

Title: Create a Bird

Objective: Students will explain how different adaptations help birds survive in their environments.

Time: 30 minutes

Materials needed: Posters of bird structures. Poster of beaks/bills; poster of head/eyes; poster of feet/legs; poster of wings; poster of outer body coverings.

Directions:

1. Either teacher creates the visual posters or groups of students find pictures and create the different posters of bird structures.
2. Students will create their own bird by choosing one feature from each poster and drawing their bird in their science notebook.
3. Along with the drawing, students write a short report explaining their bird's habitat, food source, movements, behavior (i.e.-nocturnal or not, how it attracts a mate, how it stays safe, etc.) Report connects these explanations back to the adaptations they have drawn.
4. Share reports and drawings with whole class, in small groups, or with partners.

Discussion Questions:

1. Which real birds are similar to your bird and in what ways?
2. How might a change in your bird's habitat affect its survival?

Variation: Instead of posters with different bird structures, create spinner cards for each category. (A round spinner with different beaks on outer rim, one for feet, etc.) Students spin spinner on each card and wherever it lands, that is the structure they use for the creation of their bird.

Interdisciplinary Lesson

Theme: Birds

Topic: Adaptations

Suggested Grade Level: 3-5

Indoors or Outdoors: Indoors

Science and Engineering Practices:

2. Developing and using models; 6. Constructing explanations (science).

Crosscutting Concepts:

6. Structure and function.

Disciplinary Core Ideas:

Life Sciences: LS1: From molecules to organisms: Structures and processes; LS 3: Heredity: Inheritance and variation of traits.

Background Information:

- A bird's adaptive structures determine its flying skills, courtship habits, habitat, method of feeding, protection abilities and way of life.
- Examples of different wing shapes include: Long, pointed wings excel at soaring and gliding; Fast fliers have narrow, tapered wings; Fowl-like birds have short, broad, rounded wings for quick take offs.
- Refer to "I'm Thinking of a Bird Game" card for differences in beak and feet structures.

Additional Resources:

- *Wild About Minnesota Birds* by Adele Porter
- *Sky Dancers – The Amazing World of North American Birds* by Diane Swanson
- The remarkable adaptations of birds to their environment, National Park Service: <https://www.nps.gov/cabr/blogs/the-remarkable-adaptations-of-birds-to-their-environment.htm>
- *What It's Like To Be A Bird* by David Allen Sibley

Correlates with:

Greeting - Beak Adaptations (p. 3)

Activity - I'm Thinking of a Bird Game (p. 50)