

Earth and Space Science Mineral Research Project/Brochure



Name of Researcher:

The Mineral Research Project is a linked assignment between Earth and Space Science and Computer Technology meaning that all science (mineral) concepts will be presented in ESS and research/construction of brochures (using Microsoft Publisher™) will be completed in Comp Tech. To complete this assignment, students will need to access (during Comp tech and/or at home) information from various on-line resources. Don't forget to record all sources Refer to the Comp Tech and Earth and Space Science rubrics for more information on requirements and grading. Listed below are the guidelines that students should follow to complete the research project:

Sample minerals for you to consider researching:

graphite	talc	limonite
silver	bauxite	hornblende
galena	diamond	bornite
gold	gypsum	augite
feldspar	olivine	kaolinite
copper	sulfur	quartz (amethyst, et al)
muscovite	garnet	chalcopyrite
chromite	biotite	topaz
pyrrhotite	halite	corundum (ruby, sapphire)
hematite	calcite	sphalerite
magnetite	dolomite	
pyrite	fluorite	

Core Values, Beliefs and Learning Expectations

Students will:

- Write effectively across the curriculum for a variety of purposes
- Use information, media and technology effectively and responsibly
- Develop artistic skills

Use the following assessment guidelines to complete the brochure:

1. Research

1. Choose a mineral element or compound from the list provided (or submit another choice for approval)
2. List the mineral element/compound chemical formula and a minimum of two chemical properties and two physical properties of the mineral element/compound (minimum 25 words)
3. List one location where the mineral is found in large quantities.
4. Describe (in detail) one of the methods used to extract (mine) the mineral element/compound from the crust of the Earth.
5. List and explain a minimum of one practice/process used in making the raw mineral (ore) ready for the marketplace.
6. Describe one method by which the mineral is marketed (sold) to public/private buyers and list the current market price (wholesale, retail or both) of the mineral element/compound.

7. List a minimum of two present uses for the mineral element/compound. (use bullet icons)

You must use at least 2 sources for information but you may use more, here are some suggestions to help you get started on research:

<http://www.mii.org>

<http://mineral.galleries.com/default.htm>

<http://minerals.usgs.gov/minerals/>

<http://webmineral.com>

<http://www.minerals.net>

<http://www.webmineral.com>

2. Craftsmanship

1. Cover includes:

- Name of your chosen mineral
- At least one image
- Your name and class block

2. All other panels include:

- Each panel has at least one label/title
- Each panel has at least one graphic
- Graphics are of good quality, relevant, and interesting to view (avoid clipart)
- Create at least two separate lists (at least 3 items in a list)
- Use custom icons for both lists (images or symbols)
- Use borders on at least two text boxes and two images
- Use at least two auto-shapes
- Remove hyphens using the proofing tools
- Grammar and spelling have been checked

3. Understanding

1. Use a color theme
2. Use only a few fonts so the styles across the brochure are consistent
3. Use colors that are visible (high contrast)
4. Make use of other design tools such as fill colors, borders, custom icons, rotation, artwork elements, and auto shapes to add visual interest
5. Layout is neat, eye-catching and easy to read

4. Technical Skill

1. Create a Works Cited Document in Word
2. Create a formal MLA citation for each information source used
3. Create a formal MLA web media citation for each image used
4. Email the word document to your Technology teacher
5. Put a final copy of the brochure on the Technology class flash drive
6. Print the final copy of the brochure for your Earth Science teacher
7. Print the MLA document and attach it to your brochure packet for your Earth Science teacher