

### **Pollinator**

**Lesson 2: How to ID a species** 

**Duration:** 50 mins - 1 hour **Location:** Indoors

#### **Overview**

In this lesson students will:

Explore what makes pollinators special and learn ways to identify bumblebees. Students will be introduced to field guides and participate in activities to challenge their observation and identification skills using biofacts and technology.

#### **Learning objectives**

By the end of the session, students will be able to:

- Understand characteristics used to identify bumble bees
- Understand the purpose of field guides and practice utilizing them to identify birds and other animals
- Use QR codes and iPads to obtain information about biofacts

#### **Curriculum links**

Grade: 3

Subject and Unit: Science, Animal Life Cycles

- Classify a variety of animals, based on observable characteristics; e.g., limbs, teeth, body covering, overall shape, backbone
- Observe and describe the growth and development of at least one living animal, as the animal develops from early to more advanced stages.
- Identify the food needs of at least one animal from each of the following groups: mammals, birds, fish, reptiles, amphibians, insects; and describe changes in how each Science (Elementary) B.16 (1996) animal obtains food through different stages of its life.
- Recognize adaptations of a young animal to its environment, and identify changes in its
  relationship to its environment as it goes through life; e.g., tadpoles are adapted for life
  in an aquatic environment; adult frogs show adaptations to both terrestrial and aquatic
  environments;





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### **Equipment required**

| PowerPoint called "Lesson 2 how to id a species (grade 3 birds)" |
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| Biofact QR Code Activity instructions                            |
| 7 iPads/tablets  |
| 7-9 biofacts and QR codes  |
| 7 digital microscopes  |
| Laminated student observation sheets                             |
| Erasable markers   |
| Computer with Wi-Fi  |
| Projector  |





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### **Lesson plan**

| Time       | Activity   | Equipment needed  |
|------------|--|---|
| 3-5 mins   | How are pollinators special? (slide 2)  - Ask students what they think makes pollinators special  - Go through the slide notes as a guide  | <ul><li>Computer with Wi-Fi</li><li>Projector</li></ul>   |
| 5 mins     | What are ways we can identify bumble bees? Guess who activity (slides 3-6)  - review body parts of the bee: head, thorax, and abdomen on slide 3  - Guess who activity: using the diagram on the left, students will have to guess what bumble bee species it from the real-life images presented  - Go through the slide notes as a guide and for answers                               | <ul><li>Computer with Wi-Fi</li><li>Projector</li></ul>   |
| 3 mins     | What do we use to identify birds? (slide 7)  - Introduce field guides  - Go through the slide notes as a guide   | <ul> <li>Computer with Wi-Fi</li> <li>Projector</li> <li>Field Guides (if doing optional activity)</li> </ul>   |
| 30-40 mins | Biofact Blitz Activity (slides 8-10)  Review slide 8 for the biofact rules  Set up classroom for activity and review slide 9 for the activity instructions for the students (refer to the Biofact Blitz Activity Instructions)  Allow each group to see at least a few biofacts and fill out the observation sheets for them  End the session with the Biofact Blitz Debrief on slide 10 | <ul> <li>Computer with Wi-F</li> <li>Projector</li> <li>Field guides (at least one per station)</li> <li>7 iPads/tablets (one per station)</li> <li>7 biofacts (one per station)</li> <li>Digital microscopes (refer to Biofact Blitz Activity Instructions for instructions of use)</li> </ul> |







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|  | 7 laminated observation      |
|--|------------------------------|
|  | worksheets (one per station) |





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