



Worm Exploration

Goals

Teach students about life cycles by learning about worms and the ways they benefit the garden and farms. Through reading literature and completing hands-on activities, the class will conduct a worm investigation and observe that the organisms (and other animals) need food, air and space to grow.

Curriculum Alignment

Find a list of which Common Core State Standards and NC Essential Standards this lesson plan aligns with on the lesson plan page at www.growing-minds.org.

Materials

- Nightcrawlers or red wiggler worms (one per student)
- Worm anatomy chart
- Magnifying glass (one per student)
- Rulers (one per student)
- Paper and pencils

Preparation: Contact a local farmer or bait shop to purchase worms.

Activities

KWL Chart

Start the lesson by making a KWL chart about worms with students. What do they know about worms? What do they want to know? What have they observed in the garden? After reading books about worms and completing the hands-on activities below, students will fill in what they learned on the chart.

Read a Book and the Message from a Farmer

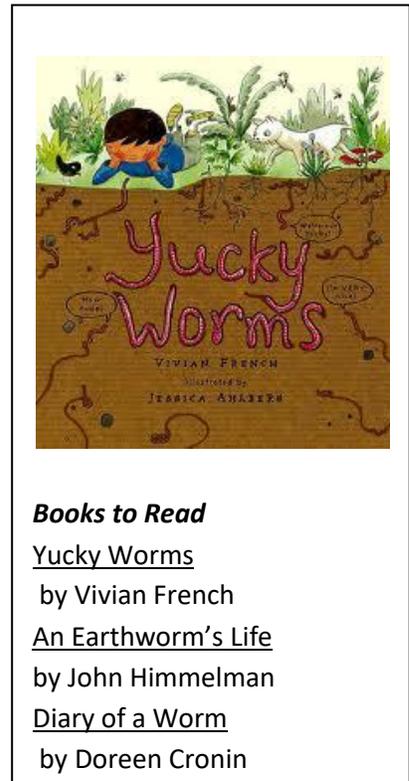
Read one of the children's books to your class. [Yucky Worms](#) and [An Earthworm's Life](#) are factual books that include lots of fun facts and interesting information about worms. [Diary of a Worm](#) is a great book to read students in order to bring some humor to the subject of worms.

Read the included message from farmer Steven about the importance of worms to your class.

Worm Exploration

Step one: Start the worm exploration by reviewing fun worm facts and asking the class a few questions.

Worm Facts: Worms don't have lungs like you and me, but instead they breathe through their skin! Worms also don't have ears, but they feel sound through their whole bodies! Show the students the worm anatomy chart. Do people and worms have any similarities? Differences?



Books to Read

[Yucky Worms](#)

by Vivian French

[An Earthworm's Life](#)

by John Himmelman

[Diary of a Worm](#)

by Doreen Cronin



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Step two: Give each student a paper plate with a bit of dirt, one worm, a magnifying glass, and a pencil and paper to record their observations. Ask the students to look closely at their worms. Can they tell which end is the worm's head? How does the worm feel? How does it move? Encourage them to observe as much as possible about their worm, including which body parts they can identify and how many rings the worm has around its body. Now put leaves next to the worm on the plate. What does the worm do?

Step three: Show students the rulers and explain how to use them without harming the worms. Give each student a ruler and ask them to measure their worm with a ruler. Record the lengths on the board and make a table that shows how long the class' worms are. Older students can tally the average length of the class worms.

Step four: Record observations. Give students paper and pencils and ask students to record observations they have made. Students may illustrate their worms or write sentences about them.

Step five: Complete the KWL Chart. Take up the worms and plates. Ask students to recall what they have learned about worms. Record their answers in the KWL chart.

Garden Exploration

Take students to the garden and ask them where they predict worms would live. Give students trowels and put them in groups of three. Direct the groups to different areas of the garden and have them dig and report back if they find any worms. Be sure to ask students to keep any worms they find in the garden. Areas of the garden covered with leaves or hay will have more worms because the hay and leaves are a food source and keep the soil moist.

Bring the class back together for reflection. Where did the class find the most worms? Review the class' predictions and see if any were correct. If they didn't see any worms at all, discuss possible reasons for the absence of worms.

Make a Worm Advertisement (Optional)

Advertise all the great things worms do to help plants grow in your garden! Ask them to illustrate a worm activity that helps gardeners grow healthy plants. They can also write some of the fun worm facts around their illustration to make it clear how great worms are. Post the worm advertisements on your bulletin board.

Make a Worm Farm (Optional)

Use basic materials such as plastic storage bins and newspaper to make a worm farm for your class. Students will be able to see worms turn food scraps into healthy soil! The book, Worms Eat My Garbage: How to Set Up and Maintain a Worm Composting System by Mary Appelhof is a great resource for keeping worms.