NO BONES: LESSON 1
INSECT DETECTIVE

Teacher

SUBJECTS: English Language Arts, Science, Math	**SKILLS:** Investigating and analyzing Data

MATERIALS

- Computer/tablet/phone
- Insect Detective Student Sheet
- Discovery Kit Materials: Field Guides, Magnifying glass, trowel, observation container, rope
- **FLIPGRID Challenge: Insect Detective, Be an Entemologist: Lasso an Ant!**

COMMON CORE STATE STANDARDS

ENGLISH LANGUAGE ARTS

2.SL.1 Participate in collaborative conversations about grade 2 topics and texts with diverse partners in small or larger groups.

2.SL.2 Retell or describe key ideas or details from a text read aloud or information presented in various media and other formats.

2.SL.4 Tell a story or recount and experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.

2.SL.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

MATHEMATICS

2.MD.10 Organize, represent, and interpret data with up to four categories; complete picture graphs when single-unit scales are provided; complete bar graphs when single-unit scales are provided; solve simple put-together, take-apart, and compare problems in a graph.

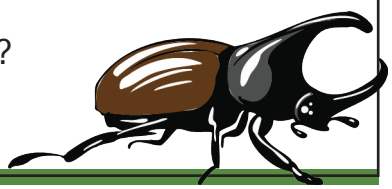
SCIENCE (OHIO LEARNING STANDARDS)

2.LS.1 Living things cause changes on Earth.

2.LS.2 All organisms alive today result from their ancestors, some of which may be extinct. Not all kinds of organisms that lived in the past are represented by living organisms today.

ESSENTIAL QUESTIONS

1. How do living organisms affect our environment?
2. What characteristics do living organisms use to adapt to their environment?
3. How can we use a graph to compare objects?



I CAN STATEMENTS (LEARNING OBJECTIVES)

1. I can discover the diversity of insects in many different habitats and see effects that insects have on their environment.
2. I can create a bar graph using data I have collected.
3. I can use a bar graph to analyze data.

LINKS

- *No Bones Science Journey* https://www.miamicountyparks.com/node/1251
- *Slug Science Journey Video* https://vimeo.com/videobranch/review/415290936/f0661064ea

ACTIVITY

In the SLUG SCIENCE JOURNEY video, Solar Steve, Buzz and Cinda Wind encourage the students to get outside to explore with hands on discovery learning. By lifting rocks or logs, the student will discover insects in their habitat and be able to study them and better understand how they benefit the world. Insects are in the air, in water, on flowers, in the dirt and everywhere! **Students can use the rope in their Discovery kit, to "LASSO" AN ANT!** Students can toss the rope like a lasso and wherever it lands they spread the rope out into a circle and explore that space for insects. They should toss the lasso in several different habitats to explore i.e grass, bare dirt, under a bush, on a tree or around a group of flowers etc. When exploring around the flowers be sure and explain to the students to carefully place the lasso around the flower area instead of tossing it in order to prevent damage to the flowers. Have the students dig up a trowel full of dirt and put in the observation pan to see what might be living in a scoop full of dirt! The student can use the **FLIPGRID Challenge: Insect Detective** and **Insect Count: Be an Entemologist** to record their observations outside with the insect habitat. Just like a real entomologist, the student is encouraged to record the number of insects, the different types and the habitat where they found the insect using the provided student recording sheet. Then they will use their data to make a bar graph and answer related questions.

EVIDENCE OF ACTIVITY

Students will submit the completed Student Sheet and the **FLIPGRID Challenge: Insect Detective and Be an Entemologist:Lasso an Ant.**