

Lesson 3: Different Orders of Insects

Class Facts

- The class called “Insects” is divided into Orders.
- The Orders are defined by the shape of their body parts
- The seven Orders in this book are: Odonata, Orthoptera, Hemiptera, Diptera, Coleoptera, Lepidoptera, Hymenoptera

Reading and Questions

Reader pp.
11-15

1. How many insects do scientists guess there are? _____

2. Insects are separated into groups based on characteristics. What are these groups called?

3. What insects are in Order Odonata? _____

4. In what order do the insects have strong hind legs for jumping? _____

5. What is special about the wings of insects in Order Hemiptera? _____

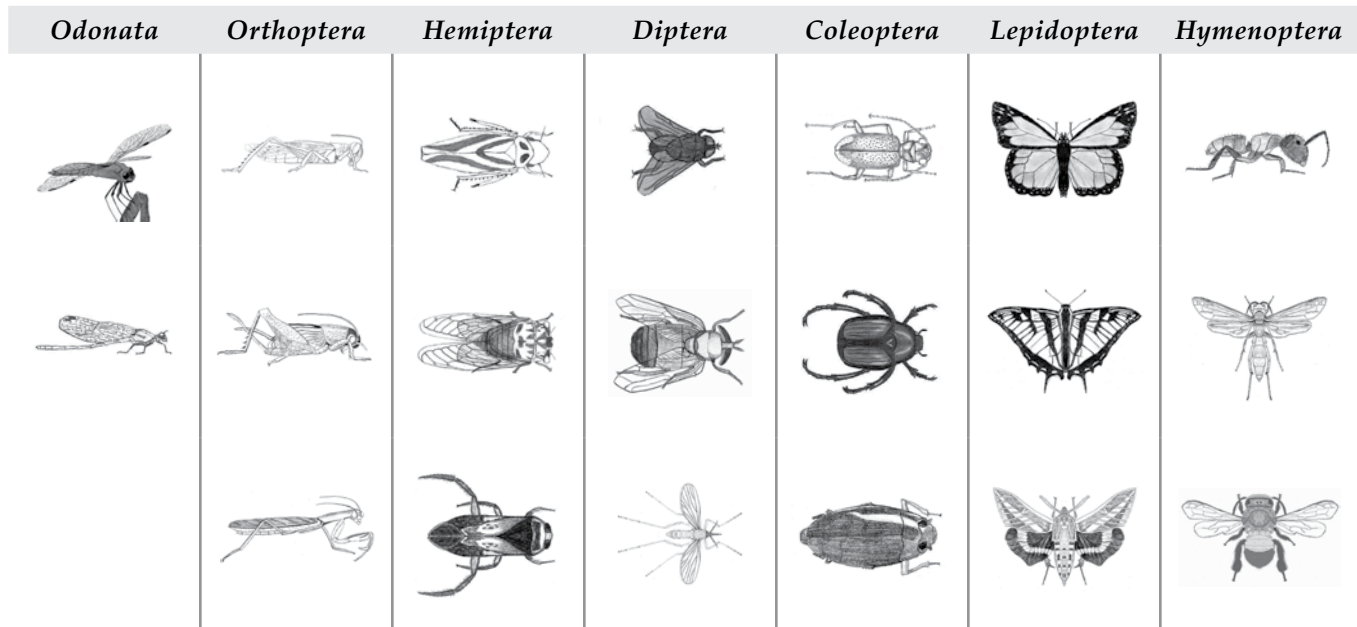
6. How many wings do flies have? _____
7. Name two insects from Order Coleoptera. _____

8. What does ‘Lepidoptera’ mean? _____

9. Do social insects like bees live together? _____

Observation and Sketching

- Compare the insects in each Order with each other. For example, what is similar about the insects in Order Odonata, dragonflies and damselflies?
- Contrast the Orders. What is different about them? For example, how are insects in Order Diptera different from those in Order Lepidoptera?



- Recite the seven Orders of insects with their scientific and common names, kind of metamorphosis, and two main traits/characteristics:
 - Odonata* (toothed) -- Dragonflies and Damselflies; incomplete; water nymphs and needle-like abdomen
 - Orthoptera* (straight-winged) -- Grasshoppers and Crickets; incomplete; fan-like wings and leathery front wings
 - Hemiptera* (half-winged) -- True Bugs; incomplete; first half of wing is rough and tip is smooth
 - Diptera* (two-winged) -- Flies; complete; soft body and sucking mouthparts
 - Coleoptera* (sheath-winged) -- Beetles; complete; front wings are hard and meet down the middle of the back
 - Lepidoptera* (scale-winged) -- Butterflies and Moths; complete; large wings and coiling mouthparts
 - Hymenoptera* (membrane-winged) -- Bees, Wasps, and Ants; complete; slender waist and stingers

Activities

1. Recite from memory the Class **Facts** at the beginning of this lesson.
2. Review the **Facts** from Lessons 1 and 2.