|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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) | Matter is useful because of its properties. | 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. | Specific properties of materials connected to the function of the materials. | Instructional Labs  - Melting ice  - Dancing raisins  - Fill the balloon (baking soda and vinegar)  All about Solids, Liquids and Gases | Ice  Raisins, cups, clear soda  Empty water bottles, vinegar, baking soda, water  BrainPOP Jr- Matter  Solids, Liquids and Gases by Ginger Garrett(Library)  Experiments with Solids, Liquids and Gases by Salvatore Tocci(Library)  States of matter sorting worksheets  (Resources)  States of Matter Video(Resources) | **Diagnostic**  K-W-L Chart  **Formative**  -Exit tickets  - Oral description of melting ice lab  - Dancing raisins lab  -Fill the balloon lab  -Classification of solids, liquids and gases  **Summative**  Unit test - Week of October  28-November 1 | Liquid  Solid  Gas  States of matter |
| **Unit 2:**  November 4-  January 17 (9 weeks) | Observable patterns and cycles occur in the local sky and landscape. | 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. | Instructional labs  - Shadow tracing/measuring  Tracking weather  -temperature  -precipitation  Cloud observations  -cloud in a bottle experiment  Day/night  - moon phases and connection to Islam  - the sun | Flashlight  Shadow tracing  video(resources)  -Objects to trace  eg. animal  figurines,  fruit, mugs etc.  -Thermometer  -Measuring jug  Types of Clouds  video(resources)  - cloud in a bottle  video(resources)  Empty 2litre soda bottle, rubbing alcohol, duct tape, air pump.  So That’s How The  Moon Changes  Shape! by Allan  Fowler (Library)  Phases of the Moon  with Oreo Cookies  activity  (Resources)  Energy from the  Sun by Allan  Fowler (Library)  Experiments with  the Sun and the  Moon by Salvatore  Tucci (Library)  Various  videos/songs  (resources) | **Diagnostic**  K-W-L Chart  **Formative**  -Exit tickets  - Shadow tracing oral discussion  -weather graph  - Clouds  **Summative**  Seasonal adaptations report/diorama (focus on how humans, animals and plants adapt to a season of choice.) - Week of January 13-17 | spring  summer  winter  fall  season  temperature  rainy  windy  dusty  snow  sun  moon |
| **Unit 3:**  January 17- March 21 (9 weeks) | Living things have features and behaviors that help them survive in 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.  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. | The classification of living or non-living things.  Structural features of living things in the local environment.  Behavioral adaptations of animals in the local environment. | Plants  - needs  - uses  Lab: planting bean or sunflower seeds  Animals  - needs  - uses  - adaptations  Animal research project  People  - needs and wants  - the five senses | BrainPOP Jr-  Plants  Needs of Plants video (resources)  Uses of Plants video (resources)  From Seed to Plant by Gail Gibbons (library)  Seeds/beans, soil, plastic containers, spray bottle for water, spoons or scoops.  BrainPOP Jr- Animals  Needs of an Animal video (resources)  Skin and Fur by Jonathan A. Brown (library)  Lifecycles collection: From Catterpillar to Butterfly (library)  Research project template  (resources)  BrainPOP Jr- Needs and Wants  Needs and Wants Sort Worksheet (resources)  Pocket chart cards for anchor chart (resources)  BrainPOP Jr- Senses  The Five Senses worksheets (resources)  The Five Sense Video- Dr. Binoc’s Show | **Diagnostic**  K-W-L Chart  **Formative**  -Exit tickets  - classification living/non-living  -classification; plant vs. animal  - planting seeds lab  - Animal research project  **Summative**  Unit Test -  Week of March 17-21 | plant  animal  shelter  food  water  air  fur  feathers  scales  mammal  reptile  amphibian  insect  grow  measure |
| **Unit 4:**  March 24-  May 29  (9 weeks) | Light and sound can be produced and their properties can be changed. | 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. | Natural and artificial sources of light and sound.  Properties of light and sound that depend on their source and the objects they interact with. | Sound labs  - identifying sounds  - changing sound  Light lab  - flashlights, coloured cellophane  - prisms | -Environmental  Sounds video  (resources)  -plastic cups and string  BrainPOP Jr- Sound  BrainPOP Jr- Light  Dr. Binocs Light video (resources)  Light and Sound Sort worksheet (resources)  What Is Light Energy video (resources) | **Diagnostic**  K-W-L Chart  **Formative**  -Exit tickets  - sound lab  -light lab  Summative  Unit test  Week of May 26-29 | sun  rainbow  artificial  natural  bright  dark  loud  quiet  pitch |