

Exploring Rocks and Minerals

Saskatchewan	
Grade 4	
Earth and Space Science	
<u>Outcomes:</u>	<u>Indicators:</u>
<p>RM4.1 Investigate physical properties of rocks and minerals, including those found in the local environment.</p>	<p>(a) Pose questions about the properties of rocks and minerals.</p> <p>(c) Observe and record physical properties of rocks and minerals using appropriate terminology such as colour, lustre, hardness, cleavage, transparency, and crystal structure.</p> <p>(d) Use appropriate tools (e.g., hand lens, safety glasses, brush, rock pick, knife, measuring tape, and gloves) safely while making observations and collecting information on the physical properties of rocks and minerals.</p> <p>(f) Demonstrate processes for testing the hardness of minerals, including reference to guides such as Moh's scale of mineral hardness.</p> <p>(g) Record observations of rocks and minerals using jot notes, labelled diagrams, and charts.</p> <p>(k) Differentiate between rocks and minerals.</p> <p>(l) Develop simple generalizations about the physical characteristics of rocks and minerals based on observation and research.</p>
<p>RM4.2 Assess how human uses of rocks and minerals impact self, society, and the environment.</p>	<p>(a) Discuss ways in which people of different cultures value, respect, and use rocks and minerals, including First Nations and Métis connections to the Mother Earth.</p> <p>(b) Identify objects in their local environment that are made from rocks and minerals (e.g., nickel, table salt, pottery, cement, carvings, brick, jewellery, bicycle, nutrients, battery, copper wiring, soda can, plumbing pipe, and sidewalk).</p> <p>(g) Discuss the economic benefits associated with mineral extraction and refining, including related careers, in Saskatchewan.</p> <p>(h) Analyze issues related to the extraction and use of minerals from the perspectives of various stakeholders (e.g., company owner, employee, scientist, Elder, environmental group, and end user).</p>

Grade 7

Earth and Space Science

Outcomes:

Indicators:

EC7.2 Identify locations and processes used to extract Earth's geological resources in Saskatchewan and around the world (e.g., quartz, calcite, feldspar, mica, and examine the impacts of hornblende).

those locations and

processes on society and the environment.

(b) Distinguish between rocks and minerals using physical samples, pictures, and/or video recordings and identify the minerals most often found in rocks.

(c) Classify rocks and minerals based on physical properties such as colour, hardness, cleavage, lustre, and streak.

(f) Provide examples of technologies used to further scientific research related to extracting geological resources (e.g., satellite imaging, magnetometer, and core sample drilling).

(j) Identify uses for rocks and minerals, such as healing, recuperative powers, and ceremonies, which include ideas not explained by science.

(k) Research Saskatchewan careers directly and indirectly related to resource exploration.