# SCIENCE CURRICULUM BRITISH COLUMBIA

## GRADE K - 8


VISIT: **3P.STEMSCOPES.SCIENCE**

stemscopes SCIENCE

3P Learning

# CONTENTS

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Pushes and Pulls** | K | **K.BI.3.** | The motion of objects depends on their properties. |
| | | **K.C.5.** | Effects of size, shape, and materials on movement |
| | | **K.CC.1.2.** | Observe objects and events in familiar contexts |
| | | **K.CC.2.2.** | Safely manipulate materials |
| | | **K.CC.3.4.** | Represent observations and ideas by drawing charts and simple pictographs |
| | | **K.CC.4.1.** | Take part in caring for self, family, classroom and school through personal approaches |
| | | **K.CC.5.2.** | Express and reflect on personal experiences of place |
| **Basic Needs and Habitats** | K | **K.BI.1.** | Plants and animals have observable features. |
| | | **K.C.2.** | Adaptations of local plants and animals |
| | | **K.C.1.** | Basic needs of plants and animals |
| | | **K.CC.1.3.** | Ask simple questions about familiar objects and events |
| | | **K.CC.2.1.** | Make exploratory observations using their senses |
| | | **K.CC.3.1.** | Experience and interpret the local environment |
| | | **K.CC.4.2.** | Generate and introduce new or refined ideas when problem solving |
| | | **K.CC.5.2.** | Express and reflect on personal experiences of place |
| | | **K.C.3.** | Local First Peoples uses of plants and animals |
| | | **K.CC.3.2.** | Recognize First Peoples stories , songs, and art, as ways to share knowledge |
| **Parts of Animals** | K | **K.BI.1.** | Plants and animals have observable features. |
| | | **K.C.2.** | Adaptations of local plants and animals |
| | | **K.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **K.CC.2.1.** | Make exploratory observations using their senses |
| | | **K.CC.3.3.** | Discuss observations |
| | | **K.CC.4.2.** | Generate and introduce new or refined ideas when problem solving |
| | | **K.CC.5.1.** | Share observations and ideas orally |
| **Seasonal Patterns** | K | **K.BI.4.** | Daily and seasonal changes affect all living things. |
| | | **K.C.7.** | Seasonal changes |

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| | | **K.C.8.** | Living things make changes to accommodate daily and seasonal cycles |
| | | **K.CC.1.3.** | Ask simple questions about familiar objects and events |
| | | **K.CC.2.1.** | Make exploratory observations using their senses |
| | | **K.CC.3.4.** | Represent observations and ideas by drawing charts and simple pictographs |
| | | **K.CC.4.2.** | Generate and introduce new or refined ideas when problem solving |
| | | **K.CC.5.2.** | Express and reflect on personal experiences of place |
| | | **K.C.9.** | First Peoples knowledge of seasonal changes |
| | | **K.CC.3.2.** | Recognize First Peoples stories , songs, and art, as ways to share knowledge |
| **Properties and States of Matter** | K | **K.BI.2.** | Humans interact with matter every day through familiar materials. |
| | | **K.C.4.** | Properties of familiar materials |
| | | **K.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **K.CC.2.1.** | Make exploratory observations using their senses |
| | | **K.CC.3.3.** | Discuss observations |
| | | **K.CC.4.2.** | Generate and introduce new or refined ideas when problem solving |
| | | **K.CC.5.1.** | Share observations and ideas orally |
| | | **K.CC.2.3.** | Make simple measurements using non-standard units |
| **Adaptations** | K | **K.BI.1.** | Plants and animals have observable features. |
| | | **K.C.2.** | Adaptations of local plants and animals |
| | | **K.C.8.** | Living things make changes to accommodate daily and seasonal cycles |
| | | **K.CC.1.3.** | Ask simple questions about familiar objects and events |
| | | **K.CC.2.1.** | Make exploratory observations using their senses |
| | | **K.CC.3.3.** | Discuss observations |
| | | **K.CC.4.2.** | Generate and introduce new or refined ideas when problem solving |
| | | **K.CC.5.1.** | Share observations and ideas orally |
| **Parts of Plants** | K | **K.BI.1.** | Plants and animals have observable features. |
| | | **K.C.1.** | Basic needs of plants and animals |
| | | **K.CC.1.2.** | Observe objects and events in familiar contexts |

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| | | **K.CC.2.2.** | Safely manipulate materials |
| | | **K.CC.3.4.** | Represent observations and ideas by drawing charts and simple pictographs |
| | | **K.CC.4.2.** | Generate and introduce new or refined ideas when problem solving |
| | | **K.CC.5.2.** | Express and reflect on personal experiences of place |
| **Weather Conditions** | K | **K.BI.4.** | Daily and seasonal changes affect all living things. |
| | | **K.C.6.** | Weather changes |
| | | **K.C.8.** | Living things make changes to accommodate daily and seasonal cycles |
| | | **K.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **K.CC.2.1.** | Make exploratory observations using their senses |
| | | **K.CC.3.3.** | Discuss observations |
| | | **K.CC.4.2.** | Generate and introduce new or refined ideas when problem solving |
| | | **K.CC.5.2.** | Express and reflect on personal experiences of place |
| | | **K.CC.5.2.** | Express and reflect on personal experiences of place |

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Patterns in Space** | 1 | **1.BI.4.** | Observable patterns and cycles occur in the local sky and landscape. |
| | | **1.C.10.** | Local patterns that occur on Earth and in the sky |
| | | **1.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **1.CC.2.1.** | Make and record observations |
| | | **1.CC.3.4.** | Compare observations with predictions through discussion |
| | | **1.CC.4.1.** | Compare observations with those of others |
| | | **1.CC.5.3.** | Generate and introduce new or refined ideas when problem solving |
| | | **1.CC.6.2.** | Express and reflect on personal experiences of place |
| | | **1.CC.3.2.** | Recognize First Peoples stories , songs, and art, as ways to share knowledge |
| | | **1.C.8.** | Common objects in the sky |
| | | **1.C.9.1.** | Shared First Peoples knowledge of the sky |
| **Sound** | 1 | **1.BI.3.** | Light and sound can be produced and their properties can be changed. |
| | | **1.C.6.** | Natural and artificial sources of light and sound |
| | | **1.C.7.** | Properties of light and sound depend on their source and the objects with which they interact |
| | | **1.CC.1.4.** | Make simple predictions about familiar objects and events |
| | | **1.CC.2.2.** | Safely manipulate materials to test ideas and predictions |
| | | **1.CC.3.5.** | Identify simple patterns and connections |
| | | **1.CC.4.1.** | Compare observations with those of others |
| | | **1.CC.5.2.** | Transfer and apply learning to new situations |
| | | **1.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Physical Properties of Matter** | 1 | **1.BI.2.** | Matter is useful because of its properties. |
| | | **1.C.5.** | Specific properties of materials allow us to use them in different ways |
| | | **1.CC.1.2.** | Observe objects and events in familiar contexts |

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| | | **1.CC.2.2.** | Safely manipulate materials to test ideas and predictions |
| | | **1.CC.3.3.** | Sort and classify data and information using drawings, pictographs and provided tables |
| | | **1.CC.4.1.** | Compare observations with those of others |
| | | **1.CC.5.1.** | Take part in caring for self, family, classroom and school through personal approaches |
| | | **1.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Seasons and Changes** | 1 | **1.BI.4.** | Observable patterns and cycles occur in the local sky and landscape. |
| | | **1.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **1.CC.2.1.** | Make and record observations |
| | | **1.CC.3.1.** | Experience and interpret the local environment |
| | | **1.CC.4.1.** | Compare observations with those of others |
| | | **1.CC.5.2.** | Transfer and apply learning to new situations |
| | | **1.CC.6.2.** | Express and reflect on personal experiences of place |
| | | **1.C.10.** | Local patterns that occur on Earth and in the sky |
| | | **1.C.9.3.** | Local First Peoples understanding and use of seasonal rounds |
| **Functional Structures of Organisms** | 1 | **1.BI.1.** | Living things have features and behaviours that help them survive in their environment. |
| | | **1.C.3.** | Structural features of living things in the local environment |
| | | **1.CC.1.3.** | Ask questions about familiar objects and events |
| | | **1.CC.2.1.** | Make and record observations |
| | | **1.CC.3.5.** | Identify simple patterns and connections |
| | | **1.CC.4.1.** | Compare observations with those of others |
| | | **1.CC.5.3.** | Generate and introduce new or refined ideas when problem solving |
| | | **1.CC.6.2.** | Express and reflect on personal experiences of place |
| | | **1.C.9.2.** | Local First Peoples knowledge of the local landscape, plants and animals |
| **Living and Nonliving Things** | 1 | **1.BI.1.** | Living things have features and behaviours that help them survive in their environment. |
| | | **1.C.1.** | Classification of living and non-living things |
| | | **1.CC.1.2.** | Observe objects and events in familiar contexts |

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| | | **1.CC.2.1.** | Make and record observations |
| | | **1.CC.3.1.** | Experience and interpret the local environment |
| | | **1.CC.4.2.** | Consider some environmental consequences of their actions |
| | | **1.CC.5.1.** | Take part in caring for self, family, classroom and school through personal approaches |
| | | **1.CC.6.2.** | Express and reflect on personal experiences of place |
| | | **1.C.2.** | Names of local plants and animals |
| **Forms of Energy** | 1 | **1.BI.3.** | Light and sound can be produced and their properties can be changed. |
| | | **1.C.7.** | Properties of light and sound depend on their source and the objects with which they interact |
| | | **1.CC.1.4.** | Make simple predictions about familiar objects and events |
| | | **1.CC.2.1.** | Make and record observations |
| | | **1.CC.3.5.** | Identify simple patterns and connections |
| | | **1.CC.4.1.** | Compare observations with those of others |
| | | **1.CC.5.2.** | Transfer and apply learning to new situations |
| | | **1.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Learned Behaviors and Inherited Traits** | 1 | **1.BI.1.** | Living things have features and behaviours that help them survive in their environment. |
| | | **1.C.4.** | Behavioural adaptations of animals in the local environment |
| | | **1.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **1.CC.2.1.** | Make and record observations |
| | | **1.CC.3.1.** | Experience and interpret the local environment |
| | | **1.CC.4.1.** | Compare observations with those of others |
| | | **1.CC.5.2.** | Transfer and apply learning to new situations |
| | | **1.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Behavior of Light** | 1 | **1.BI.3.** | Light and sound can be produced and their properties can be changed. |
| | | **1.C.7.** | Properties of light and sound depend on their source and the objects with which they interact |
| | | **1.CC.1.2.** | Observe objects and events in familiar contexts |
| | | **1.CC.2.2.** | Safely manipulate materials to test ideas and predictions |

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| | | **1.CC.3.4.** | Compare observations with predictions through discussion |
| | | **1.CC.4.1.** | Compare observations with those of others |
| | | **1.CC.5.3.** | Generate and introduce new or refined ideas when problem solving |
| | | **1.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Physical and Chemical Changes** | 2 | **2.BI.2.** | Materials can be changed through physical and chemical processes. |
| | | **2.C.4.** | Physical ways of changing materials |
| | | **2.C.5.** | Chemical ways of changing materials |
| | | **2.CC.1.3.** | Ask questions about familiar objects and events |
| | | **2.CC.2.2.** | Safely manipulate materials to test ideas and predictions |
| | | **2.CC.3.3.** | Sort and classify data and information using drawings, pictographs and provided tables |
| | | **2.CC.4.1.** | Compare observations with those of others |
| | | **2.CC.5.1.** | Take part in caring for self, family, classroom and school through personal approaches |
| | | **2.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Experimenting with Forces** | 2 | **2.BI.3.** | Forces influence the motion of an object. |
| | | **2.C.6.** | Types of forces |
| | | **2.CC.1.4.** | Make simple predictions about familiar objects and events |
| | | **2.CC.2.2.** | Safely manipulate materials to test ideas and predictions |
| | | **2.CC.3.3.** | Sort and classify data and information using drawings, pictographs and provided tables |
| | | **2.CC.4.1.** | Compare observations with those of others |
| | | **2.CC.5.2.** | Transfer and apply learning to new situations |
| | | **2.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Changes from Heat** | 2 | **2.BI.2.** | Materials can be changed through physical and chemical processes. |
| | | **2.C.4.** | Physical ways of changing materials |
| | | **2.C.6.** | Types of forces |
| | | **2.CC.1.2.** | Observe objects and events in familiar contexts |
| | | **2.CC.2.2.** | Safely manipulate materials to test ideas and predictions |
| | | **2.CC.3.5.** | Identify simple patterns and connections |
| | | **2.CC.4.1.** | Compare observations with those of others |

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| | | **2.CC.5.2.** | Transfer and apply learning to new situations |
| | | **2.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Objects and Motion** | 2 | **2.BI.3.** | Forces influence the motion of an object. |
| | | **2.C.6.** | Types of forces |
| | | **2.CC.1.3.** | Ask questions about familiar objects and events |
| | | **1.CC.2.3.** | Make and record simple measurements using informal or non-standard methods |
| | | **2.CC.3.5.** | Identify simple patterns and connections |
| | | **2.CC.4.1.** | Compare observations with those of others |
| | | **2.CC.5.3.** | Generate and introduce new or refined ideas when problem solving |
| | | **2.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Life Cycles** | 2 | **2.BI.1.** | Living things have life cycles adapted to their environment. |
| | | **2.C.1.** | Metamorphic and non-metamorphic life cycles of different organisms |
| | | **2.C.2.** | Similarities and differences between offspring and parent |
| | | **2.CC.1.2.** | Observe objects and events in familiar contexts |
| | | **2.CC.2.1.** | Make and record observations |
| | | **2.CC.3.4.** | Compare observations with predictions through discussion |
| | | **2.CC.4.2.** | Consider some environmental consequences of their actions |
| | | **2.CC.5.2.** | Transfer and apply learning to new situations |
| | | **2.CC.6.2.** | Express and reflect on personal experiences of place |
| | | **2.C.3.** | First Peoples use of their knowledge of life cycles |
| | | **2.CC.3.2.** | Recognize First Peoples stories , songs, and art, as ways to share knowledge |
| **Inheritance and Variation of Traits** | 2 | **2.BI.1.** | Living things have life cycles adapted to their environment. |
| | | **2.C.2.** | Similarities and differences between offspring and parent |
| | | **2.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **2.CC.2.1.** | Make and record observations |
| | | **2.CC.3.1.** | Experience and interpret the local environment |

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| | | **2.CC.4.1.** | Compare observations with those of others |
| | | **2.CC.5.2.** | Transfer and apply learning to new situations |
| | | **2.CC.6.2.** | Express and reflect on personal experiences of place |
| | | **2.CC.3.2.** | Recognize First Peoples stories , songs, and art, as ways to share knowledge |
| **The Water Cycle** | 2 | **2.BI.4.** | Water is essential to all living things, and it cycles through the environment. |
| | | **2.C.9.** | The water cycle |
| | | **2.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **2.CC.2.3.** | Make and record simple measurements using informal or non-standard methods |
| | | **2.CC.3.5.** | Identify simple patterns and connections |
| | | **2.CC.4.1.** | Compare observations with those of others |
| | | **2.CC.5.2.** | Transfer and apply learning to new situations |
| | | **2.CC.6.2.** | Express and reflect on personal experiences of place |
| | | **2.C.10.1.** | Water cycles |
| | | **2.CC.3.2.** | Recognize First Peoples stories , songs, and art, as ways to share knowledge |
| **Consumption of Natural Resources** | 2 | **2.BI.4.** | Water is essential to all living things, and it cycles through the environment. |
| | | **2.C.8.** | Water conservation |
| | | **2.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **2.CC.2.3.** | Make and record simple measurements using informal or non-standard methods |
| | | **2.CC.3.3.** | Sort and classify data and information using drawings, pictographs and provided tables |
| | | **2.CC.4.2.** | Consider some environmental consequences of their actions |
| | | **2.CC.5.2.** | Transfer and apply learning to new situations |
| | | **2.CC.6.2.** | Express and reflect on personal experiences of place |
| | | **2.C.10.2.** | Conservation |
| | | **2.C.10.3.** | Connection to other systems |
| | | **2.CC.3.2.** | Recognize First Peoples stories , songs, and art, as ways to share knowledge |

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| **Electric and Magnetic Forces** | 2 | **2.BI.3.** | Forces influence the motion of an object. |
| | | **2.C.6.** | Types of forces |
| | | **2.CC.1.4.** | Make simple predictions about familiar objects and events |
| | | **2.CC.2.2.** | Safely manipulate materials to test ideas and predictions |
| | | **2.CC.3.5.** | Identify simple patterns and connections |
| | | **2.CC.4.1.** | Compare observations with those of others |
| | | **2.CC.5.3.** | Generate and introduce new or refined ideas when problem solving |
| | | **2.CC.6.1.** | Communicate observations and ideas using oral or written language, drawing, or role-play |
| **Forms of Water on Earth** | 2 | **2.BI.4.** | Water is essential to all living things, and it cycles through the environment. |
| | | **2.C.7.** | Water sources including local watersheds |
| | | **2.C.8.** | Water conservation |
| | | **2.CC.1.1.** | Demonstrate curiosity and a sense of wonder about the world |
| | | **2.CC.2.1.** | Make and record observations |
| | | **2.CC.3.1.** | Experience and interpret the local environment |
| | | **2.CC.4.2.** | Consider some environmental consequences of their actions |
| | | **2.CC.5.3.** | Generate and introduce new or refined ideas when problem solving |
| | | **2.CC.6.2.** | Express and reflect on personal experiences of place |

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Ecosystems** | 3 | **3.BI.1.** | Living things are diverse, can be grouped, and interact in their ecosystems. |
| | | **3.C.1.** | Biodiversity in the local environment |
| | | **3.C.2.** | The knowledge of local First Peoples of ecosystems |
| | | **3.CC.1.1.** | Demonstrate curiosity about the natural world |
| | | **3.CC.2.2.** | Consider ethical responsibilities when deciding how to conduct an experiment |
| | | **3.CC.3.1.** | Experience and interpret the local environment |
| | | **3.CC.4.4.** | Identify some simple environmental implications of their and others' actions |
| | | **3.CC.5.1.** | Contribute to care for self, others, school, and neighbourhood through personal or collaborative approaches |
| | | **3.CC.6.2.** | Express and reflect on personal or shared experiences of place |
| | | **3.CC.2.4.** | Make observations about living and non-living things in the local environment |
| **Transfer of Energy in Collision** | 3 | **3.BI.3.** | Thermal energy can be produced and transferred. |
| | | **3.C.7.** | Transfer of thermal energy |
| | | **3.CC.1.2.** | Observe objects and events in familiar contexts |
| | | **3.CC.2.3.** | Safely use appropriate tools to make observations and measurements, using formal measurements and digital technology as appropriate |
| | | **3.CC.3.4.** | Use tables, simple bar graphs, or other formats to represent data and show simple patterns and trends |
| | | **3.CC.4.3.** | Demonstrate an understanding and appreciation of evidence |
| | | **3.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **3.CC.6.1.** | Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports, using digital technologies as appropriate |
| | | **3.C.6.** | Sources of thermal energy |

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| **Energy Transfer** | 3 | **3.BI.3.** | Thermal energy can be produced and transferred. |
| | | **3.C.7.** | Transfer of thermal energy |
| | | **3.CC.1.3.** | Identify questions about familiar objects and events that can be investigated scientifically |
| | | **3.CC.2.1.** | Suggest ways to plan and conduct an inquiry to find answers to their questions |
| | | **3.CC.3.5.** | Compare results with predictions, suggesting possible reasons for findings |
| | | **3.CC.4.2.** | Reflect on whether an investigation was a fair test |
| | | **3.CC.5.2.** | Co-operatively design projects |
| | | **3.CC.6.1.** | Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports, using digital technologies as appropriate |
| **Thermal Energy** | 3 | **3.BI.3.** | Thermal energy can be produced and transferred. |
| | | **3.C.6.** | Sources of thermal energy |
| | | **3.CC.1.4.** | Make predictions based on prior knowledge |
| | | **3.CC.2.3.** | Safely use appropriate tools to make observations and measurements, using formal measurements and digital technology as appropriate |
| | | **3.CC.3.3.** | Sort and classify data and information using drawings or provided tables |
| | | **3.CC.4.3.** | Demonstrate an understanding and appreciation of evidence |
| | | **3.CC.5.3.** | Transfer and apply learning to new situations |
| | | **3.CC.6.1.** | Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports, using digital technologies as appropriate |
| **Diversity of Living Things** | 3 | **3.BI.1.** | Living things are diverse, can be grouped, and interact in their ecosystems. |
| | | **3.C.1.** | Biodiversity in the local environment |
| | | **3.CC.1.1.** | Demonstrate curiosity about the natural world |
| | | **3.CC.2.2.** | Consider ethical responsibilities when deciding how to conduct an experiment |
| | | **3.CC.3.1.** | Experience and interpret the local environment |
| | | **3.CC.4.4.** | Identify some simple environmental implications of their and others' actions |
| | | **3.CC.5.1.** | Contribute to care for self, others, school, and neighbourhood through personal or collaborative approaches |
| | | **3.CC.6.2.** | Express and reflect on personal or shared experiences of place |
| | | **3.C.3.** | Energy is needed for life |

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| **Effects of Wind and Water** | 3 | **3.BI.4.** | Wind, water, and ice change the shape of the land. |
| | | **3.C.10.** | Observable changes in the local environment caused by erosion and deposition by wind, water, and ice |
| | | **3.CC.1.1.** | Demonstrate curiosity about the natural world |
| | | **3.CC.2.5.** | Collect simple data |
| | | **3.CC.3.5.** | Compare results with predictions, suggesting possible reasons for findings |
| | | **3.CC.4.1.** | Make simple inferences based on their results and prior knowledge |
| | | **3.CC.5.3.** | Transfer and apply learning to new situations |
| | | **3.CC.6.2.** | Express and reflect on personal or shared experiences of place |
| **Mapping Our World** | 3 | **3.C.8.** | Major local landforms |
| | | **3.CC.1.1.** | Demonstrate curiosity about the natural world |
| | | **3.CC.2.5.** | Collect simple data |
| | | **3.CC.3.1.** | Experience and interpret the local environment |
| | | **3.CC.4.3.** | Demonstrate an understanding and appreciation of evidence |
| | | **3.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **3.CC.6.2.** | Express and reflect on personal or shared experiences of place |
| | | **3.CC.3.2.** | Identify First Peoples perspectives and knowledge as sources of information |
| | | **3.C.9.** | Local First Peoples knowledge of local landforms |
| **Matter Changing States** | 3 | **3.BI.2.** | All matter is made of particles. |
| | | **3.C.4.** | Matter is anything that has mass and takes up space |
| | | **3.C.5.** | Atoms are building blocks of matter |
| | | **3.CC.1.3.** | Identify questions about familiar objects and events that can be investigated scientifically |
| | | **3.CC.2.1.** | Suggest ways to plan and conduct an inquiry to find answers to their questions |
| | | **3.CC.3.3.** | Sort and classify data and information using drawings or provided tables |

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| | | **3.CC.4.2.** | Reflect on whether an investigation was a fair test |
| | | **3.CC.5.3.** | Transfer and apply learning to new situations |
| | | **3.CC.6.1.** | Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports, using digital technologies as appropriate |

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Patterns on Earth** | 4 | **4.BI.4.** | The motions of Earth and the moon cause observable patterns that affect living and non-living systems. |
| | | **4.C.7.** | Local changes caused by Earth's axis, rotation, and orbit |
| | | **4.C.8.** | The effects of the relative positions of the sun, moon, and Earth including local First Peoples perspectives |
| | | **4.CC.1.1.** | Demonstrate curiosity about the natural world |
| | | **4.CC.2.5.** | Collect simple data |
| | | **4.CC.3.5.** | Compare results with predictions, suggesting possible reasons for findings |
| | | **4.CC.4.1.** | Make simple inferences based on their results and prior knowledge |
| | | **4.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **4.CC.6.2** | Express and reflect on personal or shared experiences of place |
| **Energy Transformations** | 4 | **4.BI.3.** | Energy can be transformed. |
| | | **4.C.5.1.** | Has various forms |
| | | **4.C.5.2.** | Is conserved |
| | | **4.C.6.** | Devices that transform energy |
| | | **4.CC.1.3.** | Identify questions about familiar objects and events that can be investigated scientifically |
| | | **4.CC.2.1.** | Suggest ways to plan and conduct an inquiry to find answers to their questions |
| | | **4.CC.3.3.** | Sort and classify data and information using drawings or provided tables |
| | | **4.CC.4.2.** | Reflect on whether an investigation was a fair test |
| | | **4.CC.5.2.** | Co-operatively design projects |
| | | **4.CC.6.1.** | Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports, using digital technologies as appropriate |
| **Particle Movement** | 4 | **4.C.4.** | The effect of temperature on particle movement |
| | | **4.BI.3.** | Energy can be transformed. |
| | | **4.CC.1.3.** | Identify questions about familiar objects and events that can be investigated scientifically |

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| | | **4.CC.2.3.** | Safely use appropriate tools to make observations and measurements, using formal measurements and digital technology as appropriate |
| | | **4.CC.3.4.** | Use tables, simple bar graphs, or other formats to represent data and show simple patterns and trends |
| | | **4.CC.4.2.** | Reflect on whether an investigation was a fair test |
| | | **4.CC.5.2.** | Co-operatively design projects |
| | | **4.CC.6.1.** | Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports, using digital technologies as appropriate |
| | | **4.C.3.** | Phases of matter |
| | | **4.BI.2.** | Matter has mass, takes up space, and can change phase. |
| | | **4.CC.1.2.** | Observe objects and events in familiar contexts |
| **Patterns of Motion** | 4 | **4.BI.4.** | The motions of Earth and the moon cause observable patterns that affect living and non-living systems. |
| | | **4.C.7.** | Local changes caused by Earth's axis, rotation, and orbit |
| | | **4.C.8.** | The effects of the relative positions of the sun, moon, and Earth including local First Peoples perspectives |
| | | **4.CC.1.1.** | Demonstrate curiosity about the natural world |
| | | **4.CC.2.5.** | Collect simple data |
| | | **4.CC.3.5.** | Compare results with predictions, suggesting possible reasons for findings |
| | | **4.CC.4.1.** | Make simple inferences based on their results and prior knowledge |
| | | **4.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **4.CC.6.2** | Express and reflect on personal or shared experiences of place |
| | | **4.CC.3.2.** | Identify First Peoples perspectives and knowledge as sources of information |
| **Modeling Conservation of Energy** | 4 | **4.BI.3.** | Energy can be transformed. |
| | | **4.C.5.2.** | Is conserved |
| | | **4.CC.1.3.** | Identify questions about familiar objects and events that can be investigated scientifically |

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| | | **4.CC.2.3.** | Safely use appropriate tools to make observations and measurements, using formal measurements and digital technology as appropriate |
| | | **4.CC.3.3.** | Sort and classify data and information using drawings or provided tables |
| | | **4.CC.4.3.** | Demonstrate an understanding and appreciation of evidence |
| | | **4.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **4.CC.6.1.** | Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports, using digital technologies as appropriate |
| **Earth's Biomes** | 4 | **4.BI.1.** | All living things sense and respond to their environment. |
| | | **4.C.2.** | Biomes as large regions with similar environmental features |
| | | **4.CC.1.1.** | Demonstrate curiosity about the natural world |
| | | **4.CC.2.4.** | Make observations about living and non-living things in the local environment |
| | | **4.CC.3.1.** | Experience and interpret the local environment |
| | | **4.CC.4.4.** | Identify some simple environmental implications of their and others' actions |
| | | **4.CC.5.3.** | Transfer and apply learning to new situations |
| | | **4.CC.6.2** | Express and reflect on personal or shared experiences of place |
| **Sense Receptors** | 4 | **4.BI.1.** | All living things sense and respond to their environment. |
| | | **4.C.1.1** | Humans |
| | | **4.C.1.2.** | Other animals |
| | | **4.C.1.3.** | Plants |
| | | **4.CC.1.4.** | Make predictions based on prior knowledge |
| | | **4.CC.2.1.** | Suggest ways to plan and conduct an inquiry to find answers to their questions |
| | | **4.CC.3.4.** | Use tables, simple bar graphs, or other formats to represent data and show simple patterns and trends |
| | | **4.CC.4.1.** | Make simple inferences based on their results and prior knowledge |
| | | **4.CC.5.1.** | Contribute to care for self, others, school, and neighbourhood through individual or collaborative approaches |

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| | | **4.CC.6.2** | Express and reflect on personal or shared experiences of place |
| | | **4.CC.2.2.** | Consider ethical responsibilities when deciding how to conduct an experiment |

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Bodies and Systems** | 5 | **5.BI.1.** | Multicellular organisms have organ systems that enable them to survive and interact within their environment. |
| | | **5.C.1.1.** | Digestive |
| | | **5.C.1.2.** | Musculo-skeletal |
| | | **5.C.1.3.** | Respiratory |
| | | **5.C.1.4.** | Circulatory |
| | | **5.CC.1.1.** | Demonstrate a sustained curiosity about a scientific topic or problem of personal interest |
| | | **5.CC.2.3.** | Choose appropriate data to collect to answer their questions |
| | | **5.CC.3.4.** | Identify patterns and connections in data |
| | | **5.CC.4.4.** | Identify some of the assumptions in secondary sources |
| | | **5.CC.4.6.** | Identify some of the social, ethical, and environmental implications of the findings from their own and others' investigations |
| | | **5.CC.5.1.** | Contribute to care for self, others, and community through personal or collaborative approaches |
| | | **5.CC.6.2.** | Express and reflect on personal, shared, or others' experiences of place |
| **Simple Machines** | 5 | **5.BI.3.** | Machines are devices that transfer force and energy. |
| | | **5.C.3.** | Properties of simple machines and their force effects |
| | | **5.C.4.1.** | Constructed |
| | | **5.C.4.2.** | Found in nature |
| | | **5.C.5.** | Power - the rate at which energy is transferred |
| | | **5.C.1.4.** | Circulatory |
| | | **5.CC.2.3.** | Choose appropriate data to collect to answer their questions |
| | | **5.CC.3.4.** | Identify patterns and connections in data |
| | | **5.CC.4.2.** | Identify possible sources of error |
| | | **5.CC.5.2.** | Co-operatively design projects |
| | | **5.CC.6.1.** | Communicate ideas, explanations, and processes in a variety of ways |

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| | | **5.CC.2.1.** | With support, plan appropriate investigations to answer their questions or solve problems they have identified |
| | | **5.CC.2.5.** | Use equipment and materials safely, identifying potential risks |
| | | **5.CC.3.3.** | Construct and use a variety of methods, including tables, graphs, and digital technologies, as appropriate, to represent patterns or relationships in data |
| | | **5.CC.4.1.** | Evaluate whether their investigations were fair tests |
| **Classifying Rocks** | 5 | **5.BI.4.** | Earth materials change as they move through the rock cycle and can be used as natural resources. |
| | | **5.C.6.** | The rock cycle |
| | | **5.C.7.** | Local types of earth materials |
| | | **5.CC.1.2.** | Make observations in familiar or unfamiliar contexts |
| | | **5.CC.2.4.** | Observe, measure, and record data, using appropriate tools, including digital technologies |
| | | **5.CC.3.1.** | Experience and interpret the local environment |
| | | **5.CC.4.4.** | Identify some of the assumptions in secondary sources |
| | | **5.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **5.CC.6.1.** | Communicate ideas, explanations, and processes in a variety of ways |
| | | **5.CC.3.2.** | Identify First Peoples perspectives and knowledge as sources of information |
| | | **5.CC.3.3.** | Construct and use a variety of methods, including tables, graphs, and digital technologies, as appropriate, to represent patterns or relationships in data |
| **Separating Mixtures** | 5 | **5.BI.2.** | Solutions are homogeneous. |
| | | **5.C.2.** | Solutions and solubility |
| | | **5.CC.1.3.** | Identify questions to answer or problems to solve through scientific inquiry |
| | | **5.CC.2.2.** | Decide which variable should be changed and measured for a fair test |
| | | **5.CC.3.5.** | Compare data with predictions and develop explanations for results |
| | | **5.CC.4.3.** | Suggest improvements to their investigation methods |
| | | **5.CC.5.2.** | Co-operatively design projects |

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| | | **5.CC.6.1.** | Communicate ideas, explanations, and processes in a variety of ways |
| | | **5.CC.1.4.** | Make predictions about the findings of their inquiry |
| | | **5.CC.2.5.** | Use equipment and materials safely, identifying potential risks |
| | | **5.CC.4.5.** | Demonstrate an understanding and appreciation of evidence |
| **Human Impact on the Environment** | 5 | **5.BI.4.** | Earth materials change as they move through the rock cycle and can be used as natural resources. |
| | | **5.C.9.** | The nature of sustainable practices around BC's resources |
| | | **5.C.10.** | First Peoples knowledge of sustainable practices |
| | | **5.CC.1.1.** | Demonstrate a sustained curiosity about a scientific topic or problem of personal interest |
| | | **5.CC.2.3.** | Choose appropriate data to collect to answer their questions |
| | | **5.CC.3.1.** | Experience and interpret the local environment |
| | | **5.CC.3.6.** | Demonstrate an openness to new ideas and consideration of alternatives |
| | | **5.CC.4.6.** | Identify some of the social, ethical, and environmental implications of the findings from their own and others' investigations |
| | | **5.CC.5.3.** | Transfer and apply learning to new situations |
| | | **5.CC.6.2.** | Express and reflect on personal, shared, or others' experiences of place |
| | | **5.CC.3.2.** | Identify First Peoples perspectives and knowledge as sources of information |
| | | **5.C.8.** | First Peoples concepts of interconnectedness in the environment |

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Balanced and Unbalanced Forces** | 6 | **6.BI.3.** | Newton's three laws of motion describe the relationship between force and motion. |
| | | **6.C.4.** | Newton's three laws of motion |
| | | **6.C.5.** | Effects of balanced and unbalanced forces in daily physical activities |
| | | **6.CC.1.3** | Identify questions to answer or problems to solve through scientific inquiry |
| | | **6.CC.2.3.** | Choose appropriate data to collect to answer their questions |
| | | **6.CC.3.4.** | Identify patterns and connections in data |
| | | **6.CC.4.3.** | Suggest improvements to their investigation methods |
| | | **6.CC.5.2.** | Co-operatively design projects |
| | | **6.CC.6.1.** | Communicate ideas, explanations, and processes in a variety of ways |
| | | **6.CC.2.5.** | Use equipment and materials safely, identifying potential risks |
| | | **6.CC.3.5.** | Compare data with predictions and develop explanations for results |
| | | **6.CC.5.1.** | Contribute to care for self, others, and community through personal or collaborative approaches |
| **Systems of the Human Body** | 6 | **6.BI.1.** | Multicellular organisms rely on internal systems to survive, reproduce, and interact with their environment. |
| | | **6.C.1.1.** | Excretory |
| | | **6.C.1.2.** | Reproductive |
| | | **6.C.1.3.** | Hormonal |
| | | **6.C.1.4.** | Nervous |
| | | **6.CC.1.2** | Make observations in familiar or unfamiliar contexts |
| | | **6.CC.2.4.** | Observe, measure, and record data, using appropriate tools, including digital technologies |
| | | **6.CC.3.6.** | Demonstrate an openness to new ideas and consideration of alternatives |
| | | **6.CC.4.4.** | Identify some of the assumptions in secondary sources |
| | | **6.CC.5.3.** | Transfer and apply learning to new situations |
| | | **6.CC.6.2.** | Express and reflect on personal, shared, or others' experiences of place |

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| **Interactions Of Body Systems** | 6 | **6.BI.1.** | Multicellular organisms rely on internal systems to survive, reproduce, and interact with their environment. |
| | | **6.C.1.1.** | Excretory |
| | | **6.C.1.2.** | Reproductive |
| | | **6.C.1.3.** | Hormonal |
| | | **6.C.1.4.** | Nervous |
| | | **6.CC.1.1** | Demonstrate a sustained curiosity about a scientific topic or problem of personal interest |
| | | **6.CC.2.3.** | Choose appropriate data to collect to answer their questions |
| | | **6.CC.3.6.** | Demonstrate an openness to new ideas and consideration of alternatives |
| | | **6.CC.4.6.** | Identify some of the social, ethical, and environmental implications of the findings from their own and others' investigations |
| | | **6.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **6.CC.6.2.** | Express and reflect on personal, shared, or others' experiences of place |
| **Gravity** | 6 | **6.BI.4.** | The solar system is part of the Milky Way, which is one of billions of galaxies. |
| | | **6.C.6.** | Force of gravity |
| | | **6.CC.1.4** | Make predictions about the findings of their inquiry |
| | | **6.CC.2.3.** | Choose appropriate data to collect to answer their questions |
| | | **6.CC.3.1.** | Experience and interpret the local environment |
| | | **6.CC.4.5.** | Demonstrate an understanding and appreciation of evidence |
| | | **6.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **6.CC.6.1.** | Communicate ideas, explanations, and processes in a variety of ways |
| | | **6.CC.5.1.** | Contribute to care for self, others, and community through personal or collaborative approaches |
| **The Universe** | 6 | **6.BI.4.** | The solar system is part of the Milky Way, which is one of billions of galaxies. |
| | | **6.C.7.** | The overall scale, structure, and age of the universe |
| | | **6.C.8.** | The position, motion, and components of our solar system in our galaxy |

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| | | **6.CC.1.1** | Demonstrate a sustained curiosity about a scientific topic or problem of personal interest |
| | | **6.CC.2.1.** | With support, plan appropriate investigations to answer their questions or solve problems they have identified |
| | | **6.CC.3.6.** | Demonstrate an openness to new ideas and consideration of alternatives |
| | | **6.CC.4.4.** | Identify some of the assumptions in secondary sources |
| | | **6.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **6.CC.6.1.** | Communicate ideas, explanations, and processes in a variety of ways |
| | | **6.CC.3.2.** | Identify First Peoples perspectives and knowledge as sources of information |
| **Pure Substances And Mixtures** | 6 | **6.BI.2.** | Everyday materials are often mixtures. |
| | | **6.C.2.** | Heterogeneous mixtures |
| | | **6.C.3.** | Mixtures |
| | | **6.C.3.1.** | Separated using a difference in component properties |
| | | **6.C.3.2.** | Local First Peoples knowledge of separation and extraction methods |
| | | **6.CC.1.3** | Identify questions to answer or problems to solve through scientific inquiry |
| | | **6.CC.2.2.** | Decide which variable should be changed and measured for a fair test |
| | | **6.CC.2.3.** | Choose appropriate data to collect to answer their questions |
| | | **6.CC.3.3.** | Construct and use a variety of methods, including tables, graphs, and digital technologies, as appropriate, to represent patterns or relationships in data |
| | | **6.CC.4.1.** | Evaluate whether their investigations were fair tests |
| | | **6.CC.4.2.** | Identify possible sources of error |
| | | **6.CC.4.3.** | Suggest improvements to their investigation methods |
| | | **6.CC.5.2.** | Co-operatively design projects |
| | | **6.CC.6.1.** | Communicate ideas, explanations, and processes in a variety of ways |
| | | **6.CC.2.5.** | Use equipment and materials safely, identifying potential risks |

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| **The Solar System** | 6 | **6.BI.4.** | The solar system is part of the Milky Way, which is one of billions of galaxies. |
| | | **6.C.7.** | The overall scale, structure, and age of the universe |
| | | **6.C.8.** | The position, motion, and components of our solar system in our galaxy |
| | | **6.CC.1.1** | Demonstrate a sustained curiosity about a scientific topic or problem of personal interest |
| | | **6.CC.2.4.** | Observe, measure, and record data, using appropriate tools, including digital technologies |
| | | **6.CC.3.4.** | Identify patterns and connections in data |
| | | **6.CC.4.5.** | Demonstrate an understanding and appreciation of evidence |
| | | **6.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **6.CC.6.1.** | Communicate ideas, explanations, and processes in a variety of ways |

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Chemical Properties and Interactions** | 7 | **7.BI.2.** | Elements consist of one type of atom, and compounds consist of atoms of different elements chemically combined. |
| | | **7.C.6.** | Chemical changes |
| | | **7.CC.1.3.** | Identify a question to answer or a problem to solve through scientific inquiry |
| | | **7.CC.2.2.** | Measure and control variables through fair tests |
| | | **7.CC.2.5.** | Ensure that safety and ethical guidelines are followed in their investigations |
| | | **7.CC.3.4.** | Seek patterns and connections in data from their own investigations and secondary sources |
| | | **7.CC.4.4.** | Demonstrate an understanding and appreciation of evidence |
| | | **7.CC.5.2.** | Co-operatively design projects |
| | | **7.CC.6.1.** | Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate |
| | | **7.C.4.** | Elements and compounds are pure substances |
| | | **7.C.5.** | Crystalline structure of solids |
| | | **7.CC.1.4.** | Formulate alternative "If...then..." hypotheses based on their questions |
| | | **7.CC.2.3.** | Observe, measure, and record data , using equipment, including digital technologies, with accuracy and precision |
| **The Dynamic Nature of Ecosystems** | 7 | **7.BI.1.** | Evolution by natural selection provides an explanation for the diversity and survival of living things. |
| | | **7.C.1.** | Organisms have evolved over time |
| | | **7.C.2.** | Survival needs |
| | | **7.C.3.** | Natural selection |
| | | **7.CC.1.2.** | Make observations aimed at identifying their own questions about the natural world |
| | | **7.CC.2.1.** | Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified |
| | | **7.CC.3.1.** | Experience and interpret the local environment |

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| | | **7.CC.4.5.** | Exercise a healthy, informed skepticism and use scientific knowledge and findings from their own investigations to evaluate claims in secondary sources |
| | | **7.CC.4.6.** | Consider social, ethical, and environmental implications of the findings from their own and others' investigations |
| | | **7.CC.5.3.** | Transfer and apply learning to new situations |
| | | **7.CC.6.2.** | Express and reflect on a variety of experiences and perspectives of place |
| | | **7.C.9.** | First Peoples knowledge of changes in biodiversity over time e |
| **Electric Circuits** | 7 | **7.BI.3.** | The electromagnetic force produces both electricity and magnetism. |
| | | **7.C.7.1.** | Generated in different ways with different environmental impacts |
| | | **7.C.7.2.** | Electromagnetism |
| | | **7.CC.1.5.** | Make predictions about the findings of their inquiry |
| | | **7.CC.2.4.** | Use appropriate SI units and perform simple unit conversions |
| | | **7.CC.3.5.** | Use scientific understandings to identify relationships and draw conclusions |
| | | **7.CC.4.1.** | Reflect on their investigation methods, including the adequacy of controls on variables and the quality of the data collected |
| | | **7.CC.5.1.** | Contribute to care for self, others, community, and world through personal or collaborative approaches |
| | | **7.CC.6.1.** | Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate |
| | | **7.CC.1.4.** | Formulate alternative "If...then..." hypotheses based on their questions |
| | | **7.CC.4.2.** | Identify possible sources of error and suggest improvements to their investigation methods |
| **Fossil Record** | 7 | **7.BI.4.** | Earth and its climate have changed over geological time. |
| | | **7.C.8.** | The fossil record provides evidence for changes in biodiversity over geological time |
| | | **7.CC.1.1.** | Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest |

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| | | **7.CC.2.1.** | Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified |
| | | **7.CC.3.4.** | Seek patterns and connections in data from their own investigations and secondary sources |
| | | **7.CC.4.3.** | Demonstrate an awareness of assumptions and bias in their own work and secondary sources |
| | | **7.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **7.CC.6.2.** | Express and reflect on a variety of experiences and perspectives of place |
| | | **7.CC.3.2.** | Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information |
| **Natural Selection and Populations** | 7 | **7.BI.1.** | Evolution by natural selection provides an explanation for the diversity and survival of living things. |
| | | **7.C.3.** | Natural selection |
| | | **7.C.1.** | Organisms have evolved over time |
| | | **7.C.2.** | Survival needs |
| | | **7.CC.1.5.** | Make predictions about the findings of their inquiry |
| | | **7.CC.2.1.** | Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified |
| | | **7.CC.3.5.** | Use scientific understandings to identify relationships and draw conclusions |
| | | **7.CC.4.6.** | Consider social, ethical, and environmental implications of the findings from their own and others' investigations |
| | | **7.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **7.CC.6.2.** | Express and reflect on a variety of experiences and perspectives of place |
| | | **7.CC.3.3.** | Construct and use a range of methods to represent patterns or relationships in data, including tables, graphs, keys, models, and digital technologies as appropriate |
| **Human Activities and Global Climate Change** | 7 | **7.BI.4.** | Earth and its climate have changed over geological time. |
| | | **7.C.10.** | Evidence of climate change over geological time and the recent impacts of humans |

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| | | **7.C.10.1.** | Physical records |
| | | **7.C.10.2.** | Local First Peoples knowledge of climate change |
| | | **7.CC.1.2.** | Make observations aimed at identifying their own questions about the natural world |
| | | **7.CC.2.5.** | Ensure that safety and ethical guidelines are followed in their investigations |
| | | **7.CC.3.1.** | Experience and interpret the local environment |
| | | **7.CC.4.6.** | Consider social, ethical, and environmental implications of the findings from their own and others' investigations |
| | | **7.CC.5.2.** | Co-operatively design projects |
| | | **7.CC.6.2.** | Express and reflect on a variety of experiences and perspectives of place |
| | | **7.CC.2.3.** | Observe, measure, and record data , using equipment, including digital technologies, with accuracy and precision |
| | | **7.CC.3.2.** | Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information |

| Module Name | Grade | Standard | Description |
|---|---|---|---|
| **Microorganisms** | 8 | **8.BI.1.** | Life processes are performed at the cellular level. |
| | | **8.C.4.1.** | Basic functions of the immune system |
| | | **8.C.4.2.** | Vaccination and antibiotics |
| | | **8.C.4.3.** | Impacts of epidemics and pandemics on human populations |
| | | **8.CC.1.1.** | Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest |
| | | **8.CC.2.5.** | Ensure that safety and ethical guidelines are followed in their investigations |
| | | **8.CC.3.1.** | Experience and interpret the local environment |
| | | **8.CC.4.5.** | Exercise a healthy, informed skepticism and use scientific knowledge and findings from their own investigations to evaluate claims in secondary sources |
| | | **8.CC.4.6.** | Consider social, ethical, and environmental implications of the findings from their own and others' investigations |
| | | **8.CC.5.1.** | Contribute to care for self, others, community, and world through personal or collaborative approaches |
| | | **8.CC.6.2.** | Express and reflect on a variety of experiences and perspectives of place |
| **Earth's Crust, Mantle and Core** | 8 | **8.BI.4.** | The theory of plate tectonics is the unifying theory that explains Earth's geological processes. |
| | | **8.C.11.** | Plate tectonic movement |
| | | **8.C.12.** | Major geological events of local significance |
| | | **8.C.14.** | Layers of Earth |
| | | **8.CC.1.3.** | Identify a question to answer or a problem to solve through scientific inquiry |
| | | **8.CC.2.1.** | Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified |
| | | **8.CC.3.3.** | Construct and use a range of methods to represent patterns or relationships in data, including tables, graphs, keys, models, and digital technologies as appropriate |
| | | **8.CC.4.3.** | Demonstrate an awareness of assumptions and bias in their own work and secondary sources |

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| | | **8.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **8.CC.6.1.** | Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate |
| **Gas Laws** | 8 | **8.BI.2.** | The behaviour of matter can be explained by the kinetic molecular theory and atomic theory. |
| | | **8.C.5.** | Kinetic molecular theory |
| | | **8.CC.1.5.** | Make predictions about the findings of their inquiry |
| | | **8.CC.2.3.** | Observe, measure, and record data , using equipment, including digital technologies, with accuracy and precision |
| | | **8.CC.3.5.** | Use scientific understandings to identify relationships and draw conclusions |
| | | **8.CC.4.4.** | Demonstrate an understanding and appreciation of evidence |
| | | **8.CC.5.3.** | Transfer and apply learning to new situations |
| | | **8.CC.6.1.** | Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate |
| | | **8.CC.1.2.** | Make observations aimed at identifying their own questions about the natural world |
| **Plate Tectonics** | 8 | **8.BI.4.** | The theory of plate tectonics is the unifying theory that explains Earth's geological processes. |
| | | **8.C.11.** | Plate tectonic movement |
| | | **8.C.12.** | Major geological events of local significance |
| | | **8.C.13.1.** | Local geological formations |
| | | **8.C.13.2.** | Significant local geological events |
| | | **8.CC.1.1.** | Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest |
| | | **8.CC.2.1.** | Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified |
| | | **8.CC.3.1.** | Experience and interpret the local environment |
| | | **8.CC.4.3.** | Demonstrate an awareness of assumptions and bias in their own work and secondary sources |
| | | **8.CC.5.3.** | Transfer and apply learning to new situations |
| | | **8.CC.6.2.** | Express and reflect on a variety of experiences and perspectives of place |

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| | | **8.CC.3.2.** | Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information |
| | | **8.CC.3.4.** | Seek patterns and connections in data from their own investigations and secondary sources |
| **Wave Model vs. Particle Model** | 8 | **8.BI.3.** | Energy can be transferred as both a particle and a wave. |
| | | **8.C.9.** | Types and effects of electromagnetic radiation |
| | | **8.C.10.1.** | Properties |
| | | **8.C.10.2.** | Behaviours |
| | | **8.C.10.3.** | Ways of sensing |
| | | **8.CC.1.4.** | Formulate alternative "If...then..." hypotheses based on their questions |
| | | **8.CC.2.3.** | Observe, measure, and record data , using equipment, including digital technologies, with accuracy and precision |
| | | **8.CC.3.5.** | Use scientific understandings to identify relationships and draw conclusions |
| | | **8.CC.4.4.** | Demonstrate an understanding and appreciation of evidence |
| | | **8.CC.5.2.** | Co-operatively design projects |
| | | **8.CC.6.1.** | Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate |
| | | **8.CC.1.2.** | Make observations aimed at identifying their own questions about the natural world |
| | | **8.CC.2.2.** | Measure and control variables through fair tests |
| | | **8.CC.2.4.** | Use appropriate SI units and perform simple unit conversions |
| | | **8.CC.4.1.** | Reflect on their investigation methods, including the adequacy of controls on variables and the quality of the data collected |
| | | **8.CC.4.2.** | Identify possible sources of error and suggest improvements to their investigation methods |
| **Atomic Structure and Bonding** | 8 | **8.BI.2.** | The behaviour of matter can be explained by the kinetic molecular theory and atomic theory. |
| | | **8.C.5.** | Kinetic molecular theory |
| | | **8.C.6.** | Atomic theory and models |
| | | **8.C.7.** | Protons, neutrons, and quarks |
| | | **8.C.8.** | Electrons and leptons |

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| | | **8.CC.1.3.** | Identify a question to answer or a problem to solve through scientific inquiry |
| | | **8.CC.2.3.** | Observe, measure, and record data , using equipment, including digital technologies, with accuracy and precision |
| | | **8.CC.3.3.** | Construct and use a range of methods to represent patterns or relationships in data, including tables, graphs, keys, models, and digital technologies as appropriate |
| | | **8.CC.4.4.** | Demonstrate an understanding and appreciation of evidence |
| | | **8.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **8.CC.6.1.** | Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate |
| **What Are Cells?** | 8 | **8.BI.1.** | Life processes are performed at the cellular level. |
| | | **8.C.1.** | Characteristics of life |
| | | **8.C.2.** | Cell theory and types of cells |
| | | **8.C.3.** | Photosynthesis and cellular respiration |
| | | **8.CC.1.1.** | Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest |
| | | **8.CC.2.1.** | Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified |
| | | **8.CC.3.3.** | Construct and use a range of methods to represent patterns or relationships in data, including tables, graphs, keys, models, and digital technologies as appropriate |
| | | **8.CC.3.5.** | Use scientific understandings to identify relationships and draw conclusions |
| | | **8.CC.4.3.** | Demonstrate an awareness of assumptions and bias in their own work and secondary sources |
| | | **8.CC.5.4.** | Generate and introduce new or refined ideas when problem solving |
| | | **8.CC.6.2.** | Express and reflect on a variety of experiences and perspectives of place |

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