



Earth Science Week

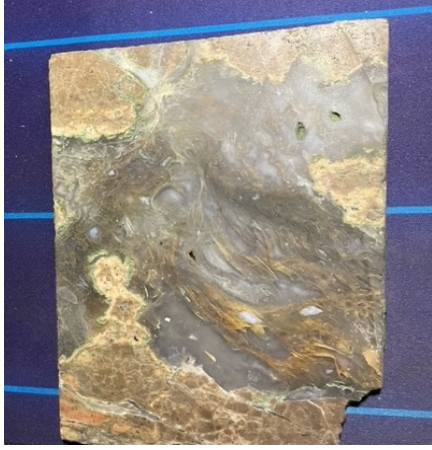
Welcome to Earth Science Week 2023! There are many aspects of Earth Science, and thus many different ways to celebrate Earth Science Week! My great grandfather Wayne Armstrong was an avid hobby geologist. He personally collected and traded rocks all over the world in his spare time. He even built many of his own tools that he used to polish, clean, and preserve the rocks. He decorated many parts of his home with the rocks he had. I thought it would be fun to look at some of his finds and match them to their descriptions. There are also two mystery rocks from my house that I thought would be fun to identify.

- Deborah FHSU Undergraduate, Geosciences (Geography/GIS)

On the following pages you will find different rocks or other geology samples pictured. Your challenge is to match the samples with the corresponding description boxes. Write the letter belonging to each sample of what you think is the correct answer in each description box.

Check your answers on Friday, Oct 13th at
www.fhsu.edu/geo/events/ESW

A) Agate



B) Coralloidal Gypsum



C) Galena



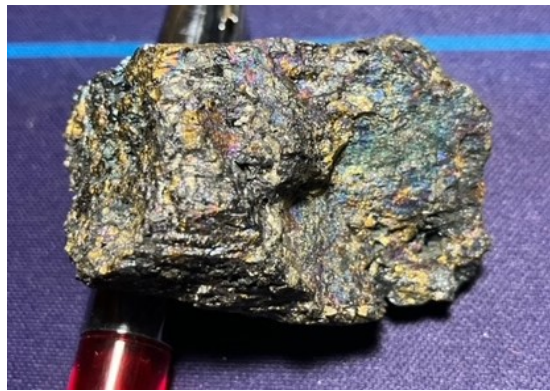
D) Muscovite



E) Silica Glass (Natural)



F) Chalcopyrite



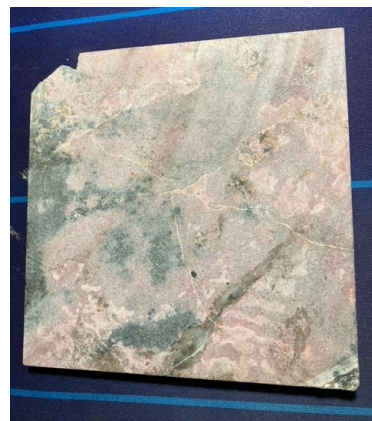
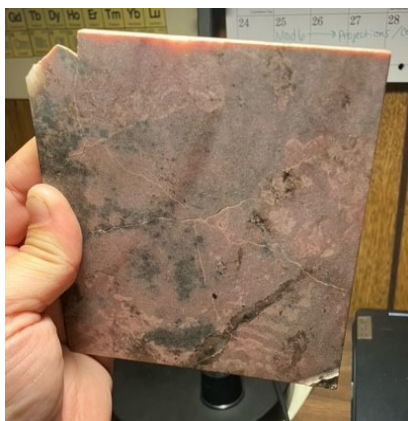
G) Copper Ore OR Malachite



H) Quartz



I) Rhodonite



J) Mystery Rock #1



Mystery Rock #2



I'm common; everyone knows me. You can find me in Sand or underground. I sparkle in the light. If pure, I am clear/white. I can take on different colors when introduced to other elements. I am very hard, a tight network of silica tetrahedrons.

I'm flexible, you can bend me
I'm hard like a fingernail.
I fracture in sheets; perfect cleavage.
My sheets are clear but overall I give a white to brown color.
I'm shiny.

I'm shiny! I habitually form cubic crystals that break when dropped. I have great cleavage in three directions. I am composed of Pb, S. They've named towns after me, including one such place in Eastern KS. I leave behind a dark gray streak.

I am white and powdery.
I crumble. I am softer than a fingernail. I kind of look like a plant. I am a type of speleothem (cave formation). I am used in industry to make drywall and plaster.

I like to wash my food before I eat it. The Germans even call me "Waschbär" because I look like a bear, I guess. Doesn't my mask give me away?

I'm a Rock-oon!

I come from the middle of nowhere, but pretty close to Hutchinson, KS. I used to live over 600 feet underground. I produce cubic crystals with 90 degree cleavage. I am white/gray and I taste sharp. Some of my cousins end up on your plate, but folks like me usually just end up in the streets.

Rock Salt! (Halite & Sylvite) _____

I'm shiny.

I'm as hard as a penny with a brittle fracture.

I lead the bronze age and I am composed of Cu, Fe, S.

I leave a greenish/black streak.

My tarnish is reminiscent of rainbows; the light reflects purples, blues, greens.

I'm used today for several uses and one of the first ores harvested to produce copper metal. I usually grow on other rocks and am known as a deposit. My deposits are associated with copper, and I conduct electricity. My name in Greek means mallow green stone because it resembles the leaves of a mallow plant.

I am manganese silicate mineral and often appear with iron. I am not white but my streak is. I have a pearly luster and am pretty hard, almost as hard as quartz. Today I am collected and sold for my looks but I used to be mined as Ore of Manganese in India.

I am not a rock or mineral in the traditional sense. I am very beautiful and often found in jewelry stores. I can present in many different colors. I am considered a “mineraloid” or a rock-like formation caused by igneous forces on minerals. Silica dissolved in water.

I am not a traditional rock. I almost look fake. I am natural. I am water trapped within a silica formation.

Works Consulted

Essentials of Geology; 13th ed. Lutgens, Tarbuck, Tasa.
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<https://geology.com>

What is Agate? <https://study.com>