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| **Unit –Time** | **BC Big Ideas (Understand)** | **BC Curricular Competencies (Do)** | **BC Content (Know)** | **Instructional Strategies/ Learning Activities** | **Materials & Resources** | **Assessment Methods/Assessment Date** | **Key Vocabulary** |
| **Unit 1:**  August 29- November 1  (9 weeks) | Living things have life cycles adapted to their environment | Demonstrate curiosity about the natural world.  Observe objects and events in familiar contexts  Ask questions about familiar objects and events.  Make simple predictions about familiar objects and events.  Make and record observations.  Safely manipulate materials to test ideas and predictions.  Sort and classify data and information using drawings or provided tables.  Compare observations with predictions through discussion.  Compare observations with those of others.  Transfer and apply learning to new situations.  Generate and introduce new or refined ideas when problem solving.  Communicate observations and ideas using oral or written language, drawing or role play.  Express and reflect on personal experiences of place. | metamorphic and   non-metamorphic life cycles of different organisms  similarities and differences between offspring and parent | -KWL chart on lifecycle of a human (metamorphic)  -Teacher will provide models of each part of the life cycle of a butterfly.  Students will observe models first without talking and then try to put them in order.  -Hands on sequencing activities on life cycles of frogs and butterflies, using arts and crafts  -Brain pop junior videos on life cycles  -Shared reading of life cycle poems  -Create booklets to read about life cycle of a frog (resources)  Cut & paste cycle of a frog sequence worksheet (resources) | Butterfly life cycle sequence wheel (resources)  Butterfly life cycle poem (resources)  Very Hungry Caterpillar Animated Film  <https://www.youtube.com/watch?v=75NQK-Sm1YY>  <https://www.brainpop.com/science/ecologyandbehavior/metamorphosis/>  <https://www.nationalgeographic.org/activity/the-very-hungry-caterpillar-and-the-butterfly-life-cycle/>  Life cycle of a frog  <https://www.youtube.com/watch?v=FIXoJYbBls0>  Life cycle of a frog booklet pages (resources) | **Diagnostic**  K-W-L Chart  **Formative**  - Student worksheets based on criteria set for assignment  -Exit tickets  - Oral description of animal life cycles  **Summative**  Unit test - Week of October 28-November 1  Labeling and Explaining each stage of a butterfly and frog  -science journal observations and recordings | Stages  Life cycle  metamorphic  butterfly  chrysalis  caterpillar  tadpole  frog  eggs  froglets |
| **Unit 2:**  November 4-  January 17 (9 weeks) | Water is essential to all living things, and it cycles through the environment. | Demonstrate curiosity about the natural world.  Observe objects and events in familiar contexts  Ask questions about familiar objects and events.  Make simple predictions about familiar objects and events.  Make and record observations.  Make and record simple measurements using informal or non-standard methods.  Experience and interpret the local environment.  Sort and classify data and information using drawings or provided tables.  Compare observations with predictions through discussion.  Identify simple patterns and connections.  Compare observations with those of others.  Transfer and apply learning to new situations.  Generate and introduce new or refined ideas when problem solving.  Communicate observations and ideas using oral or written language, drawing or role play.  Express and reflect on personal experiences of place. | Common objects in the sky.  Aboriginal knowledge of the sky and landscape.  Local patterns in events that occur on Earth and in the sky. | -vocabulary of new words in the unit  -videos and computer programs about water cycle  -KWL chart on the water cycle  -create a flow chart that lists the steps of the water cycle  -read books and lead class discussions on how water, air, and soil interact  -watch videos and learn to explain each stage of the water cycle  -create a water cycle booklet  -organize and label the stages of the water cycle in their correct order  -create a small ecosystem where the students can observe evaporation and condensation (rain: shaving cream & food colouring experiment) | Sdwater cycle anchor chcharts  Youtube water cycle stages https://www.youtube.com/watch?v=XhIkEy73j50  Go noodle.com water cycle dance  <https://www.youtube.com/watch?v=KM-59ljA4Bs>  Water cycle wheel activity (resources)  Water cycle worksheets (resources)  Shaving cream  Cups  Blue food colouring | **Diagnostic**  K-W-L Chart  **Formative**  -Exit tickets  - experiment observation checklist  -worksheets  **Summative**  Water cycle Test: Description and explanation of stages Week of January 13-17  Water cycle project - Week of January 13-17 | stages  changes  rain  vapor  steam  heat  water  clouds  sun  droplets |
| **Unit 3:**  January 17- March 21 (9 weeks) | Materials can be changed through physical and chemical processes. | Demonstrate curiosity about the natural world.  Observe objects and events in familiar contexts  Ask questions about familiar objects and events.  Make simple predictions about familiar objects and events.  Make and record observations.  Safely manipulate materials to test ideas and predictions.  Make and record simple measurements using informal or non-standard methods.  Experience and interpret the local environment.  Sort and classify data and information using drawings or provided tables.  Compare observations with predictions through discussion.  Identify simple patterns and connections.  Compare observations with those of others.  Consider some environmental consequences of their actions.  Transfer and apply learning to new situations.  Generate and introduce new or refined ideas when problem solving.  Communicate observations and ideas using oral or written language, drawing or role play.  Express and reflect on personal experiences of place. | Examine the physical /chemical ways of changing | Create a vocabulary list as we go along in the unit of new and important words  -movement activities (acting out states of matter)  -videos from brainpop jr and magic school bus that talk about changes in matter  -worksheets that sort out materials into categories of solids, liquids and gas  -place a cut up piece of paper, a crumbled paper, and a burned paper in front of the students.  Discuss the difference between physical and chemical change.  -make food that shows changes in the states of matter (ice cubes, popsicles, eggs, yogurt cheese, FLOATS w/soda & icecream  -create mini-books about the different states of matter and the qualities of each one | Pan Canada Science  Science A-Z  Science worksheets (in resource folder)  Brain Pop Junior  Nelson science textbook | **Diagnostic**  K-W-L Chart  **Formative**  -Exit tickets  - classification solid, liquid gas  -classification; chemical and physical change  -science experiment/observation worksheet  **Summative**  Unit Test -  Week of March 17-21 | Chemical  Physical  Change  Solid  Liquid  Gas  Touch  Fluid  Space  Melt  Hardens  Process  cold  heat |
| **Unit 4:**  March 24-  May 29  (9 weeks) | Forces influence the motion of an object. | Demonstrate curiosity about the natural world.  Observe objects and events in familiar contexts  Ask questions about familiar objects and events.  Make simple predictions about familiar objects and events.  Make and record observations.  Safely manipulate materials to test ideas and predictions.  Make and record simple measurements using informal or non-standard methods.  Experience and interpret the local environment.  Sort and classify data and information using drawings or provided tables.  Compare observations with predictions through discussion.  Identify simple patterns and connections.  Compare observations with those of others.  Transfer and apply learning to new situations.  Generate and introduce new or refined ideas when problem solving.  Communicate observations and ideas using oral or written language, drawing or role play.  Express and reflect on personal experiences of place. | The way different objects fall depending on their shape  Analyzing the way objects move in different environments  The motions caused by different strengths of forces | Create vocabulary of new words in the unit  -movement activities (acting out push, pull, and friction)  -dropping different objects of different weight from a higher position—analyzing the fall/landing  -experiment by pushing and pulling objects across smooth and rough surface  -do a thought experiment about pushing and pulling an object across ice, the floor, the side of a mountain etc…--Magic School Bus: What makes a Ball Move experiment  -experiment with using the appropriate amount of force for tapping someone, passing a book across a table, dragging a heavy bag across a smooth or rough surface  -mystery boxes: place differently shaped 3D objects in separate boxes and have the students think about what the shape might be, and which object might be the easiest to push or pull. | Different objects students can bring from home for experiments(toys etc.)  -push and pull objects sorting worksheets (resources)  -bucket and water (sink and float activity)  -forces & motion video  <http://studyjams.scholastic.com/studyjams/jams/science/forces-and-motion/inertia.htm>  -Magic School Bus Scholastic Activity on Movement  <https://www.scholastic.com/magicschoolbus/parentteacher/activities/playsball.htm>  Magic School Bus Plays Ball Video: <https://www.dailymotion.com/video/x5vitvu> | **Diagnostic**  K-W-L Chart  **Formative**  -Exit tickets  - movement experiment lab  Summative  Unit test  Week of May 26-29 | Move  Push  Pull  Sink  Float  Speed  Direction  Forward  Backwards |