

EXAMINE AN EARTHWORM



What will you spot with your magnifier?

What you'll need:

- A clear, cylindrical plastic container with a tight-fitting lid, such as a reusable water bottle
- Water

Create:

1. Add water to your cylindrical container until it is completely full. If you notice an air bubble, try adding more water to get rid of the bubble or make it as small as possible.
2. Put the lid on the container and screw it on tightly. Your magnifier is ready!
3. Print this activity or view it on your phone or tablet screen. Hold your magnifier up sideways and look through it to examine the worm pictures on both pages of this activity. What do you notice?



Play:

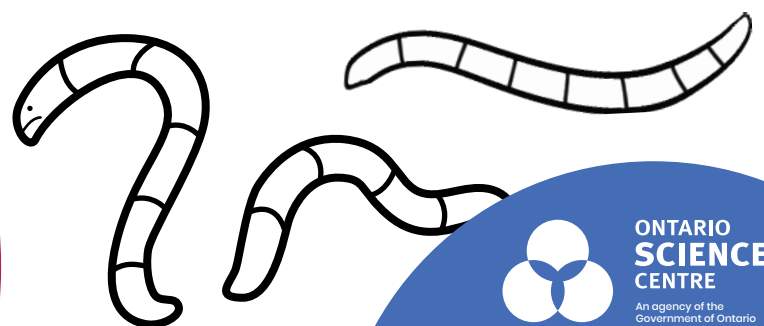
You can use your magnifier when you want to look at things that are too small to see clearly. Try using your magnifier to look at the worms on this page and the next. What do you see? Which worm has the most lines? Which one is smiling?

Use your magnifier to look at small things around your home, then head outside. Take a close look at the plants or insects you see.

Learn:

All about earthworms

There are many different earthworm species. These creatures have unique bodies that allow them to move easily through soil. Their bodies are divided into **sections** or **segments**, and each segment has muscles and tiny bristles called **setae**. The segments keep the earthworm flexible, allowing it to wiggle, and the setae help the earthworm move forward through soil.



Here's a song you can sing while you play! Try singing these words to the tune of "Row, Row, Row Your Boat."

*Squirm, squirm, squirmy worm,
Digging underground,
Wiggle left and wiggle right,
Tunnelling all around!*

*Squirm, squirm, squirmy worm,
Crawling through the grass,
Sliding left and sliding right,
Now you're home at last!*



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Earthworms are a reddish brown colour. They do not have legs, eyes or lungs.

Instead of breathing, the earthworm absorbs oxygen through its moist skin. Earthworms do have mouths, but they do not have teeth. To eat, the earthworm has a special lip that grabs food from the soil and pushes it down into the worm's throat and stomach.

Earthworms are **cold blooded**, which means they do not produce their own body heat. To survive the winter, some species of earthworms hibernate. When temperatures fall below 0 °C and water in the soil freezes, these worms burrow deeper into the soil for warmth. Many soil animals, including earthworms, remain active under the top layer of frost—even if the soil temperature is only 4 °C!

Other species of earthworms rely on special chemicals in their bodies to survive the winter. These earthworms avoid freezing by increasing the amount of sugars in their bodies, which reduces the temperature at which they will freeze.

How do earthworms help gardens?



Did you know that earthworms help gardens grow? These interesting creatures help keep soil healthy by eating and breaking down organic matter, including dead roots, leaves, grasses



and fungi. After the earthworm digests this matter, it leaves behind lots of rich nutrients in its waste, which helps plants grow.

Another way earthworms keep soil healthy is by digging tunnels. As the worm moves underground, it loosens the soil. This allows water to reach the roots of growing plants.

Earthworms are also a very important part of the food chain. They are prey for many other animals, including birds, frogs, moles and even beetles. Earthworms are blind, but they can sense vibrations above them, which lets them know a predator is near. When an earthworm notices these vibrations, it will burrow deeper into the soil or try to wiggle away. Some worm species also release a bad-tasting secretion so that predators spit them out.

