Make a Mineral Research & Creative Mini-Project

My Mineral's Name: Answer

PART 1: RESEARCH

Once you have selected your mineral (anything but pyrite), it's time to research its properties, uses, global distribution and any other distinguishing facts. Complete the data table below as you conduct your research. Some recommended sources are listed at the end of this document. You may use other sources, but if you do, please add them (hyperlinked) in that section.

| Properties | |
|--|--|
| Chemical Formula | |
| Crystal Shape | |
| Color(s) | |
| Luster | |
| Hardness | |
| Streak | |
| Density | |
| Occurrence (list types of environments it forms in, type of rocks it makes up) | |
| | |
| Uses (list and explain at least three specific uses- historic or current) | |
| 1. 2. 3. | |
| Global Distribution (explain where in the world it's found) | |
| | |
| Word Origin (provide the language/meaning of root word(s) | |
| | |
| Other Interesting Facts (anything that makes your mineral special) | |
| | |

PART 2: CREATE

Now is the time to get creative! Your task is to make your selected mineral into a character (superhero, villain, doll/toy, member of a profession, spoof of a real person or fictional character, etc.) and design an **infographic**, **comic**, **or mini-poster** that educates the viewer about the mineral. You may hand draw all or part of it or you may digitally design it!

Required elements:

- > A **character name** that includes the mineral's actual name
- > Your first name
- > An original **slogan or tagline** for the character
- > A depiction of the character itself and any other visuals
- ➤ Detailed scientific information. You do <u>NOT</u> need to include all your research, but please be sure to include:
 - Occurrence
 - Uses (at least three and be as specific as possible)
 - Global Distribution
 - Anything that makes your mineral special

See full-page example on the last page of this document.

Suggested Sources:

Rocks, Minerals, and Gems book is a great resource for this project (and unit)

Interactive Mineral Gallery, Minerals.net

National Minerals Information Center, USGS

Mineral Database, Geology.com

Mineral Resources Database, Minerals Education Coalition

Mineral List from HyperPhysics

PYRITE THE PIRATE

OCCURRENCE

Pyrite is an accessory mineral in sedimentary, igneous, and metamorphic rocks. It most often occurs in oxygen-poor, organic environments in the presence of iron and sulfur, such as coal beds, where decaying organic material consumes oxygen and releases sulfur.

USES

In the 16th and 17th centuries, pyrite was used as a source of ignition in firearms. Historically, pyrite was used in the production of sulphur dioxide for the paper industry and the production of sulphuric acid for the chemistry and fertilizer industries. Now those uses are declining, as sulphur is most often collected as a byproduct of petroleum refining. Pyrite is still used as an ornamental rock and in jewelry.

BY CRISTINA

I LOVE TREASURE BUT I'M NOT GOLD, FOOL!

GLOBAL DISTRIBUTION

Pyrite has a wide global distribution and is the most abundant sulfide mineral on Earth. Italy and China are the world's largest producers, followed by Russia and Peru.

- Pyrite is commonly known as "fool's gold" due to it's metallic luster and pale brass-yellow coloration.
- Its name comes from Greek (-pyr meaning fire and -lithos meaning stone) because it was used to strike steel in order to create sparks for fires.

A pyrite ammonite fossil. Pyrite is a common replacement mineral in fossil formation.