

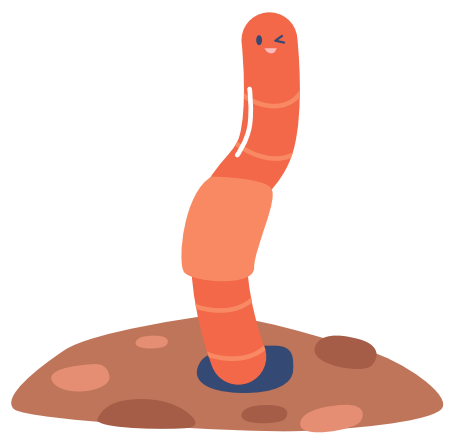
☆  
☆ Secret Lives  
of Earthworms



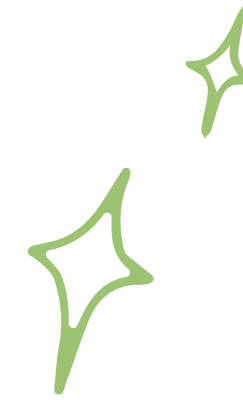
Earthworms are an important part of our ecosystem, especially for soil health

In this lesson K to Grade 4 students will learn:

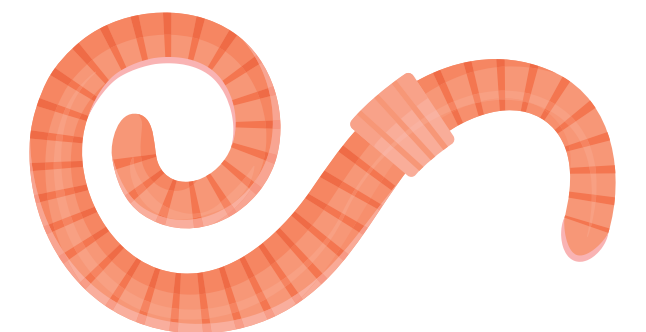
- ✓ Living things have life cycles adapted to and can sense their environment
- ✓ Experience and interpret the local environment
- ✓ Daily and seasonal changes affect all living things



# Did you know?...

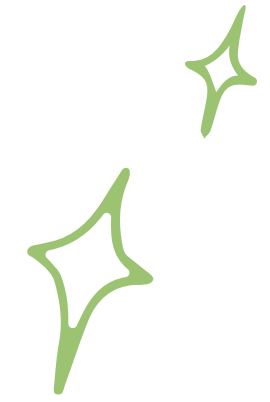


- Did you know that earthworms have been around as long as dinosaurs over 200 million year ago?
- Earthworms didn't originate in North America, they were brought over by European settlers that were migrating to new homes.
- Earthworms can live between one to ten years depending on the species.
- If an earthworm is injured or cut near it's head, it will not grow back or survive.



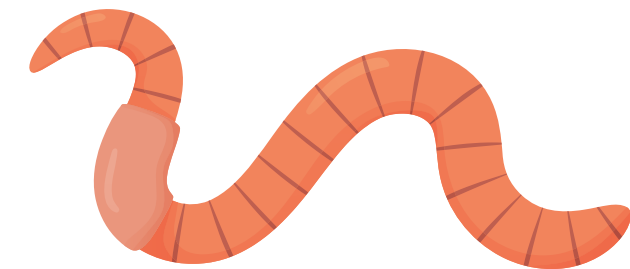


# Are earthworms insects?



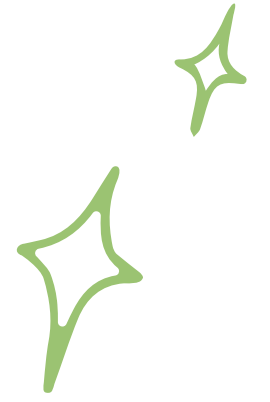
Earthworms are not insects, they belong to the Annelid family. They don't have a skeleton, instead they have ring like segments of muscles and fluid.

Insects have an exoskeleton, and 3 body parts: head, thorax and abdomen.





# What do earthworms eat?

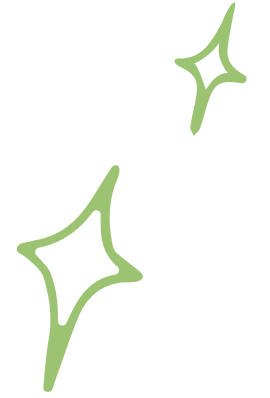


Earthworms don't have eyes, or teeth, however they do have a mouth.

They eat micro organisms we can't see like bacteria and fungi, and decaying plants, roots, and leaves. They also take in soil and small rocks/stones that travel to their gizzard/stomach which help them break up the food to make worm poop - also called **worm castings** which is a form of compost that helps keep the soil healthy!

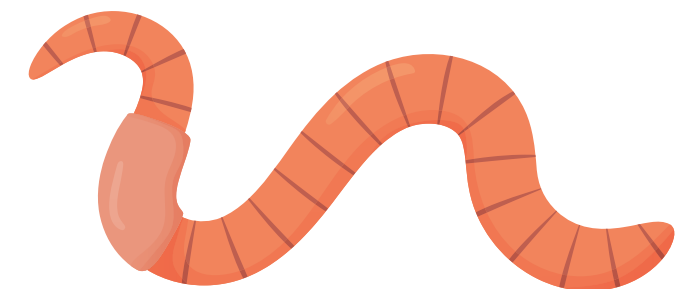


# How do earthworms move?



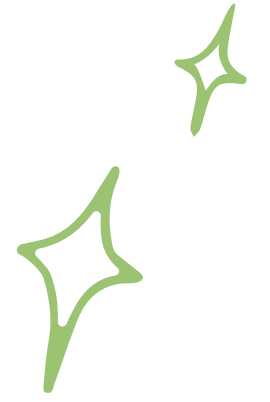
Earthworms inch forward by squeezing and stretching their muscles to move. To help with the movement, tiny hairs or bristles called **setae** cover the worm's body to help it grip the surface of the soil or ground.

Earthworms create shallow and deep burrows in the soil allowing for good air flow which helps the plants roots grow deeper and stronger.





Do earthworms breathe?

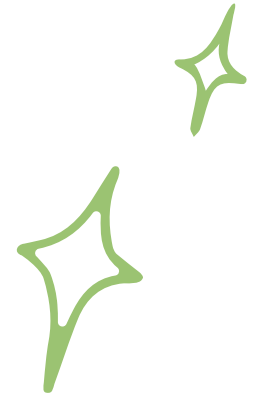


YES!

Earthworms don't have lungs. They breathe through their skin which needs to stay moist.



Do earthworms like the sun?



NO!

Too much sunlight is bad for earthworms as it can dry out their skin which needs to stay moist. The sunlight can paralyze the earthworms and they will eventually die.

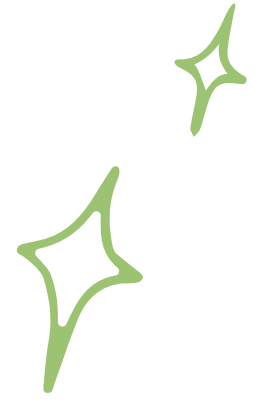


**SPEC** School Gardens





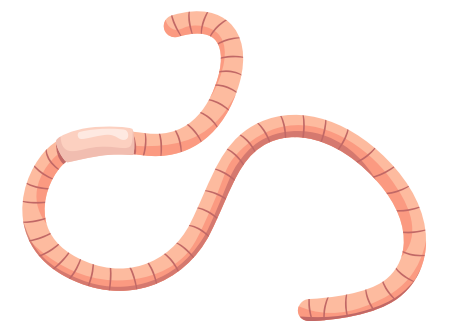
# Where do earthworms live?



There are many different types of worms.

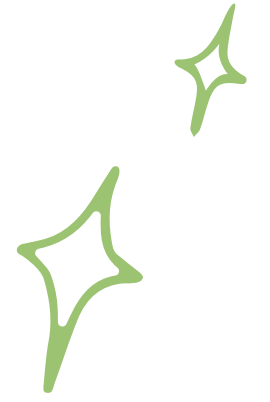
Redworms (Red Wigglers or Tiger worms) live in compost bins or soil and break down plant material into soil.

Earthworms live in ground in soil, always on the move. Some live in the first 3-4 inches of soil, some burrow deeper at 6 - 12 inches and some live as deep as 7 FT in the ground.





# Why do earthworms come to the surface on a rainy day?

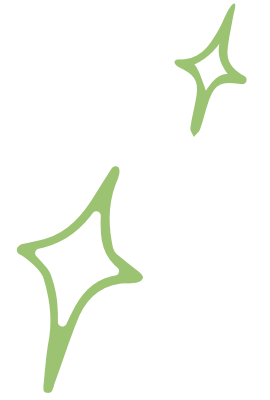


Most earthworms surface on a rainy day as they are migrating to a new home. They can cover more ground, moving faster than in wet soil. Earthworms don't drown as they need moisture to survive and can endure the rainy puddles or water logged soil.





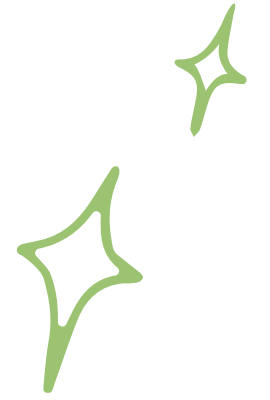
Do earthworms have any predators?



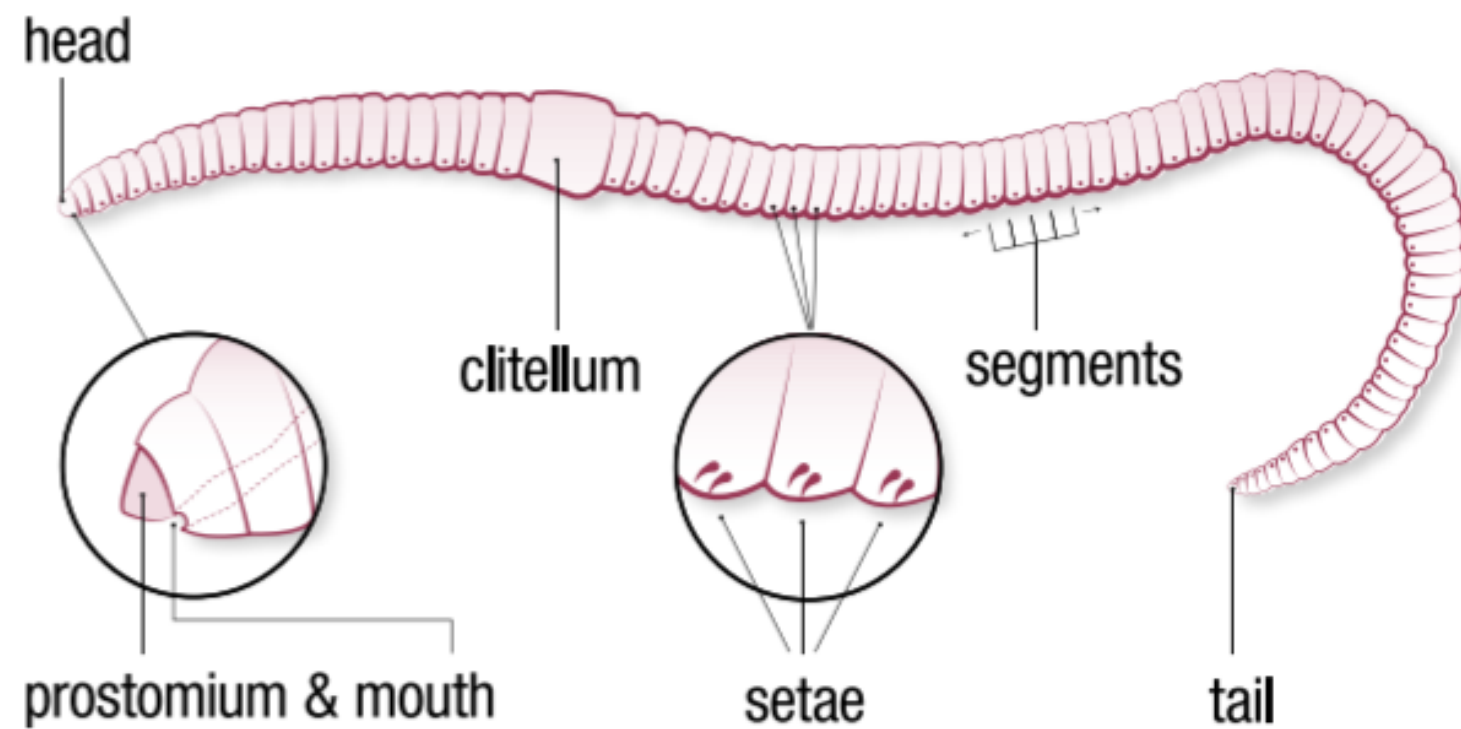
YES! Moles and robins are the biggest predators of the earthworm. Ground beetles, birds, skunks, snakes, frogs, ants, mites also feed on earthworms in the evening when they worms are the most active and come to the surface of the soil.



# Activity



## The Earthworm

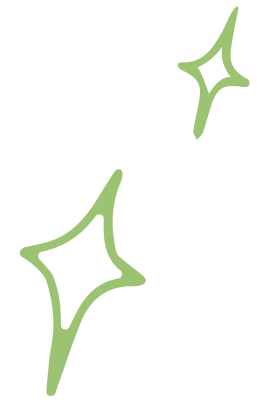
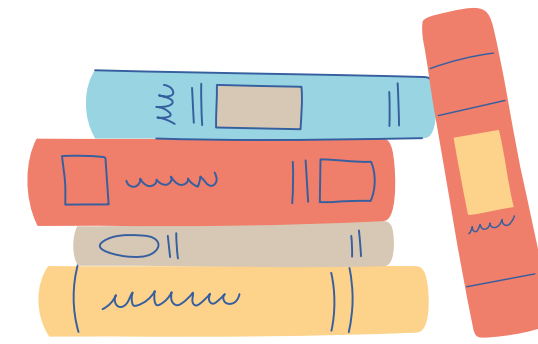


Original poster concept credit: Catriona Gordon

SPEC Green Thumbs at School: Food Garden Lesson Book (pg. 22, 25-27)



# Books & Resources



Yucky Worms by Vivian French

Garden Wigglers: Earthworms in your Backyard by Claire Llewellyn

An Earthworm's Life by John Himmelman

The Life Cycle of an Earthworm by Bobby Kalman

Wonderful Worms by Linda Glasser

[SPEC Green Thumbs at School: Food Garden Lesson Book \(pg. 25 - 27\)](#)

