



British Columbia, Canada Science Standards

Grade 6: Earth Force hits all 3 Core Competencies: Communication, Thinking, Personal and Social

Relevant Curricular Competencies:

Questioning and predicting

- Demonstrate a sustained curiosity about a scientific topic or problem of personal interest
- Make observations in familiar or unfamiliar contexts
- Identify questions to answer or problems to solve through scientific inquiry
- Make predictions about the findings of their inquiry

Planning and conducting

- With support, plan appropriate investigations to answer their questions or solve problems they have identified
- Choose appropriate data to collect to answer their questions
- Observe, measure, and record data, using appropriate tools, including digital technologies
- Use equipment and materials safely, identifying potential risks

Processing and analyzing data and information

- Experience and interpret the local environment
- Identify First Peoples perspectives and knowledge as sources of information
- Construct and use a variety of methods, including tables, graphs, and digital technologies, as appropriate, to represent patterns or relationships in data
- Identify patterns and connections in data
- Compare data with predictions and develop explanations for results
- Demonstrate an openness to new ideas and consideration of alternatives

Evaluating

- Evaluate whether their investigations were fair tests
- Identify possible sources of error
- Suggest improvements to their investigation methods
- Identify some of the assumptions in secondary sources
- Demonstrate an understanding and appreciation of evidence
- Identify some of the social, ethical, and environmental implications of the findings from their own and others' investigations

Applying and innovating

- Contribute to care for self, others, and community through personal or collaborative approaches

- Co-operatively design projects
- Transfer and apply learning to new situations
- Generate and introduce new or refined ideas when problem solving

Communicating

- Communicate ideas, explanations, and processes in a variety of ways
- Express and reflect on personal, shared, or others' experiences of place



Grade 7: Earth Force hits all 3 Core Competencies: Communication, Thinking, Personal and Social

Relevant Curricular Competencies:

Questioning and predicting

- Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest
- Make observations aimed at identifying their own questions about the natural world
- Identify a question to answer or a problem to solve through scientific inquiry
- Formulate alternative “If...then...” hypotheses based on their questions
- Make predictions about the findings of their inquiry

Planning and conducting

- Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified
- Observe, measure, and record data (qualitative and quantitative), using equipment, including digital technologies, with accuracy and precision
- Use appropriate SI units and perform simple unit conversions
- Ensure that safety and ethical guidelines are followed in their investigations

Processing and analyzing data and information

- Experience and interpret the local environment
- Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information
- Construct and use a range of methods to represent patterns or relationships in data, including tables, graphs, keys, models, and digital technologies as appropriate
- Seek patterns and connections in data from their own investigations and secondary sources
- Use scientific understandings to identify relationships and draw conclusions

Evaluating

- Identify possible sources of error and suggest improvements to their investigation methods
- Demonstrate an awareness of assumptions and bias in their own work and secondary sources
- Demonstrate an understanding and appreciation of evidence (qualitative and quantitative)
- Exercise a healthy, informed skepticism and use scientific knowledge and findings from their own investigations to evaluate claims in secondary sources
- Consider social, ethical, and environmental implications of the findings from their own and others’ investigations

Applying and innovating

- Contribute to care for self, others, community, and world through personal or collaborative approaches
- Co-operatively design projects
- Transfer and apply learning to new situations
- Generate and introduce new or refined ideas when problem solving

Communicating

- Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate
- Express and reflect on a variety of experiences and perspectives of place



Grade 8: Earth Force hits all 3 Core Competencies: Communication, Thinking, Personal and Social

Relevant Curricular Competencies:

Questioning and predicting

- Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest
- Make observations aimed at identifying their own questions about the natural world
- Identify a question to answer or a problem to solve through scientific inquiry
- Formulate alternative “If...then...” hypotheses based on their questions
- Make predictions about the findings of their inquiry

Planning and conducting

- Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified
- Observe, measure, and record data (qualitative and quantitative), using equipment, including digital technologies, with accuracy and precision
- Use appropriate SI units and perform simple unit conversions
- Ensure that safety and ethical guidelines are followed in their investigations

Processing and analyzing data and information

- Experience and interpret the local environment
- Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information
- Construct and use a range of methods to represent patterns or relationships in data, including tables, graphs, keys, models, and digital technologies as appropriate
- Seek patterns and connections in data from their own investigations and secondary sources
- Use scientific understandings to identify relationships and draw conclusions

Evaluating

- Identify possible sources of error and suggest improvements to their investigation methods
- Demonstrate an awareness of assumptions and bias in their own work and secondary sources
- Demonstrate an understanding and appreciation of evidence (qualitative and quantitative)
- Exercise a healthy, informed skepticism and use scientific knowledge and findings from their own investigations to evaluate claims in secondary sources
- Consider social, ethical, and environmental implications of the findings from their own and others’ investigations

Applying and innovating

- Contribute to care for self, others, community, and world through personal or collaborative approaches
- Co-operatively design projects
- Transfer and apply learning to new situations
- Generate and introduce new or refined ideas when problem solving

Communicating

- Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate
- Express and reflect on a variety of experiences and perspectives of place