Make Way for Animals - Teacher Guide

Lesson inspired by the book *Make Way for Animals! A World of Wildlife Crossings* by Meeg Pincus

Lesson Concept - Analyze and interpret data (SEP) about the cause(s) and effect(s) (CCC) land development has on living things.

STEELS Standard - 3.3.K.E - Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

PA Career Readiness Skills - Establishing and Maintaining Relationships - Identify multiple ways to solve conflicts and practice solving problems

Anchoring Phenomenon - Animals Migrate

Investigative Phenomenon - Humans impact animal migration

Materials

Slideshow

Book or youtube of read aloud

Resources

Make Way For Animals slideshow https://docs.google.com/presentation/d/1JlvL-PE1JsP_UYF_aUb2t2PZnaEwA2I5 jsyC1PvleEo/edit?usp=sharing

Make Way for Animals! A World of Wildlife Crossing by Meeg Pincus book reading

https://youtu.be/QcMt-K_cZ9I

Key Vocabulary (Do not front load these. If they come up in conversation help clarify and come to an understanding if students are ready for the vocab)

Migration - the seasonal movement of animals from one place to another **Engineer** - someone who creates, builds, and tests solutions to problems **Conservation** - managing natural resources to avoid overuse or harm

Ecology - study how living organisms interact with their environment **Teamwork & Collaboration** -working together as a team with people who may have different expertise or interests or strengths or ideas. Listening is important when collaborating

<u>Time Requirement</u> - 30 to 40 minutes <u>Engage</u>

- 1. Open "Make Way For Animals" slideshow.
- 2. Show slide 2 featuring a highway overpass. Ask students if they have seen one before. If they have, ask where they saw it and what it is used for. Focus only on asking questions and avoid providing any answers.
- 3. Display slide 3 featuring an animal overpass. Without explaining its purpose, ask students if this overpass looks the same as the first one. Prompt them to share similarities and differences they notice. Focus only on asking questions and avoid providing any answers.
- 4. Play the YouTube read-aloud video of Make Way for Animals! by Meeg Pincus, shown on slide 4.

Explore and Explain

- 5. Display slide 5 with the Investigative Phenomenon Humans impact animal migration.
- 6. Start reviewing the video by asking students why they think animals migrate. What animals migrate that you can think of? (slides 6 and 7)
- 7. Explain that animals migrate for four main reasons: to find food, to breed, to escape extreme weather, and to hibernate.
- 8. Ask students whether human activities and land development have a significant impact on animal migration. (slides 8 and 9)
- 9. Explain that engineers and scientists collaborate to restore areas affected by human activity and to ensure new developments are mindful of the environment. Ecologists study the land in impacted or soon-to-be-developed areas and share

their findings with engineers and builders to minimize the impact on local ecosystems and living organisms.

- 10. Explain to the students that in the book, various structures like bridges, tunnels, ladders, trees and hives were designed to support migrating animals. These small adjustments made a big difference, allowing animals to find food, build nests, and lay eggs safely. (slides 10 to 21)
- 11. Examine and discuss the examples on each slide. Feel free to return to some of the image slides to help pull ideas
 Ask questions like:
 - "Why was this built?"
 - "How does it help the animals?"
 - Let's brainstorm all the different types of workers that would need to work together or collaborate to complete this type of project?- Ask follow up questions here to try to identify as many career types possible

Evaluate

- 12. Restate the Investigative Phenomenon Humans impact animal migration
- 13. Ask, "Think about the book *Make Way For Animals*. What did the author mean when she said "The road is a visitor"?
- 14. Ask "Is it important that we work together to help animals? What could happen if we don't?"

Elaborate

Save The Salamander Design Challenge