INSTRUCTIONS TO TEACHERS

Bee Life

Grade 1 Science Unit

bees matter

Bee Life

Instructions to Teachers

This unit is a **Science** lesson plan for *Life Science: Needs and Characteristics of Living Things*. Over a duration of 30 minutes, the lesson will take grade 1 students through an overview of the life and structure of honey bees.

Concepts this will teach students include: recognizing insects, diagramming anatomy, considering the life habits of insects.

The materials included are:

- Blackline Master: *The Honey Bee Life Cycle*
- Blackline Master: *Honey Bee Anatomy Worksheet*

Based on the Saskatchewan curriculum, we've identified three Outcomes & Indicators that this unit will meet as described in the curriculum guides (and in more detail on the next page): **LT1.1.h, LT1.1.i, LT1.1.j.**

Prior to the lesson, make copies of each of the *Bee Life* Blackline Masters for all of your students and attach them together in a hand-out package. Determine if you will be using the Honey Bee Anatomy Worksheet as an assignment and if so, keep it separate from the other materials.

During the lesson, ensure each student has all the relevant materials. Draw a diagram on the board of a bee, included with *Honey Bee Anatomy Worksheet*, but don't label any of the parts. Instead, in a list next to the drawing, include a list of the terms that students will learn:

- **Head**
- **Thorax**
- **Abdomen**
- **Stinger**
- **Legs**
- **Eye**
- **Antenna**
- **Wings**

As you explain the material in the Blackline Masters, add the simple function next to each of the words to define them. Draw lines from the words to the parts of the bee to reinforce the parts and their names.

Bee Life

Curriculum Expectations

Grade 1 Science – *Life Science: Needs and Characteristics of Living Things*

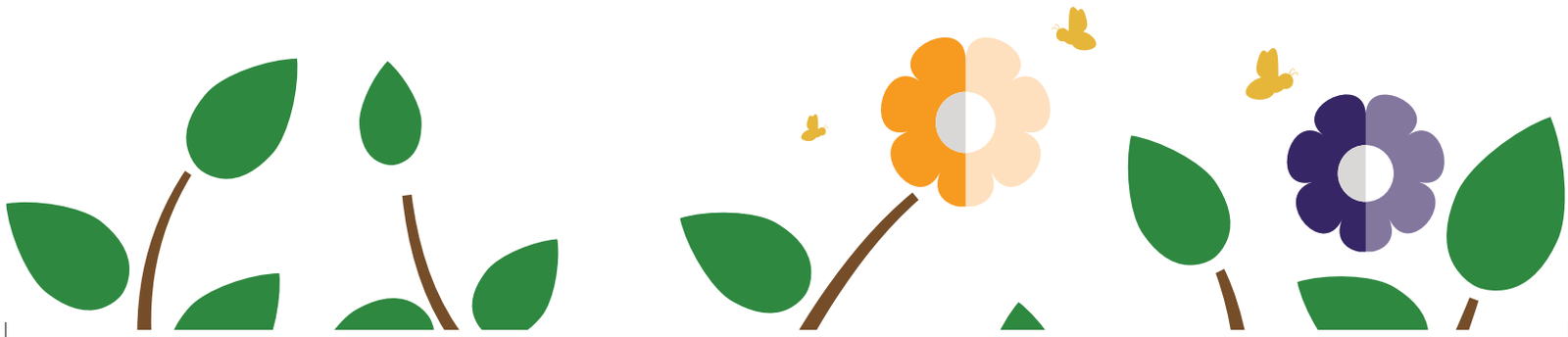
Students will learn to differentiate between living things according to observable characteristics, including appearance and behaviour. [CP, SI]

By the end of Grade 1 Science, students will be able to:

LT1.1.h: Describe the appearance and behaviour (e.g., method of movement, social grouping, diet, body covering, habitat, and nocturnal vs. diurnal orientation) of familiar animals (e.g., bumblebee, worm, dog, cat, snake, owl, fish, ant, beaver, rabbit, and horse).

LT1.1.i: Differentiate among animals according to their observable characteristics.

LT1.1.j: Compare characteristics of plants and animals at different stages of their lives (e.g., compare an adult dog with a pup, compare a young tree with an older established tree, and compare a baby bird with a fully grown bird).



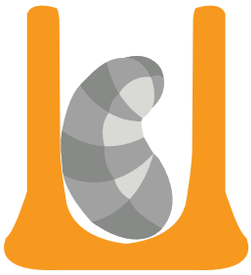
Bee Life

The Honey Bee Life Cycle

Egg

The **queen** lays an **egg** into a **cell** in the honeycomb.

Larva



The **egg** hatches into a young **larva,** which gets fed by other honey bees.

Pupa

The **larva** spins a **cocoon** around itself and becomes a **pupa.**

Adult

In its **cocoon,** the **pupa** develops into an **adult,** and then leaves the **cell.**

Honey Bee Anatomy

Honey bees are **insects.** Their bodies are divided into a **head,** a **thorax** and an **abdomen.** On their **head,** they have two **antennae,** which they use to "smell" their surroundings. They also have very complicated **eyes,** and they can see in many directions at once.

The **thorax** is the middle section of a honey bee, connected to six **legs** and two **wings** on each side. Honey bees use their legs to walk, and also to carry **pollen,** which they turn into a food called "bee bread".

Stay away from the **abdomen!** That's where a honey bee's **stinger** is, but they will only use it to defend themselves.

Fill in the diagram above with the words that match the parts of the **honey bee:**

head	**abdomen**	**legs**	**antenna**
thorax	**stinger**	**eye**	**wings**

Honey Bee Anatomy

Answer Key

Fill in the diagram with the words that match the parts of the **honey bee:**

head	**abdomen**	**legs**	**antenna**
thorax	**stinger**	**eye**	**wings**