teri school of advanced studies

Google Earth Education

LESSON TITLE–BIRDS	Time1hr 40 minutes

OVERVIEW: The children will learn about features of birds and how birds adapt to their habitat. Students will use items to represent different types of bird beaks attempting to pick up a variety of foods as a bird might.

SUBJECT/TOPIC SCIENCE- ENVIRONMENTAL SUSTAINABIITY	AGE LEVEL GRADE- III
Learning Objectives By the end of the activity, the students will be able to: ➢ Body structure(Features of a bird) ➢ Birds have different types of beaks and this affects their diet. ➢ Birds have beaks that have adapted to their habitat. ➢ The different diets of birds allow them to coexist in the same habitat.	Inquiry https://youtu.be/E9noi9vUSbo Students will be shown the musical video on birds After that some inquiry based questions will be put for them.

Materials Needed

Access to **Expedition**

Student internet access

Lesson Summary

Engage: At the beginning of the lesson, the class will do a Think-Pair-Share to discuss the objective. Students will discuss features or parts of bird.

Explore: Students will explore about features and types of beaks through activity.

Explain: Students on the basis of gathered information will analyse the reasons to make correlation between habitat and adaptation.

Revise: All the terms and investigation will be listed

Apply: Sensitized students to take care to birds.

Sustainable Development Goal

Culminating Task/Assessment

https://docs.google.com/document/d/1-D2TWBHLujrhlcH-KT7N17weec88kLQKP9SaJsuXsN8/edit?usp=sharing

Textbook Chapter

Chapter Birds

Engage (5 minutes)

https://youtu.be/E9n0i9vUSbo Video on birds.

1. How do you think birds fly?

   Expected Answer: By flapping their wings.

2. Are there animals other than birds that can fly?

   Expected Answer: Animals with wings can fly. This includes some examples such as flying insects — dragonflies, bees, butterflies — and bats.

3. If you could fly, where would you like to go?

   Up to touch the clouds, up into a tree, to outer space…this question is to encourage the children to think creatively about how they would use the power of flight.

Explore (25 minutes)

https://docs.google.com/document/d/1bBQs8QBEdNhJRDedamgYOAexuaoC6-KObFMfVPYmPZI/edit?usp=sharing
After showing the images a question will be asked
What do these animals have in common? And how are they different?
EXPEDITION TOUR : BIRDS
EXPEDITION TOUR : Bird adaptation

Explain (20 minutes)

1. Teachers organize students into small groups or partners.
2. Students share their findings and now find the features that help birds fly.
3. Teachers facilitate whole group discussion in which students collect the information of all adaptive features.
4. Students record their findings.

Revise (10 minutes)

BIRD PARTS: https://docs.google.com/document/d/1bbHFOfcaU7z6qj1ZCyzvdl1qKWeFltkbQ0manzYc_u0/edit?usp=sharing

Next, repeat the process with a second source of information.

Explore (25 minutes)

1. **BEAK GAME :**
   Things required: Supplies: Beaks: spoons, scissors, tweezers, clothespins (one “beak” per child). Stomach: paper cups. Bird “food:” cut pipe cleaners (worms), macaroni (snails), and beans (beetles), sunflower seed. Snack: blueberries, sunflower seeds, peanuts in the shell.

Give each child a stomach (cup) and one bird beak.
Explain the rules: Children must stay put in their "nest" until allowed to feed. Birds must pick up their food using only their beaks. Foods may not be scooped or thrown. Cups must be held upright.
Distribute one type of food (on the ground or a table) and allow birds (children) to leave the nest and feed.
Give 1-2 minutes then have the children return to their nests.
Distribute the other foods in turn and allow feeding. Have children count the number of each food and record their results in the data sheet.
DATA SHEET:
https://docs.google.com/document/d/1ktpBlrM_-EMQE0sfhK9dYtL039A6yqku_npsynTsoVI/edit?usp=sharing

2. Discuss what kinds of beaks have you seen (long, pointy, short, wide). Explain that bird beaks are adapted to match the type of food they eat. Explain what adapted means. Many birds have tweezers-like beaks so they can reach and eat animals that burrow deep. Some birds have scissorlike beaks that rip food apart into bite-sized pieces. Other birds have clothespin-shaped beaks that can crush the hard covering of seeds. Birds with spoon-like beaks can scoop up large numbers of small fish or strain plant material from mud. The different diets of birds allow them to live in the same area at the same time (coexist). This is why many types of birds feed together in one area. Show beak types and ask children what kinds of birds have beaks similar.

Spoon beak-mallard duck, Pelican, Spoonbill
Scissor beak-perching birds, tern, kestrel, owl
Clothespin beak-goldfinch, wren, finch, jay, chickadee
Tweezers beak-egret, kingfisher, heron, hummingbird

Explain (20 minutes)
1. Are some beaks better at eating a particular food? What other parts of a bird are important to its feeding success? (Long legs-wadding webbed feet swimming, clawed feet-catch prey.) In which habitat does each beak type forage for its food? (Tweezers-mud or field, scissors-field, spoon-slough or pond, clothespin-marsh.) How could pesticides affect birds and their food? https://docs.google.com/document/d/1UCOsMtSWC_2XVgjB5ugtZhDPouYHVqJIgqhnMkzVsh4/edit?usp=sharing

Revise (10 minutes)
https://docs.google.com/document/d/1-D2TWBHLujrhlcH-KT7N17weec88kLQKP9SaJsuXsN8/edit?usp=sharing

(Option to repeat this process with additional sources of information, each time resulting in an updated hypothesis.)

Apply (80 minutes)
1. Students are able to understand that relation of adaptation and habitat.
Evaluate: Exemplar Response and/or Rubric
https://docs.google.com/document/d/1-D2TWBHLujrhlcH-KT7N17weec88kLQKP9SaJsuXsN8/edit?usp=sharing

Additional Resources
https://www.youtube.com/watch?v=EmF3iX5fvcY Research about bird man.

Options for Differentiation
More about claws and flightless birds can be done

Credits

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