

2016 BC Learning Standards:

Correlations with MineralsEd's *K-3 Integrated Resource Unit: Kids & Rocks*

Area of Learning: APPLIED DESIGN, SKILLS, AND TECHNOLOGIES

BIG IDEAS Kindergarten–Grade 3

- Designs grow out of natural curiosity.
- Skills can be developed through play.
- Technologies are tools that extend human capabilities.

Curricular Competencies:

Applied Skills • Use materials, tools, and technologies in a safe manner in both physical and digital environments • Develop their skills and add new ones through play and collaborative work

Applied Technologies • Explore the use of simple, available tools and technologies to extend their capabilities

Area of Learning: ARTS EDUCATION

BIG IDEAS Kindergarten

- **Engagement in the arts creates opportunities for inquiry through purposeful play.**

Curricular Competencies:

Exploring and creating • Explore **elements**, processes, materials, movements, technologies, tools, and techniques of the arts ☐ Create artistic works collaboratively and as an individual, using ideas inspired by imagination, inquiry, experimentation, and **purposeful play**

Curricular Competencies Elaborations:

- **purposeful play:** learning that uses real-life and/or imaginary situations to engage and challenge learners' thinking. Through planned purposeful play, students express their natural curiosity while exploring the world around them. It also provides a means for high-level reasoning and problem solving in a variety of ways
- **document:** activities that help students reflect on their learning (e.g., through drawing, painting, journaling, taking pictures, making video clips or audio-recordings, constructing new works, compiling a portfolio)

Content:

- traditional and contemporary **Aboriginal arts** and arts-making processes
- **personal and collective responsibility** associated with creating, experiencing, or **sharing** in a safe learning environment

Area of Learning: CAREER EDUCATION Kindergarten–Grade 3

BIG IDEAS (all)

- Confidence develops through the process of self-discovery.
- Strong communities are the result of being connected to family and community and working together toward common goals.
- Effective collaboration relies on clear, respectful communication.
- Everything we learn helps us to develop skills.
- Communities include many different roles requiring many different skills.
- Learning is a lifelong enterprise.

Content:

- Connections to community
- jobs in the local community

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Area of Learning: Language Arts K-Grade 1

(ATB: K-3 Unit is strong in developing language and practicing LA skills to learn the Big Ideas in all subject areas)

BIG IDEAS K-Grade 1

- Through listening and speaking, we connect with others and share our world.
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us.

(ATB: these are the purpose of the K-3 unit)

Curricular Competencies:

Comprehend and connect (reading, listening, viewing) • Use sources of information and prior knowledge to make meaning

Create and communicate (writing, speaking, representing) • Exchange ideas and perspectives to build shared understanding • Use language to identify, create, and share ideas, feelings, opinions, and preferences

Curricular Competencies Elaborations:

exchange ideas and perspectives: taking turns in offering ideas related to the topic at hand, focusing on the speaker without interrupting, and generally contributing to the discussion
(ATB: this unit lends itself to this.)

BIG IDEAS Grade 2 and Grade 3

- Language and story can be a source of creativity and joy.
- Through listening and speaking, we connect with others and share our world.
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us.
- Stories and other texts connect us to ourselves, our families, and our communities.
- Everyone has a unique story to share.
- Playing with language helps us discover how language works.

Curricular Competencies (Grade 3):

Create and communicate (writing, speaking, representing) • Develop and apply expanding word knowledge

Area of Learning: Math

BIG IDEAS K-2

- Repeating elements in patterns can be identified.
- Objects have attributes that can be described, measured, and compared.

(ATB: Unit includes estimating; financial literacy could be added)

BIG IDEAS Grade 1-Grade 2

- Concrete graphs help us to compare and interpret data and show one-to-one correspondence.

Big Ideas Elaborations:

patterns: • Patterning: We use patterns to represent identified regularities and to make generalizations.

Curricular Competencies:

Reasoning and analyzing • Use reasoning to explore and make connections • Estimate reasonably

Understanding and solving • Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving

Communicating and representing • Communicate mathematical thinking in many ways

Curricular Competencies Elaborations:

patterns: • Patterning: We use patterns to represent identified regularities and to make generalizations.

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Estimate reasonably: • estimating by comparing to something familiar (e.g., more than 5, taller than me)

Content:

- direct comparative measurement (e.g., linear, mass, capacity)
- financial literacy — attributes of coins, and financial role-play

Content Elaborations:

number concepts: • counting:

repeating patterns: • sorting and classifying using a single attribute • identifying patterns in the world

direct comparative measurement: • understanding the importance of using a baseline for direct comparison in linear measurement • linear height, width, length (e.g., longer than, shorter than, taller than, wider than) • mass (e.g., heavier than, lighter than, same as) • capacity (e.g., holds more, holds less)

single attributes: • At this level, using specific math terminology to name and identify 2D shapes and 3D objects is not expected. • sorting 2D shapes and 3D objects, using a single attribute • building and describing 3D objects (e.g., shaped like a can) • exploring, creating, and describing 2D shapes • using positional language, such as beside, on top of, under, and in front of

Area of Learning: Science

BIG IDEAS K

- Humans interact with matter every day through familiar materials.
- The motion of objects depends on their properties.

Big Idea Elaborations:

Humans interact with matter every day through familiar materials. • What is matter? • How do you interact with matter? • What qualities do different forms of matter have?

The motion of objects depends on their properties. • How can you make objects move? • How does the shape or size of an object affect the object's movement? • How does the material the object is made of affect the object's movement?

Curricular Competencies:

Questioning and predicting • Demonstrate curiosity and a sense of wonder about the world • Observe objects and events in familiar contexts • Ask simple questions about familiar objects and events

Planning and conducting • Make exploratory observations using their senses • Safely manipulate materials

Applying and innovating • Take part in caring for self, family, classroom and school through personal approaches • Transfer and apply learning to new situations • Generate and introduce new or refined ideas when problem solving

Communicating • Share observations and ideas orally • Express and reflect on personal experiences of place

Humans interact with matter every day through familiar materials. • What is matter? • How do you interact with matter? • What qualities do different forms of matter have?

The motion of objects depends on their properties. • How can you make objects move? • How does the shape or size of an object affect the object's movement? • How does the material the object is made of affect the object's movement?

Curricular Competencies Elaborations

Questioning and predicting:

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- Patterns are natural configurations, designs, arrangements or sequences.
- Many patterns indicate an underlying scientific principle or unifying idea.
- People identify patterns and look for relationships behind the patterns they find.
- They use this information to extend their understanding.

Content:

- properties of familiar materials
- effects of pushes/pulls on movement
- effects of size, shape, and materials on movement

Content Elaborations:

- properties: colour, texture (smooth or rough), flexibility (bendable or stretchable), hardness, lustre (shiny or dull), absorbency, etc.
- familiar materials: fabric, wood, plastic, glass, metal/foil, sand, etc.
- effects of pushes/pulls: how things move (e.g., bounce, roll, slide)

BIG IDEAS Grade 1

- Matter is useful because of its properties.
- Observable patterns and cycles occur in the local sky and landscape.

Curriculum Competencies

Applying and innovating

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

Content

- classification of living and non-living things
- specific properties of materials allow us to use them in different ways
- local patterns that occur on Earth and in the sky

BIG IDEAS Grade 2

- Materials can be changed through physical and chemical processes.
- Forces influence the motion of an object.

Content

- metamorphic and non-metamorphic life cycles of different organisms
- physical ways of changing materials
- chemical ways of changing materials
- types of forces

BIG IDEAS Grade 3

- All matter is made of particles.
- Thermal energy can be produced and transferred.
- Wind, water, and ice change the shape of the land.

Curricular Competencies

Questioning and predicting

- 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
- Make predictions based on prior knowledge

Planning and conducting

- Suggest ways to plan and conduct an inquiry to find answers to their questions

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- Safely use appropriate tools to make observations and measurements, using formal measurements and digital technology as appropriate

Processing and analyzing data and information

- Experience and interpret the local environment

Content

- energy is needed for life
- matter is anything that has mass and takes up space
- atoms are building blocks of matter
- sources of thermal energy
- transfer of thermal energy
- major local landforms
- observable changes in the local environment caused by erosion and deposition by wind, water, and ice

Area of Learning: Social Studies

BIG IDEAS K

- Our communities are diverse and made up of individuals who have a lot in common.
- Stories and traditions about ourselves and our families reflect who we are and where we are from.
- Rights, roles, and responsibilities shape our identity and help us build healthy relationships with others.

Curricular Competencies

- Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions

Curricular Competencies Elaborations

Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions: Key skills:

- Contribute to a class collection of information on a common topic.
- With teacher support, use simple graphic organizers (e.g., Venn diagrams, t-charts) to identify similarities and differences.

Sequence objects, images, or events, and distinguish between what has changed and what has stayed the same (continuity and change): Sample activities:

- Use appropriate terms to describe when events took place (e.g., then, now, long ago).

Content

- ways in which individuals and families differ and are the same
- needs and wants of individuals and families
- rights, roles, and responsibilities of individuals and groups

Content Elaborations

- **rights, roles, and responsibilities of individuals and groups: Sample topics:**
- responsibilities to self, others, and the **environment** (ATB reduce reuse recycle)

BIG IDEAS Grade 1 Local Communities

- We shape the local environment, and the local environment shapes who we are and how we live.
- Our rights, roles, and responsibilities are important for building strong communities.
- Healthy communities recognize and respect the diversity of individuals and care for the local environment.

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Curricular Competencies

Sequence objects, images, or events, and distinguish between what has changed and what has stayed the same (continuity and change):

Content

- relationships between a community and its environment
- roles, rights, and responsibilities in the local community
- key events and developments in the local community, and in local First Peoples communities
- natural and human-made features of the local environment

BIG IDEAS Grade 2 Regional and Global Communities

- Canada is made up of many diverse regions and communities.
- Individuals have rights and responsibilities as global citizens.

BIG IDEAS Grade 3 Regional and Global Communities

- Learning about indigenous peoples nurtures multicultural awareness and respect for diversity. (Kids & Rocks classroom workshop; obsidian use, inuksuk purpose, book ATB reads with FN story teller))