A MEM-UVic Partnership Project

- x Point-form version: The mineral cards include a list of useful properties of that mineral in point form, and the product cards have a list of uses for that mineral in point form. The properties list will give hints as to what that mineral is used for, e.g., is it durable, heavy, an electrical conductor or insulator. There is a BC flag logo on the cards of minerals mined in British Columbia.
- x Table version: identical to the point-form version, except the useful properties are displayed in a table format, with headings such as "appearance," "reactivity," and "useful compounds." This version is included because the organizational format of table vs. point form may be clearer to some students, but it includes some extra vocabulary words, such as tenacity and specific gravity.

Tips for Understanding C ards

- x There are two types of cards: mineral cards and product cards.
- x Here is an example template of a mineral card with property table:

x On the top left of each mineral card is the mineral name. Some of the minerals have smaller text underneath the name, indicating that mineral is an ore. As described in the vocabulary words, an ore is a rock or mineral that can be processed to extract a useful material, usually a metal (e.g., pure aluminum does not occur in nature, it must be extracted from an aluminum ore such as the mineral bauxite). x The list of properties corresponds to the properties of the extracted resource and not its ore (e.g., ilmenite is a titanium ore, and the properties on that mineral card correspond to titanium, not the mineral ilmenite). There is a smaller picture on these mineral cards of the metal in pure form to reinforce this connection.

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## Answer Key:

Mineral	Objects
Bauxite (aluminum ore)	Aluminum can; aluminum siding on airplane
Bentonite	Horse stall, kitty litter
Limestone	Tums, concrete steps
Claystone	Bricks, ceramic mug
Copper	Pennies, copper wire
Feldspar	Cupcakes, paint
Fluorite	·

Helpful W ebsites:

Minerals and their Uses: <u>http://www.scienceviews.com/geology/minerals.html</u> This website has a list of metallic and non-metallic minerals, ores, and rocks that are used to make everyday products. It also lists the main sources of the mineral and any alternative materials that can be used. Please note that it is an American website, and the "sources" of the mineral are the countries that export that mineral to the US, and not a list of all countries that produce that mineral.

Geology .com: Rocks - <u>http://geology.com/rocks/</u> and Geology.com: Minerals <u>http://geology.com/minerals/</u>

These are great pages for more pictures of rocks and minerals and information on properties. This website also includes some interesting articles, such as the misconception that diamonds are made from 95 0 T178 0 Td 5.8,Tc -0.004 Tw Tj w 0..n thatdot

Resource	World's Top Producer	Top 5 Producers	Currently mined in BC?
Bauxite	Australia (40%)	Australia, China, Brazil, India, and Guinea	No
Bentonite	U170Co1(e()]7(32%s)4		

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Oil Shale Estonia (70%)

Estonia, Brazil and China are top producers.

Curriculum Links (BC Grade 5):

Subject	Competencies
Social Studies (2006)	Human and Physical Environment: - E3 Explain why sustainability is important
Science (2013	

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