# Wiggly Worms

A Reading A-Z Level M Leveled Book Word Count: 475





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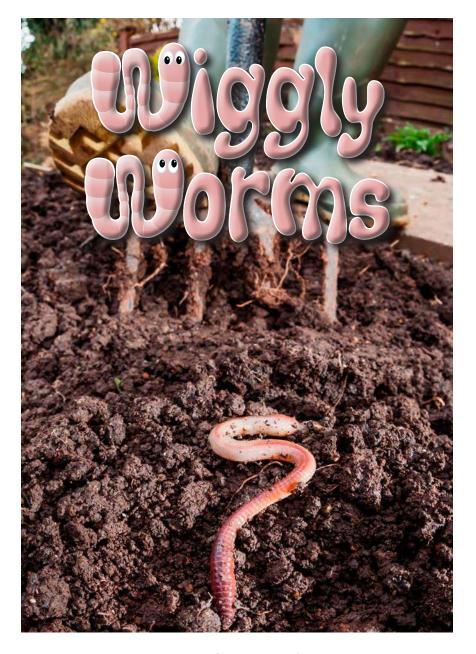
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# Glossary

short, stiff hairs on

bristles (n.)

DIISTICS (III)	Sitory Still Halls off
	an animal's skin (p. 6)
castings (n.)	the solid waste of
	an earthworm (p. 12)
cocoon (n.)	a covering that protects
	something (p. 8)
fertilizer (n.)	a natural or chemical
	substance that promotes
	plant growth (p. 12)
mate (v.)	to come together to
	reproduce, or make babies
	(p. 8)
mucus (n.)	a thick, slimy liquid created
	in a body to protect tissues
	and keep them wet (p. 7)
muscle (n.)	a type of body tissue that
	contracts and relaxes to
	allow movement (p. 5)
<b>nutrients</b> (n.)	substances that living things
	need to live, stay healthy,
	and grow (p. 12)
soil (n.)	the top layer of the ground
	in which plants grow; dirt
	(p. 4)



Written by Cheryl Reifsnyder

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Title page: An earthworm crawls away after being dug out of the ground by a gardener.

Page 3: A worm sticks its head out of its tunnel near some mushrooms.

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#### Correlation

LEVEL M	
Fountas & Pinnell	L
Reading Recovery	18
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An earthworm pokes its head out of its hole.

Earthworms may be small, but they have a big job: helping plants grow!

# In one night, an earthworm can...

- Eat up to one-third of its body weight
- Travel up to 60 feet (18 m)—the distance from the pitcher's mound to home plate in a baseball diamond.

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A mole (top left), a shrew (top right), and a toad (bottom) all make meals of worms.

# Wanted: Earthworms!

Farmers aren't the only ones who love earthworms. Moles, rats, and toads love juicy night crawlers. They love to eat them! Fish think earthworms are tasty, too. Earthworms are an important food source for these and other animals.



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An earthworm's body has many rings and can twist and turn.

# Small Animals, Big Changes

What animal eats dirt, builds tunnels in the **soil**, and comes out at night? If you guessed an earthworm, you're right!

Earthworms, or night crawlers, are found all around the world. These small animals change the soil in big ways.

Some people raise earthworms on worm farms. The earthworms eat food scraps, turning them into rich soil. Both earthworms and their castings can be sold to gardeners to improve their soil. Earthworms are also sold for fishing bait.



Worms can turn food scraps (main photo) into dark, rich soil (inset).



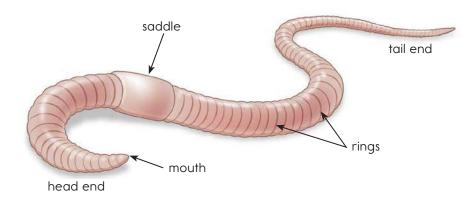
A worm crawls over a large mound of castings.

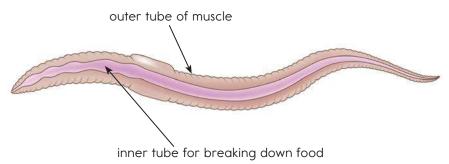
Earthworms also put **nutrients** into the soil. The nutrients are in their waste, or **castings**. Castings make excellent **fertilizer**.

In a garden smaller than most classrooms, earthworms make 170 pounds (77 kg) of castings every year. That's like fifteen bowling balls' worth of worm waste!

# **Earthworm Bodies**

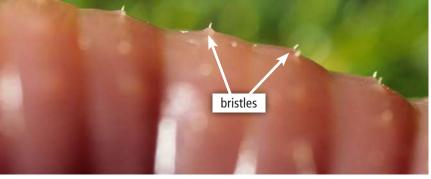
An earthworm's body is shaped like one tube inside another. A tube of **muscle** surrounds a tube that breaks down the food that the worm eats. An earthworm's body has more than one hundred ringshaped parts. Each part can bend and stretch when the worm moves.





An earthworm moves by stretching out and pulling in its body parts. Small **bristles** on the worm's body help it grip the ground.





### **Earthworm Facts**

**Common names** Classification Life span

Size (common species) Habitat

Earthworm, night crawler Invertebrate (no backbone) Up to 6 years

 $3\frac{1}{2}$ -12 inches (9-30 cm) All types except deserts and areas

where the ground is always frozen; prefer moist, rich soil

Earthworm tunnels help water and air reach plant roots.

# Earthworms Are Good for the Soil

Farmers love earthworms! When earthworms dig tunnels, they make space in the soil. The space helps plants get what they need to grow.

Earthworms also put organic matter, such as rotting leaves, into the soil. Organic matter acts like a sponge. It soaks up water, so soil stays wet longer.

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A worm pulls a rotting leaf into its hole.

Earthworms don't have ears, but they can sense tiny movements in the ground. They don't have eyes, but special parts of their skin can sense light. They avoid bright light.

Earthworms are sometimes called night crawlers because they come out at night to look for food. They use their mouths to pull dead leaves and plants into their tunnels to eat later.





**Slimy Worms!** 

Slimy mucus on an earthworm's skin helps it stay cool and wet.

Mucus helps earthworms slide through soil. When they dig, earthworms leave a mucus trail behind them. The mucus hardens on the tunnel walls, keeping them from falling in.



Worms also use mucus to protect

their eggs after they mate. The mucus hardens into a worm cocoon. Baby worms stay in the cocoon for weeks or months. They come out when the soil is warm and wet enough for them to survive.

### How do earthworms breathe?

Earthworms don't breathe through their mouths. They breathe through their skin, taking in oxygen directly from the air. That's why earthworms crowd sidewalks when it rains: underwater, they will drown. They can't survive if their skin dries out, either. They can only breathe when their skin is moist.



Earthworms are surprisingly strong—as birds discover when they try to pull them out of their holes.

# **Earthworm Behavior**

Earthworms build long tunnels underground. The tunnels protect worms from heat and sunlight. The tunnels also help earthworms hide from hungry animals. If a bird attacks, an earthworm can pull back into its tunnel to get away.