

WONDERFUL WATER

Grade 2

SCIENCE BIG IDEA

Water is essential to all living things, and it cycles through the environment.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Questioning and predicting</p> <ul style="list-style-type: none">• Demonstrate curiosity and a sense of wonder about the world• Observe objects and events in familiar contexts• Make simple predictions about familiar objects and events <p>Processing and analyzing data and information</p> <ul style="list-style-type: none">• Experience and interpret the local environment• Identify simple patterns and connections <p>Evaluating</p> <ul style="list-style-type: none">• Consider some environmental consequences of their actions <p>Communicating</p> <ul style="list-style-type: none">• Express and reflect on personal experiences of place	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none">• water sources including local watersheds• water conservation• the water cycle

WONDERFUL WATER

Grade 3

SCIENCE BIG IDEA

Living things interact in their ecosystems.

Wind, water, and ice change the shape of the land.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Questioning and predicting</p> <ul style="list-style-type: none">• Demonstrate curiosity and a sense of wonder about the world• Observe objects and events in familiar contexts• Identify questions about familiar objects and events that can be investigated scientifically <p>Planning and conducting</p> <ul style="list-style-type: none">• Make observations about living and non-living things in the local environment <p>Processing and analyzing data and information</p> <ul style="list-style-type: none">• Experience and interpret the local environment <p>Evaluating</p> <ul style="list-style-type: none">• Identify some simple environmental implications of their and others' actions <p>Applying and innovating</p> <ul style="list-style-type: none">• Co-operatively design projects (building dams)	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none">• observable changes in the local environment caused by erosion and deposition by wind, water, and ice

WONDERFUL WATER

Grade 4

SCIENCE BIG IDEA

All living things sense and respond to their environment.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Questioning and predicting</p> <ul style="list-style-type: none">• Demonstrate curiosity about the natural world• Observe objects and events in familiar contexts <p>Planning and conducting</p> <ul style="list-style-type: none">• Make observations about living and non-living things in the local environment <p>Processing and analyzing data and information</p> <ul style="list-style-type: none">• Experience and interpret the local environment <p>Evaluating</p> <ul style="list-style-type: none">• Identify some simple environmental implications of their and others' actions <p>Applying and innovating</p> <ul style="list-style-type: none">• Co-operatively design projects (dam building)	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none">• sensing and responding:<ul style="list-style-type: none">– other animals– plants• biomes as large regions with similar environmental features

WONDERFUL WATER

Grade 5

Area of Learning: SCIENCE

BIG IDEAS

Multicellular organisms have organ systems that enable them to survive and interact within their environment.

Solutions are homogeneous.

Machines are devices that transfer force and energy.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Questioning and predicting</p> <ul style="list-style-type: none">• 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 <p>Planning and conducting</p> <ul style="list-style-type: none">• With support, plan appropriate investigations to answer their questions or solve problems they have identified• Decide which variable should be changed and measured for a fair test• 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	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none">• basic structures and functions of body systems:<ul style="list-style-type: none">– digestive– musculo-skeletal– respiratory– circulatory• solutions and solubility• properties of simple machines and their force effects• machines:<ul style="list-style-type: none">– constructed– found in nature• power – the rate at which energy is transferred• local types of earth materials

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

- 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**

- the nature of sustainable practices around BC's resources