snack on me!

Flower Garden



Come and get it! I have flowers with sweet nectar plus lots of leaves and seeds!

Garter Snakes



I hunt in the grass for ants, beetles, pill bugs, cockroaches, crickets, earthworms, and spiders. I also eat mice, frogs, salamanders & lizards. Don't be scared of me...unless you're on my list of snacks!

Swallowtail Caterpillar



Like many caterpillars, I'm a picky eater. I only eat carrot leaves and parsley plants from vegetable gardens.

Gray Squirrel



I eat nuts, like acorns from oak trees. But that's not all! I eat seeds, fruit, birds' eggs, even lunch leftovers! Peanut butter sandwich? Please!

Grass



I have lots of leaves and seeds. That's lunch for lots of critters!

Earthworm



I eat bits of plants – like dead leaves or rotting wood. Anywhere that leaves are falling, I can find something for lunch!

Honeybee



I eat pollen and nectar from flowers. I'm happy anywhere flowers bloom – a flower garden, vegetable garden, a parsley plant or a patch of clover.

Pill Bug



I eat dead leaves, rotting wood, and the fungi that grow on them. Look for me under logs. Poke me, and I roll in a ball – that's why some people call me roly poly!

Veggie Garden



If you're looking for lettuce, tomatoes, cucumbers, and zucchini squash, I'm the place! Stop by for some leaves and flowers too!