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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** |
| Biology: Senses and Responses  Sept 2- Nov. 1 | All living things sense and respond to their environment. | -How do living things sense, respond, and adapt to stimuli?  -What evidence is there of interdependence between living and non-living things in ecosystems? | ·Sensing and responding:  humans  other animals  plants  ·Biomes as large regions with similar environmental features | -The way organisms in ecosystems sense and respond to their environment.  -Features of biomes. | Nelson: Science 4  BC Science Probe 4  Unit C: Habitats and Communities  Chapters 8, 9, 10  Delta kit:  Plants and Animals  Online resources:  <http://www.nelson.com/bc/nelson-science/>  [www.studyladder.com](http://www.studyladder.com) (free)  [www.superteacherworksheets.com](http://www.superteacherworksheets.com) (subscription) - optional worksheet resource | Class Work:  -What is the best habitat for certain animals.  Assessments:  -Bell work: September 23  October 7, 14,  -Project: Due October 28.  -Quiz Week of September 30  -Unit Test Oct. 21 | Habitat  Community  Environment  Organism  Senses  Ecosystem  Adaptation  Structural  Behavioural  Food Chain  Food Web |
| Chemistry: Phases of Matter  Nov 4. - Jan. 17 | Matter has mass, takes up space, and can change phase. | -How can you explore the phases of matter?  -How does matter change phases?  -How does heating and cooling affect phases? | ·Phases of matter  ·The effect of temperature on particle movement | -Solids, liquid and gasses as matter.  -The effect of temperature on pressure in gas.  -Physical changes of matter. | Nelson: Science 4  Macmillan McGraw-Hill Science:  Physical Science  Unit E and F  Online resources:  <http://www.nelson.com/bc/nelson-science/>  [www.studyladder.com](http://www.studyladder.com) (free)  [www.superteacherworksheets.com](http://www.superteacherworksheets.com) (subscription) - optional worksheet resource | Class Work:  -Types of matter worksheet.  -Changing the state of matter.  Project/Experiment:  -Oobleck project  -Thermal energy experiment  Assessments:  -Bell work:  -Quiz  -Unit Test | Liquid  Solid  Gas  States of matter  Temperature  Heating  Evaporation  Condensation |
| Physics: Energy  Jan. 20. - March 28 | Energy can be transformed. | -What is energy input and energy output?  -What is energy conservation?  -What is the relationship between energy input, output, and conservation?  -What is transformation of energy? | ·Energy:  -Various forms  -Is conserved  ·Devices that transform energy | Forms of Energy  Conservation of Energy  Effect of temperature on energy  Transformation of Energy  Application and Innovations | Nelson: Science 4 Physics and Earth /Space  Macmillan McGraw-Hill Science:  Physical Science  Unit E and F  Online resources:  <http://www.nelson.com/bc/nelson-science/>  [www.studyladder.com](http://www.studyladder.com) (free)  [www.superteacherworksheets.com](http://www.superteacherworksheets.com) (subscription) - optional worksheet resource | Class Work:  -Scavenger hunt for transform of energy  Project/Experiment:  -How to conserve energy at home and school  Assessments:  -Bell work:  -Quiz  -Unit Test | Energy  Chemical Energy  Conservation of Energy  Elastic Energy  Electrical Energy  Magnetic Energy  Nuclear Energy  Potential Energy  Kinetic Energy  Sound Energy  Thermal Energy  Volume |
| Earth/Space: Earth, Sun and Moon  April 1st - May 29 | The motions of Earth and the moon cause observable patterns that affect living and non-living systems. | -What are the phases of the moon?  -How do seasons and tides affect living and non-living things?  -What changes are caused by the movement of Earth and the moon? | -Local changes caused by Earth’s axis, rotation, and orbit  -The effects of the relative positions of the sun, moon, and Earth including local First Peoples perspectives | Earth rotates and revolves  Plants and animals respond to day and night  Plants and animals respond to seasonal changes  Phases of the Moon  Movement of the Moon causes tides | Nelson: Science 4 Physics and Earth /Space  BC Science Probe 4  Unit A: Weather  Chapters 1, 2, 3  Online resources:  <http://www.nelson.com/bc/nelson-science/>  [www.Mysteryscience.com](http://www.mysteryscience.com)  [www.studyladder.com](http://www.studyladder.com) (free)  [www.superteacherworksheets.com](http://www.superteacherworksheets.com) (subscription) - optional worksheet resource | Class Work:  -Extreme weather worksheet.  -Effect of mountains and oceans on climate worksheet  Project:  -Tracking moon phases.  Assessments:  -Bell work:  -Quiz  -Unit Test | Spring  Summer  Winter  Fall  Season  Temperature  Axis  Cycle  Eclipse  Equator  Gravity  Hibernate  High tide  Low tide |
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