Who Can Fly?

Grade Level: 1 - 4
Content Areas: Music, Life Science, Technology, and Language Arts
Time Frame: 70 minutes

MATERIALS

Who Can Fly? book

Pencils and Drawing Materials

Paper

Pictures of Bald Eagle, Great Blue Heron, Great Horned Owl, and Anna's Hummingbird.

OBJECTIVES

Students will:

- Define adaptation
- Identify and describe different adaptations used by birds

VOCABULARY:

Key vocabulary

Before reading, focus on vocabulary. Read the glossary words and their definitions.

Adaptations - A body part or feature or a behavior that helps a living thing survive and function better in its environment

Dune - A hill or ridge of sand piled up by the wind

Habitat - The natural place and conditions in which a plant or animal lives

Larry - As in Larry bird, a famous basketball player who played for the Boston Celtics; his number was 33.

Migrate - To move from one place to another

Nurse - To treat with care

Predator - An animal that hunts other animals for food

Prey - An animal hunted by another animal for food

FREE SONG

<u>Click here</u> to download or stream the Who Can Fly song. Find other Cantata Learning songs and books at http://www.cantatalearning.com.

PROCEDURES/ACTIVITIES

Preparation:

Start by asking students a couple questions to get students thinking about adaptations. Show students' pictures of a Bald Eagle and Anna's Hummingbird. Ask students what differences they see between the birds.

Ask students if they know what an adaptation is. Discuss that many of the differences they see between the birds are specific adaptations that help birds live and survive in their habitats.

Lesson Procedure:

- Tell students they are going to be listen to a book with music called <u>Who Can Fly?</u>. Read the book and listen to the music with the students.
- Tell the class they are now going to be asked questions about adaptations and tell them to think critically about what the answers could be. Break class into four groups. Let students talk about the question in their groups and come up with the answers to the questions.
- Have students share their thoughts before you give them the answers.
 - a) Tell students the Bald Eagle has a wingspan of 7-9 feet. Ask students why would some birds like the Bald Eagle need a large wingspan? The answer is that the large wingspan aids in crane flight during long migrations. With the long wingspan, Bald Eagles are able to soar for hours without expending any energy.
 - b) Tell students the Great Blue Herons can stand on one foot for hours while sleeping. Ask students why they think Great Blue Herons would do such a funny thing? The answer is that feathers keep birds warm and insulated. However, the legs of a Great Blue Herons are featherless and lose a lot of heat while standing. By tucking one leg up close to its feathered body, it can keep at least one leg warm.
 - c) Tell students the Great Horned Owl can stare for hours without blinking. Ask students why they think Great Horned Owls would need to stare for so long? The answer is that Great Horned Owls are nocturnal and hunt for prey during the night. Because of the darkness, Great Horned Owls need to stay alert in order to locate prey.
 - d) Tell students that in 10 seconds, an Anna's
 Hummingbird can flap its wings 700 times. Ask students
 why they think a hummingbird would need to flap its
 wings so fast? The answer is that Hummingbirds
 typically feed on the nectar of flowers. The ability to
 hover and flap its wings at an astonishing rate allows the
 hummingbird to enter a flower and feed on its nectar.
- 4. Have students go back to their seats and ask them again what they think an adaption is.
- 5. Have them write a short story about adaptations or draw pictures to illustrate what they think adaptations are.

Language Extension:

Students will write a short story about adaptations. They could turn these into songs too using a familiar tune or something new.

Music and Art Extension:

Students will draw or paint pictures to illustrate their adaptations.

You can use windows and paint to create their adaptations. They can make their birds fly, animals run and other fun actions on the windows. Habitats can also be added.

Standards:

National Standards:

Content Standard C: Life Sciences

Common Core Standards:

CCSS.ELA-LITERACY.SL.1.1 - Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

CCSS.ELA-LITERACY.SL.2.1 - Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

CCSS.ELA-LITERACY.SL.3.1 - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.4.1 -Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

Technology Extension:

Students can take pictures of the illustrations they create and turn them into a movie using **Animoto** or iMovie.

PE Extension:

In collaboration with the PE teacher, students can research their animal and the adaptations they are focusing on. They can watch videos of the different animals on PebbleGo Animals to see how they move and other unique characteristics.

This part can also be tied into Language Arts as students can even create posters to show the steps the animals take and what makes their adaptations unique.