

DISCOVER
our **AMAZING**
WORLD
CLIL READERS

Worms

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Life

in the Ground

The next time you are outside, take a look at the ground below your feet. You may see dirt or rocks, but look a little bit closer. There is another world right under us. In this world, worms dig large burrows and help plants grow. Snails and slugs slowly creep along, leaving slimy trails behind them. Centipedes hunt for prey in the dark of night. The creatures under our feet are part of a complex world which has existed for millions of years, and there is much to learn about it.





An

Earthworm's

Job Is Never Done

As a worm moves through the ground, it takes soil into its mouth. The worm digests the soil, cleaning it of toxic waste and dead animal and plant material. The worm then passes the clean soil with its waste. The materials that a worm passes after digesting its food are called castings. A worm produces its own weight in castings every day. Worm castings have large amounts

of the element nitrogen. Nitrogen is very important for plant growth. In fact, it is the main ingredient in fertilizers. Worm castings also help to keep the pH balance of soil. The pH scale is a measure of how much acid is in a mixture. Worm castings are almost neutral – not too acidic and not too basic, or alkaline. This helps to keep the soil in a good pH range for healthy plant growth.



Over a lifetime, the worms in 2.5 acres of soil can produce 100 tons of castings!

Worms can dig from twenty inches to six and a half feet below the surface of the ground. They eat this soil and leave their castings in the upper layers of the soil. This helps to mix the soil and refresh the dirt on the surface. As the worms move, they leave a tunnel space behind them. These tunnels are good for the soil for several reasons. First, they allow water to get into the ground. Soil that has worm tunnels absorbs four to ten times as much water as soil without tunnels. Second, they loosen the soil. This allows plant roots to grow deep into the ground. Finally, the tunnels let oxygen enter the soil. Soil with a high level of oxygen is important for plant growth.



Egypt's Tiny Farmers

Word Bank

(pp. 8-9)

bank (n) = riverside

valley (n) = low-lying land

fertile (adj) = (of land) able to produce strong and healthy crops

provide (v) = to give; to supply

kingdom (n) = a country ruled by a king or a queen

breeze (n) = a gentle wind

blooming (adj) = flowering

wonder (v) = to ask oneself

bend down (phr v) = to move the top half of the body down

disgusting (adj) = very unpleasant

crush (v) = to squash; to press flat

examine (v) = to look at closely

stomp (v) = to walk heavily

step on (v) = to put one's foot down on sth

squash (v) = to crush

eventually (adv) = in the end

word spread (phr) = news became known

be rid of sth (phr) = to no longer have sth

mysteriously (adv) = in a strange way

panic (v) = to have a strong feeling of fear

ruler (n) = a king or a queen

concerned (adj) = worried

cause (n) = a reason why sth happens

advisor (n) = sb whose job is to give advice

secret (n) = sth known by few

strange (adj) = unusual

wither (v) = to dry up and die

belong (v) = to have the right to be somewhere

punish (v) = to make sb suffer because of sth they did

law (n) = a rule set by a government


citizen (n) = a person who lives in a town or city

respect (v) = to think well of sb or sth because they are important, useful, etc.

Pre-Reading activities

1 a) Choose the word or phrase you think best completes each sentence.

- 1 When the farmer saw a worm for the first time he thought it was **interesting/disgusting**.
- 2 The farmer **stepped on/picked up** all the worms on his farm.
- 3 The farmer asked the other farmers **to come and see the strange creatures on his farm/to check their farms for worms**.
- 4 The other farmers were **worried/glad** that their farms had worms too.
- 5 When the worms disappeared, the farms started **drying out/growing better crops**.
- 6 Cleopatra visited **many farms in the area/every farm in Egypt**.
- 7 Cleopatra said that the gods were punishing **the farmers who were killing the worms/the farmers who did not believe in the gods**.
- 8 The Queen decided that **worms should be respected like gods/farmers who killed worms would be punished**.

b)  Listen, read, and check.

While-Reading activities

2 Match the beginnings of the sentences to their endings.

- 1 The creature that the farmer saw in his field ...
- 2 The farmers continued killing worms ...
- 3 Cleopatra visited a farm ...
- 4 Cleopatra asked a farmer ...
- 5 After the queen's orders,
- 6 The River Nile valley ...

- A ... together with her advisors.
- B ... the farmers stopped killing the worms.
- C ... for years.
- D ... was able to grow strong and healthy crops again.
- E ... didn't have eyes or a nose.
- F ... if he always killed worms.

3 Fill in: *fertile, panic, examine, banks, kingdom, law, cause, citizens.*

- 1 There were many fields near the of the River Nile.
- 2 The new which Cleopatra made said that the of Egypt weren't allowed to kill worms any more.
- 3 The farmers began to when they saw that their fields weren't producing enough food.
- 4 Cleopatra wanted to know the of the problem in the fields.
- 5 The valley around the Nile was very and produced enough food for everyone in the of Egypt.
- 6 The farmer took the strange creature he found on his field to it.

4 Use: *wither, strange, provide, eventually* and **belong to** to replace the words/phrases in bold.

- 1 Cleopatra found it **unusual** that only some of the farms were dying.
- 2 **In the end**, the crops on the farms started growing strong and healthy again.
- 3 Some farmers felt that worms did not **have the right to be** on their farms.
- 4 At first, farmers couldn't understand what was causing their crops to **dry up and die**.
- 5 After a while, the Queen understood that farms without worms couldn't **yield** food for her people.

After-Reading activities


5 Put the events in the order they happened.

- A She took her advisors and visited different farms to see what the problem was.
- B The farmers started growing good crops again.
- C He thought it was a terrible creature and killed it, together with all the other worms on his farm.
- D She saw that the farms that had no worms didn't produce healthy crops.
- E One day, a farmer saw a worm on his farm.
- F Cleopatra wanted to know why the farms were in trouble.
- G Soon, other farmers started doing the same thing on their farms.
- H The worms returned to the farms.
- I As time went by, most farms stopped producing enough healthy crops to feed everyone.
- J She understood how important worms were, and ordered farmers to stop killing them.


6 Use the events you put in order in Ex. 5 to give the class a summary of the chapter.

Review

Listening Activities

1  Listen to a dialogue about worms. For questions 1-3 choose the correct answer A, B, C, or D.

- 1 What are the speakers mainly discussing?
 - A how worms can be useful
 - B how worms hurt plants
 - C how to keep worms away
 - D how to start a worm farm
- 2 How did the woman feel about worms before talking to the man?
 - A She felt they were interesting.
 - B She thought they were harmful.
 - C She believed they were helpful.
 - D She considered them disgusting.
- 3 What does the woman want to know about nitrogen?
 - A if it is toxic for worms
 - B if it harms the soil
 - C if it is used as a fertilizer
 - D if it is found in fertilizers

2  Listen to a talk about worms. For questions 1-3 choose the correct answer A, B, C, or D.

- 1 What is the talk mainly about?
 - A Australian species of worms
 - B the longest worms from around the world
 - C a particular species of earthworm
 - D the dangers that earthworms face
- 2 What is the main reason behind the worms' disappearance?
 - A There is too much heavy rain in the areas where they live.
 - B People kill them in large numbers.
 - C Farm animals eat a lot of the worms.
 - D The use of chemicals by farmers on their fields.
- 3 Why does the speaker mention the town of Korumburra?
 - A Because a worm festival is held there.
 - B Because this is where the Giant Gippsland Earthworm Museum is.
 - C Because this is where the largest Gippsland earthworm was found.
 - D Because it has the highest number of giant Gippsland earthworms in Australia.

Amazing Facts

Did you know?

There are over 20,000 different
1) of worms.

Worms eat almost anything, but they don't like 2) foods like lemons and oranges. In fact, these kinds of foods can kill them.

Some people believe that if you cut a worm in two, it will grow into two different worms. This is not true. Only the 3) that has the head will grow a tail. The other part of the worm will die.



Each 4) will have between 1 and 7 baby worms in it. There's always an odd number of babies, though; usually 3 or 5.

When it rains, worms come to the surface of the ground, because it needs oxygen to 5) If they stay in the soil, they can 6)

People who are extremely 7) of worms or worry too much that parasitic worms may 8) them suffer from what is called "helminthophobia."

Worms are
9)
Their bodies do not produce heat.

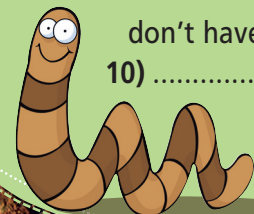
1 a) Fill in the blanks. Use:

- afraid • cocoon • types • teeth
- drown • cold-blooded • infect • breathe
- half • acidic

b)  Listen and check your answers.

2 **ICT** In groups, collect more facts about worms. Prepare a Yes/No quiz.

Worms can't bite their food, because they don't have any 10)



Worms

Dig into the amazing world of worms and unearth the fascinating truth about the essential role these unique creatures play in life.

Learn about the strange and sometimes deadly survival strategies of worms through vivid images, compelling stories and thought-provoking facts.

Components

- Reader
- Multi-ROM

DIGI MATERIAL

cross-platform application
(iOS, Android, Windows, MacOSX)



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