

Creating Mineral Fact Sheets

Humans have found many uses for the natural resources found on the earth. In fact, we rely on many of them, yet the supply of these nonrenewable resources is finite.

Where are the reserves of individual minerals located, what are their characteristics, and for what purposes are they mined and utilized? In this project, you will conduct research to answer these questions, and then create a fact sheet that profiles the element.

1. Using the listed web sites, collect the following information for your research element:

chemical symbol

atomic mass

atomic structure

electron configuration

physical and chemical properties

ores in which the element is found

location and extent of reserves

amount mined/year

yearly consumption, both nationally and internationally

cost (per ounce, pound, etc.)

recovery and treatment methods

uses

other materials that can substitute for the element

environmental issues that arise from the mining or use of the substance

any additional pertinent information

2. Collect images of the element, either in its natural or refined state, which can be included in your project. Cite the source of the images; make sure you are not using resources that are copyrighted. Government sites are often good sources for images.
3. Use the MapMaker (National Geographic) web site to obtain a world map. Use the site's drawing tools to indicate the location(s) of reserves for your element on the map. Include this edited picture in your project.
4. Find three web sites that can be included in your project as additional resources. These could be government, research, environmental, or industry sites that provide information on the mineral. Evaluate the site for its thoroughness and validity. Do not include links to personal web pages, as the information may/may not be correct, and the site may not be particularly stable.
5. Create a fact sheet for the element, using the tools suggested by your instructor. You will be creating an online or computer-based fact sheet that profiles the element, providing the information you collected in steps 1-4. It may be helpful to plan your design on paper, initially, to determine the layout you want to use. Your project will be judged on its completeness, creativity, and design.