



Inquiry on Insects

Scarlet Kim & Myrna Ordon

Division 5 & 6 Charles Dickens Elementary School

Unit Rationale



Looking at insects opens **exciting opportunities** for **inquiry**. A continuation of animal studies will help students understand the **observable features** of animals and the different **classification groups** they belong to. We want students to recognize the insects' **contribution** to our **environment**, its **role** in the **food chain** and to **connect** with the **outdoors**.

Our Students

- 2 IEPs
- 2 ELLs
- Family grouping
- Behavioural issues
(no designations)



BC New Curriculum Big Ideas Science

- **Plants and animals have observable features. (Kindergarten)**
- **Living things have features and behaviours that help them survive in their environment. (Grade One)**
- **Living things have life cycles adapted to their environment. (Grade Two)**



Curricular Competencies & Content Science

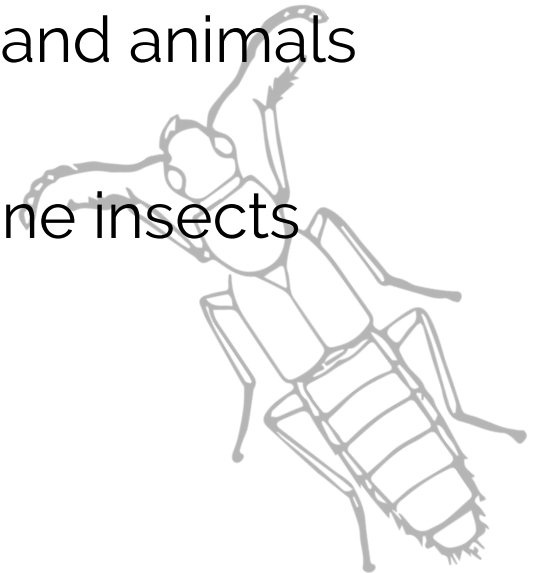


- **Questioning and Predicting** - Demonstrate curiosity and sense of wonder about the world
- **Planning and Conducting** - Make and record observations
- **Processing and analyzing data and info.** - Experience and interpret the local environment.
- **Content** - Classification of living things, names of animals (insects), structural features of living things in the local environment, behavioural adaptations of animals (insects) in the local environment and living things make changes to accommodate daily and seasonal cycles.



First Nations Integration

- Outdoor exploration of local environment
- Local First Peoples knowledge and uses of plants and animals
- Making connections to land, plants and animals around the natural environment
- Learning how the First Peoples define insects (compare/contrast)





Guiding Critical Questions

- ***What makes insects, insects?***
- ***Why are they in their own classification group?***
- ***Why are some insects pests? / What are the benefits of insects?***
- ***How do they contribute to our environment?***

Key Vocabulary

- Thorax
- Abdomen
- Head
- Wings
- Antennae
- Sting

Unit At A Glance

Lesson	Activity
Week One: Introduction Lesson 1	<ul style="list-style-type: none"> - Classification (Sorting Activity) - KWL (Know & Wonder) - Insect Fiction Book (<i>The Grouchy Ladybug</i>)
Week One: Anatomy Lesson 2	<ul style="list-style-type: none"> - Anatomy Diagram Labelling Mix and Match Activity - Review KWL chart
Week Two: Behaviour Lesson 3	<ul style="list-style-type: none"> - <u>Common "flying" insects</u> - KWL (Review "KW" and Introduce "L") - Static Butterfly Experiment - ART CLASS: theme integration - design your own insect
Week Two: Behaviour Lesson 4	<ul style="list-style-type: none"> - <u>Common "crawling" and jumping insects</u> - Sorting activity on different insect behaviours (crawlers, jumpers, fliers)
Week Three: Life Cycle Lesson 5	<ul style="list-style-type: none"> - Life cycle wheels (Student created)
Week Three: Life Cycle Lesson 6	<ul style="list-style-type: none"> - Life cycle wheels continued (Student created)
Week Four: Habitat Lesson 7	<ul style="list-style-type: none"> - Revisit KWL chart - Outdoor exploration and observations
Week Four: Friend or Foe? Lesson 8	<ul style="list-style-type: none"> - Initial insect sorting activity - friend or foe? - Drama: Perspective of an insect role play - WRITERS WORKSHOP: theme integration - describe your insect
Week Five: Field Trip	<ul style="list-style-type: none"> - Beaty Biodiversity Museum



Cross Curricular Integration



Math

- Symmetry
- Measurement
- Patterns
- Counting Collections
- Graphing



Language Arts

- Writer's Workshop
- Poetry/drama/songs
- **Guided reading** with nonfiction texts with the older learners



Social Studies

- **Regions** where insects live
- Relationship between people and the environment (insects)
- Characteristics of the local physical environment



PHE

- Movement of insects in relation to **fundamental skills** (jumping, hopping, throwing)
- Outdoor exploration and play (insect role play)
- Act like an insect brain breaks!



Art

- **Observational drawing/sketching**
- First Nations artistic elements
- Using different materials to create insects
- Sharing work in a variety of ways



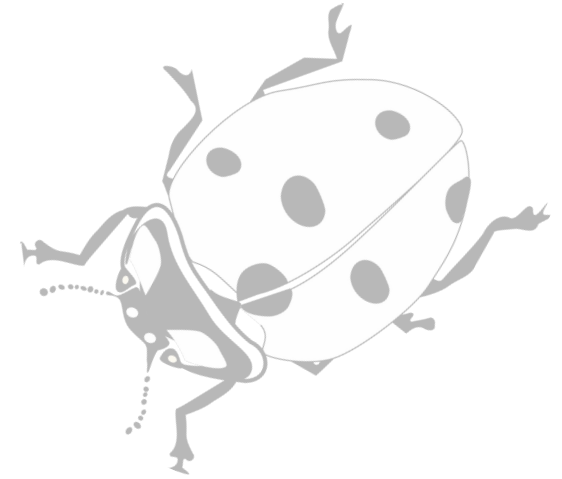
Differentiated Learning



- **ELLs:** Use of pictures and images instead of written words. Non Fiction books to activate prior knowledge. Use of insect “word wall.”
- **IEPs:** Physical and coloured images for sensory enhancement; sensory play with different textures. Visual cue cards for understanding and communicating.
- **Family-age grouping:** Modified instructions, increased content for older learners.
- **Multi-modality:** Interactive graphic organizers, video clips, chants and songs, drama role play. Group, pair, individual work.



Assessment



Formative

- Ongoing observations in class
- KWL charts and brainstorms to assess prior knowledge
- Classroom management cues to check understanding (thumbs up, thumbs down)

Reflective

- Write in their journals
- Closures on activities that were done
- Provide writing exercises/drawing exercise related to the activity taught in class

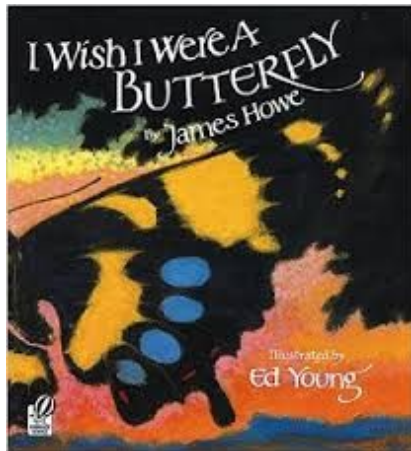
Summative

- End of unit project: Create your own insect. Overall check of understanding on the unit

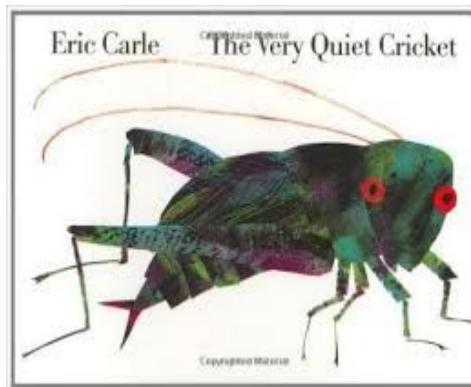


Suggested Fiction Books on Insects:

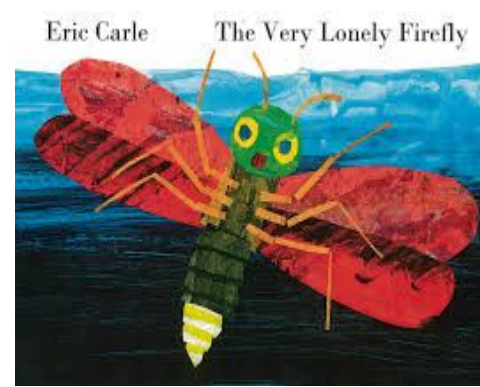
I wish I were a butterfly
by James Howe



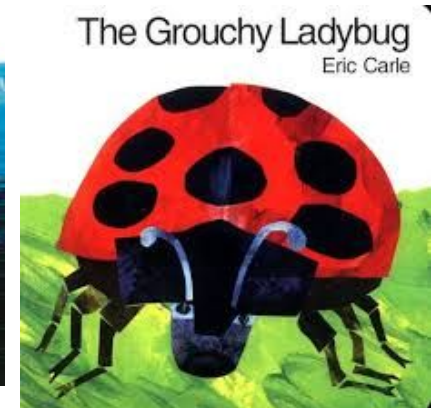
The Very Quiet Cricket
by Eric Carle



The Very Lonely
Firefly by Eric Carle



The Grouchy Ladybug
by Eric Carle





Resources

- BC Ministry of Education. (2017). *BC's new curriculum*. <https://curriculum.gov.bc.ca>
- Hughes, D. (1999). *Insects: Science for primary kids*. Gabriola, B.C: Pacific Edge Pub.
- Kalman, B., & Crossingham, J. (2006). *Insect homes*. St. Catharines, Ont; New York, NY: Crabtree Pub.
- Kalman, B., & Sjonger, R. (2006). *Everyday insects*. St. Catharines, ON; New York, NY: Crabtree Pub. Co.
- Aloian, M., & Kalman, B. (2005). *Insect life cycles*. New York, NY: Crabtree Pub. Co.
- <http://beatymuseum.ubc.ca/learn/for-schools/elementary-school/>
- www.ecokids.ca
- www.pinterest.com

