

Literature Selection

- Fiction
 - Diary of a Worm by Doreen Cronin
 - Winnie Finn, Worm Farmer by Carol Brendler
 - The Worm Book by Janet and Allan Ahlberg
 - Inchworm and a Half by Elinor J. Princzes
 - Wriggling Worms at Work by Wendy
 Pfeffer

Literature Selection

- Non-Fiction
 - Yucky Worms by Vivian French
 - Earthworm's Life by John Himmelmann
 - Wormology by Michael Ross
 - Wonderful Worms by Linda Glaser
 - Earthworms by Megan Borget-Spaniol

Theme Study

- In this theme study the students will learn all about worms. They will study the anatomy of the worm, the importance of worms, the worms habitat, and the role worms play in the cycle of life.
- This unit incorporates language arts, science, math, social studies, art, music, and movement.

Language Arts: Reading

- Students will read fiction and nonfiction literature about worms
- Read words on Worm Word Wall
- Students will read in pairs, each student will take a turn reading
- Read the books/diaries that they wrote about worms
- Students will read each others research on worms

Language Arts: Writing

- Students will write a diary from the perspective of a worm
- Students will write in their observation log for their worm farm
- Students will write a story narrating their picture of a worm in an environment that they would not normally be
- Create Worm Word Wall
- Students will write a poem of their experience (or lack there of) with worms

Language Arts: Speaking

- · Students will share their Worm stories
- Students will participate in a grand conversation about experiences they have had with worms
- Students will perform Reader's Theater of "Diary of A Worm"
- Students will present, in pairs, their worm town occupation
- Students will share their research of worms with the class
- Students will sing their environmental song to the class

Language Arts: Listening

- Students will listen to the teacher read "Diary of a Worm"
- Students will listen to peers performing Reader's Theater
- Students will listen to worm videos and worm songs
- Students will listen to peers during grand conversation
- Students will listen to their peers with they share their research

Language Arts: Viewing

- Students will watch a video from worm video clips at the beginning of each day.
- Students will be viewing worms in their worm farm (observing and journaling can be a rotation in Daily 5)
- Have students review the Worm Word Wall
- · Students will view each others artwork
- Students will view their peers diaries

Language Arts: Visually Representing

- Have students draw a picture of the worms in their environment. The students could also draw a worm in the opposite of its environment and then the students could write a story narrating their picture.
- Have textures that feel like worms or real worms for the students to touch
- Make jello worms with bendy straws
- Have cooked spaghetti in a bag and have the students reach their hand in and draw what they feel. After all of the students have felt the noodles and drawn their guess, reveal what was in the bag.
- · Worm labeling activity online
- Make dirt cups showing the different layers of the earth and put a gummy worm on top
- Students will build their own worm farm.

Science Activities

- Students will keep a worm farm and observe the worms.
 Observations will be recorded in an observation journal, students will discuss what they observed as a class.
- Students will research the external and internal anatomy of the worm. They will fill out diagrams and use the online lab.
- Go on a nature walk and find worms in their natural habitat
- Lab experiment: cut worm in half and see if it grows back.
- Students will research the habitat of the worm
- When on the nature walk the students will dig and look at the different layers of the dirt
- Students will learn about the different levels of the earth:

Math Activities

- Students will do a measurement activities using non-standard measurement and standard measurement. For the non-standard measurement students will be given a ruler with inch worms on it instead on numbers.
- Students will chart the different sizes of worms in their worm farm and the worms they find on the nature walk.
- Take area and perimeter of a spot on the ground and then dig for worms.
- Students will practice counting by tens using the body segments of the worm.
- Students will be given a worksheet with certain measurements on it and play dough. They will form the play dough into a worm and make it the appropriate length.
- Students will have to come up with the measurements that it takes to build their own worm farm and find out how many cups of dirt they will need to fill the worm farm.

Social Studies Activities

- Have the students create a town of worms and assign a role in the community to a worm in their town. They will get in pairs and choose a role that is assigned to a worm and list their responsibilities and how they benefit the community.
- Look at the different worms in the different regions of the U·S·
- Students will look at how worms work together to survive
- A worm expert will come and talk to the class:

Art

- Students will create a wall mural of their worm town that they created. The mural will use different art elements and techniques (paint, paper, crayon).
- Students will draw a worm in an environment that they would not normally be.
- Make a bookmark with fun facts about worms.
- Make dirt art: Have students dip their finger in glue and draw a design on a paper with the glue. After they are finished sprinkle dirt all of the paper and then shake the paper over the trash can to get off excess dirt.

Music

- Listen to the songs "I Can Wriggle Like a Worm", "Hey Little Worm"
- Students will write their own song about worms and their environment.
- Have students pick an instrument to represent a worm and then create their own song.

Physical Education

- When listening to the song "I Can Wriggle Like a Worm" and "Hey Little Worm" and have the students to the movement for each verse (wriggle, jump, waddle).
- · Make a worm house of P·E· equipment
- Have worm races with the scooter boards
- Going on a nature walk.
- · Outside class: digging in the dirt.

Technology

- Students will use the virtual lab http://mhhe·com/biosci/genbio/virtual_labs/BL_14/BL_14·html to practice the external anatomy·
- Wormvideoclips·com
- · Songs on YouTube
 - http://www·youtube·com/watch?v=IAO45hFAI 5Y
 - http://www·youtube·com/watch?v=rmzvpp_s8j

Language Art Strategies

- Activating background knowledge: students will share what they know about worms in a grand conversation
- Brainstorming: Students will come together and discuss ideas for their town
- Connecting: Students will connect what they already know about worms to what they learn
- Playing with Language: Students will creatively use language in their stories, poems, and journals
- Visualizing: Students will draw pictures of their worm

Group Patterns

- Large group: readers theater, grand conversation, wall mural, worm farm and observation, creating worm town, worm expert talking to the class, P·E· activities, listening to songs, nature walk
- Pairs: reading pairs, taking an occupation from worm town and researching it, readers theater
- Individual: writing their diary, narrating their pictures, drawing their pictures, reading, measurement activity, creating worm farm, environmental songs, making bookmarks

Subject	Monday	Tuesday	Wednesday	Thursday	Friday
Language Arts	Students will participate in a grand conversation about experiences they have had with worms Students will listen to the teacher read "Diary of a Worm" Students will watch a video from worm video clips at the beginning of each day. Create Worm Word Wall	Students will read in pairs, each student will take a turn reading Have textures that feel like worms or real worms for the students to touch Students will write a diary from the perspective of a worm Students will write in their observation log for their worm farm	Students will write a story narrating their picture of a worm in an environment that they would not normally be Students will write a poem of their experience (or lack there of) with worms Students will listen to worm videos and worm songs Students will listen to peers during grand conversation	Have cooked spaghetti in a bag and have the students reach their hand in and draw what they feel. Worm labeling activity online Make dirt cups showing the different layers of the earth and put a gummy worm on top Students will build their own worm farm.	Read the books/diaries that they wrote about worms Students will read each others research on worms Students will listen to their peers with they share their research Students will read each others research on worms
Science	Go on a nature walk and find worms in their natural habitat When on the nature walk the students will dig and look at the different layers of the dirt	Lab experiment: cut worm in half and see if it grows back.	Students will keep a worm farm and observe the worms. Observations will be recorded in an observation journal, students will discuss what they observed as a class.	Students will learn about the different levels of the earth.	Students will research the external and internal anatomy of the worm. They will fill out diagrams and use the online lab.
Math	Students will chart the different sizes of worms Take area and perimeter of a spot on the ground and then dig for worms.	Students will do a measurement activities using non-standard measurement	Students will practice counting by tens using the body segments of the worm.	Students will be given a worksheet with certain measurements on it and play dough.	Students will have to come up with the measurements that it takes to build their own worm farm
Social Studies	Students will look at how worms work together to survive	A worm expert will come and talk to the class.	Have the students create a town of worms and assign a role in the community to a worm in their town.	Look at the different worms in the different regions of the U.S.	
Music	Listen to the songs "I Can Wriggle Like a Worm", "Hey Little Worm".	Students will write their own song about worms and their environment.	Have students pick an instrument to represent a worm and then create their own song.		
Art	Make a bookmark with fun facts about worms.	Make dirt art.	Students will draw a worm in an environment that they would not normally be.	Students will create a wall mural of their worm town that they created.	
P.E.	Going on a nature walk. Outside class: digging in the dirt.	"Hey Little Worm" and have the students to the movement for each verse (wriggle, jump, waddle).	Make a worm house of P.E. equipment	Have worm races with the scooter boards	

Assessments

- · Participation in group work
- Participation in PE
- Test on the knowledge of the anatomy and use of measurement
- Observation journals will be assessed on quality of observation
- Students will do a project based assessment when they build their worm farm
- Portfolio of worm work, they can choose one activity from each subject area:
- 6+1 writing traits rubric