

I Am An Earthworm

Written by Mrs. Little's PreK-Kindergarten class, Andes Central School 2012-2013

Lessons and Activities – GRADE K-2



BIG IDEAS

- Interdependence
- Community
- Patterns
- Structure and Function
- Connecting to Nature

This fun call-and-response song explores some of the factors that help the garden grow.

Activity 1 *Who Are The Garden Helpers?*

This activity helps students to think about the multiple players involved in a healthy garden and their roles.

Activity 2 *What Patterns Do You Hear?*

This is a follow-up activity to the Who are the Garden Helpers lesson. Combine the class' ideas with the basic formats of the verse and refrain in *I Am An Earthworm* to write original lyrics to this song.

Activity 3 *How Does A Worm Help?*

Observing earthworms at work is a great way to learn about the structure and function of this quiet, "unseen" helper.



Where the song came from

Mrs. Little's PreK-Kindergarten Class harvesting kale in the Andes School garden. These are the kids who helped write the *I Am an Earthworm* song!

For more information, or if you experience any problems with downloads, please contact info@harvestofsongs.com.



Harvest of Songs is a collaboration between Farm Catskills and Story Laurie. All songs & activities ©2015 Story Laurie

I Am An Earthworm

Who Are The Garden Helpers?

Time 30 minutes

BIG IDEAS

- Interdependence
- Community

STANDARDS

NYS Science Standards

- LE 1.1a, b; LE 1.2a
- LE 4.1a; LE 4.2a
- LE 5.1aLE 5.2a
- PS 2.1d

CCLS

- Literacy.RL.K.1, RL.1.1, RL.2.1
- Literacy.SL.K.4, SL.1.4, RL.2.4
- Literacy.L.K.5c, 1.5c; L.2.5a

YOU WILL NEED

- Audio system for playing *I Am An Earthworm*
- Chart paper and markers or a copy of *Garden Helper Chart*
- Optional: open space for movement

This activity helps students to think about the multiple players involved in a healthy garden and their roles. This is an introductory lesson to the seen and unseen relationships that describe the complex system found in a garden. If possible, this lesson can be previewed by a simple visit to a nearby natural space. Exposure to a garden bed, a tree pit, a patch of grass or a potted plant will help give students context for this activity.

STUDENTS WILL UNDERSTAND

A healthy system is made up of many interdependent parts. Earthworms are one of many garden helpers.

ACTIVITY

1. Listen: *I Am An Earthworm*
2. Discuss & Chart: Who are the garden helpers mentioned in this song. Write answers on chart pad, or use the provided *Garden Helper Chart* via Smart Board or other projector.
3. Deepen: How do these garden helpers move? What sounds do they make? Give students the opportunity to actively demonstrate the movement, posture and sounds of the living and non-living things mentioned.
4. Discuss & Chart: What and who else helps the garden? How do they help?

TEACHER TIP

Gardens are complex systems with diverse players. They are comprised of a web of relationships between living and non-living things. Gardens are one piece of a larger system that includes human and economic systems. Students may surprise you with their answers. Garden helpers will include concrete answers such as ladybugs, soil, tools and the sun, but "correct" answers may also include ideas like care, action, air, weather, and money. If a garden helper suggestion seems out of place, ask the student to tell you more about the connection. Their line of thinking may surprise you and teach us all something new about garden dynamics!

I Am An Earthworm

Who Are The Garden Helpers?



FOOD FOR THOUGHT

Consider the fact that living things cannot complete their life cycle without help from non-living things.

EXTENSION: Are They Living or Non-living?

After you've had a chance to explore some of the "things" that help plants to grow, take a moment to review which of those items are living and which are non-living. Have your students come up with the answers and write out the two lists on a chart pad.



VARIATIONS

Individual Thinking

Give students individual copies of the Garden Helper Chart as a "thinking sheet." Use this either for pre-discussion or for post-discussion thinking and individual documentation.

Movement Garden Freeze Dance

Have students choose roles from your garden helper chart. Replay the song and allow students to enact the garden helper actions to the music. Setting space parameters and pausing the music occasionally (students should "freeze" when the music stops) are helpful regulators and create the opportunity for the teacher and the other students to guide and notice the garden-like movements enacted.

FOLLOW-UP

Dramatic Play

Supply students with tools, space and time to role play the activity and relationships alive in a garden.

Garden Visit

Take this knowledge to its roots! Give students an opportunity to deepen and extend the idea of garden helpers in context with open-ended exploration in a living garden.



I Am An Earthworm

Garden Helpers

Who or what?	How does it help the garden?	How does it move?	What sound does it make?
Earthworm			
Honeybee			
Raindrop			

Activity 2

GRADE K-2

I Am An Earthworm

What Patterns Do You Hear?

Time 40 minutes

BIG IDEAS

- Patterns
- Interdependence

STANDARDS

NYS Science Standards

- LE 1.1a, b; LE 1.2a
- LE 3.1c, g; LE 3.2c

CCLS

- Math.MP.1
- Math.MP.7
- Literacy.W.K.6, W.1.6, W.2.6
- Literacy.W.K.7, W.1.7, W.2.7
- Literacy.L.K.5d, L.1.5d, L.2.5b

YOU WILL NEED

- Audio system for playing *I Am An Earthworm*
- Chart paper
- Markers
- Writing Paper
- Pencils, Colored Pencils or Crayons

* *I Am an Earthworm* is a call-and-response (or "echo") song, in which each sung line is repeated. When discussing repetition and patterns with students, you may want to project and reference a copy of the lyrics, to help students distinguish the repetition of the "echoes" from the repetition that occurs in the refrains.

Write your own verse!

This is a follow-up activity to the Who Are the Garden Helpers lesson. Use the class chart of garden helpers created in the previous lesson as your starting point. Then combine the class' ideas with the basic formats of the verse and refrain in I Am An Earthworm to write original lyrics to this song. This is an exploration in pattern and creative writing!

STUDENTS WILL UNDERSTAND

- There are patterns in music.
- There are many helpers in a healthy system and each one has unique characteristics and plays a unique role.

ACTIVITY

1. Review the Garden Helpers chart created in the [Who Are The Garden Helpers](#) lesson. If new ideas arise, add them to the chart.
2. Listen & Focus: Before listening to *I Am An Earthworm*, prompt students to focus on the patterns in the song, and on which parts of the song repeat and which parts change.*
3. Discuss: "What patterns did you hear in this song?" Connect the repeating and changing parts of the song to the terms *refrain* and *verse*
4. Write: Use the patterns uncovered in the song to build your own class verse and refrain. Write down the new parts to this song on chart paper.
5. Sing! As a group, sing or replay the first verse of *I Am An Earthworm*, then continue this song with your new lyrics, following the pattern of the song.

TEACHER TIP

Adding new verses to this song can be fun and easy! It's also a great way to explore and acquire new vocabulary.

For the verse, you will need 8 short lines, with the first line being, "I am a/an/the _____." Encourage students to play with language by finding "spicier" substitutions for words like go, walk, fly and move.

The refrain is even simpler to write and possibly, more fun, especially as it lends itself to the exploration of onomatopoeia (buzz, slurp, drip, etc.).



I Am An Earthworm

What Patterns Do You Hear?

VARIATIONS



Delhi Elementary students singing their class' garden helper song

Technology & Design

Make an audio recording of the song to replay for yourselves and others. Engage older students as "tech partners" for your students in the making of a video of your new version of *I Am An Earthworm*.

Paired Writing *For older students*

Follow up the class writing activity with pairs of students writing a new verse together. Then, combine all of the students' lyrics to create a new version of the song. Pairs should sing their new verses, interspersed with whole group singing of the refrain.

FOLLOW-UP

Illustrate

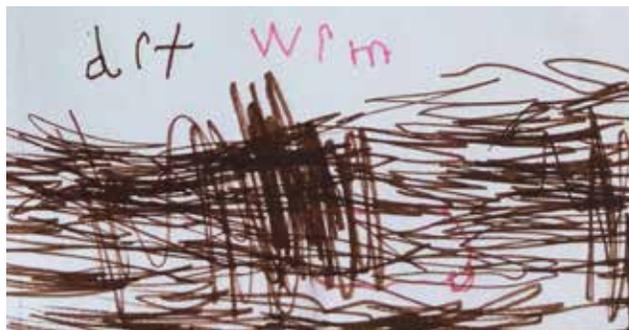
Create a book for your new song. Have students illustrate a part of the song and compile the illustrations and the new lyrics into a book.

Perform for an audience!

Sharing your new verses with other students, parents and teachers is a great way to showcase learning and to share knowledge with others!

Transitions

Use the new verses or refrain as a signal, when transitioning from one activity to another throughout your school day.



I Am An Earthworm

How Does A Worm Help?

Time 40 minutes

BIG IDEAS

- Structure and Function
- Connecting to Nature

STANDARDS

NYS Science Standards

- LE 1.1a; LE 1.2a
- LE 3.1a, c, g
- LE 4.1a; LE 5.1a
- PS2.1d

CCLS

- Math.MP.3
- Literacy.W.K.8, W.1.8, W.2.8
- Literacy.SL.K.5, SL.1.5, SL.2.5

YOU WILL NEED

- Worms (red wigglers or earthworms — see note on pg. 2 sidebar)
- Observation surfaces (a lunch tray covered with damp paper towels will work just fine)
- Magnifying glasses
- Science journals
- Pencils
- Chart paper and markers

Worm Watch

Observing worms at work is a great way to learn about the structure and function of this quiet, “unseen” helper. A worm watch is a great way for young scientists to practice their skills of observation and data collection, as well as for testing hypotheses. Additionally, bringing worms into the classroom is a wonderful way for students to have an intimate and meaningful connection to nature without the need to travel.

STUDENTS WILL UNDERSTAND

- Each part of a system contributes to the health of the system.
- Living things grow, take in nutrients, make waste and breathe.
- The structure of a worm helps it to live and thrive.

ACTIVITY

1. Engage: What do we already know about worms? What would you like to find out? Make a list of what students would like to find out on chart paper.
2. Discuss: If you were a worm, how would you like to be treated by a scientist?
3. Observe: Set up individuals or pairs of students with one tray of moist bedding, a few worms, magnifying glasses, science journals and pencils. Adding raw vegetable scraps, like bits of lettuce can add a new dimension to this research.
4. Note-take: After a few minutes of open-ended observation, encourage students to choose a particular focus for their observation—movement, shape, worm anatomy, eating, waste, or behavior. Ideally, students can choose a focus from the chart paper list generated at the beginning of the lesson. Then, students should document their observations with a detailed drawing and writing.
5. Reflect: Ask your students to think of one or two words that describe the worm they observed. Either write these words on a class thinking map or make a **Wordle** out of the students’ responses. (A Wordle is a graphic representation of all of the responses that also represents the frequency of responses in the graphic. Go to wordle.net to learn more.)

I Am An Earthworm

How Does A Worm Help?

Where to Get Worms

If you have a school garden, perhaps your students can help you dig up some earthworms from one of the garden beds. You can also pick up a small container of worms at the local bait shop or pet store, or purchase red wiggler worms online. In NYC, many Petco stores sell containers of ~45 red wigglers for under \$5.

VARIATIONS

Shed some light on the subject!

Put worms in a clear glass or plastic dish. Hold the dish and the worms up to the light so you can observe them from underneath. This way you can really see how worms locomote and maybe even see some of their internal organs, like their intestine, gizzard and their hearts!

Worm Watch Station

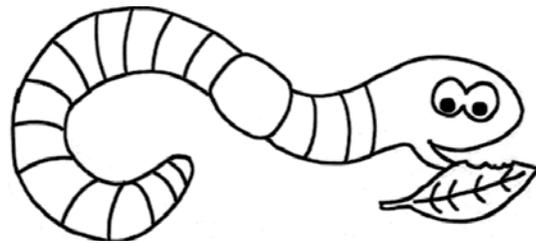
Once your students are comfortable with how to care for worms, set up a worm watch station during a choice time.

DIGGING DEEPER

Set up a classroom wormbin!

Caring for worms, maintaining a healthy wormbin, and harvesting the vermicompost is a wonderful way to gain depth of understanding about soil, decomposers and the hidden life of worms.

See Resources page for suggested sites to get you started.



TEACHER TIP

Earthworms need to stay slightly moist in order to breathe. *They secrete a slimy substance to help them stay moist. When observing worms outside of their humid habitat (in soil), take measures to ensure they maintain their moisture by offering damp bedding, such as dampened newspaper strips, or by limiting their time outside of their habitat.*

It's safe *(for you and your worms) to handle the worms. Allowing them to move freely about the palm of the hand for short periods of time is a great way to get a close up look at this amazing organism!*

I Am An Earthworm

Resources

Books to Share with Your Students

An Earthworm's Life by John Himmelman (Children's Press, 2000)

Compost Stew: An A to Z Recipe for the Earth by Mary McKenna Siddals (Tricycle Press, 2010)

Diary of A Worm by Doreen Cronin (Joanna Cotler Books, 2003)

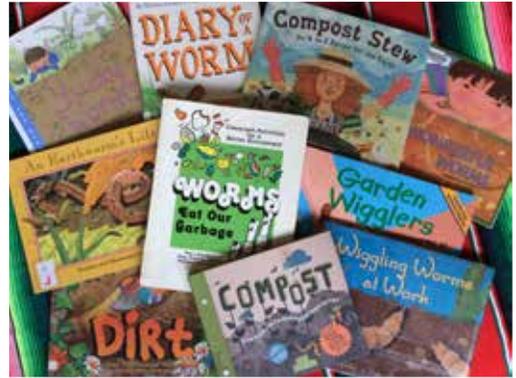
Dirt by Steve Tomecek (National Geographic Children's Books, 2007)

Garden Wigglers: Earthworms in Your Backyard by Nancy Loewen (Picture Window Books, 2005)

Wiggling Worms at Work by Wendy Pfeffer (Harper Collins, 2003)

Wonderful Worms by Linda Glaser (Scholastic, 1992)

Yucky Worms by Vivian French (Candlewick, 2012)



For Background Info and Classroom Activities

Compost: A Family Guide to Making Soil from Scraps by Ben Raskin (Roost Books, 2014)
Though billed as a family guide, there are so many wonderful activities (eg. "Compost Bingo" and "Worms & Ladders") that you can use in the classroom, and this book is chock full of info as well.

Worms Eat Our Garbage: Classroom Activities for a Better Environment by Mary Appelhof, Mary Frances Fenton & Barbara Loss Harris (Flower Press, 1993)
For those who really want to "dig in," this classic provides a wide range of ways to integrate worm-based learning into all aspects of your curriculum.

Online Resources

Do the Rot Thing: A Teacher's Guide to Compost Activities (<http://www.cvswwd.org/resources-for-teachers.html>) is an excellent resource to get you started on worm composting in the classroom. If you're seriously considering undertaking such a wonderful and satisfying endeavor, here are a few more sites that might be worth exploring as well:

<http://kidsgrowingstrong.org/make-worm-bin>

<http://www.vermicompost.net/worm-composting-bins/>

<http://www.thewormfarm.net>

For resources related to the other garden helpers (honeybee and raindrop) referenced in *I Am An Earthworm*, visit the activities pages for *We Are Flowers* and *Water is Life/Rain, Rain, Rain*.

