Place:
Arden Community Hall
636 Hall Rd
Arden, WA

Club Meetings:

Third Tuesday of the Month at 6:00PM

The Panorama Prospector

March 2024

PANORAMA GEM AND MINERAL CLUB

Minutes for the February 20, 2024 General Meeting

Lynne called the meeting to order at 6:03 pm

Show: security for all. Friday night Colville police will do extra drive bys. Thursday, open at 8 to set up. Show opens at 9 on Friday.

Johnie said there was still a need for someone to supervise the ball bounce game. Lynne volunteered. There is a need for bigger polished rock for the wheel of fortune. All cases are filled. There is free vegetable oil for saws.

Trips starting in May. Think about places to go.

Scholarships are due May 1st.

There will be an executive board meeting in April.

It was noted that the Rock Rollers Club is having their show the weekend of March 22nd.

Jim pointed out that chrysocolla is a staining and not a mineral.

Sharon gave a presentation on maps and the different rock categories, showing examples of different kinds of rocks in each category.

Johnie presented about the periodic table and how many minerals are a combination of the various elements. This is what makes rocks so varied and interesting.

And the Winner is:

The grand prize for the show, an amethyst crystal cluster, was won by Sarah Mottern from Deer Park. They moved over from the west side and she home schools her two girls. Pictured here with Betty Peters.

Johnie's Jabbers

By Johnie Pitman

The person donating the rock believes this rock, that appears to be covered with something, is actually a "Brazilian" agate. But it is not coated. How did it get

polished then? In the plunge-pools beneath the falls on a river by the diamond mines, run-off from the mines made it eventually over the falls and diamond-polished the agate. Believe it or not!!

Identify the "Rock or Mineral"

By Jim Retzer

Last month's rock or mineral:

Steatite (Soapstone) - In this summary of Steatite, I am not going to get into an in-depth analysis of this rock as that would take a book in itself, I know as I did 50 pages on just one aspect of this rock. Commonly when you research Steatite you will find yourself looking more at information on Talc than Steatite. Though they have some similar characteristics they have many differing properties. First and foremost is that Talc is a Mineral and Steatite is a Metamorphic Rock. Also, Talc has a hardness of 1 whereas Steatite has a varying hardness depending on the amount of Talc in its composition, this can be anywhere from 30% to 80%. In its low talc configuration, it is utilized for countertops and other similar applications. In most cases we deal with Steatite closer to 80% talc.

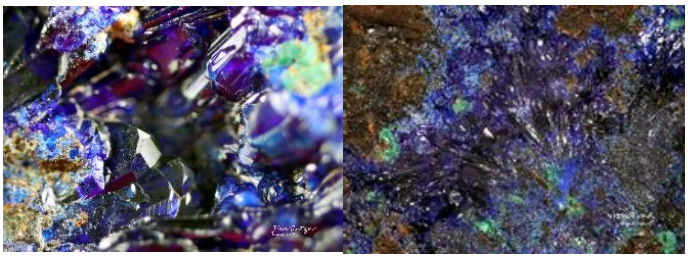
Steatite has a high heat resistance and disperses heat very evenly, it is also the natural "Teflon", not much sticks to it even when using it as cookware. These factors make it a great material for cookware and other utensils. As a countertop you can place hot items directly on it with no damage to the surface. Other uses of Steatite, other than for carving, include pottery glaze and as an insulation material in electrical engineering.

Steatite is a metamorphic rock that is produced in the subduction zones of plate tectonics. In these zones rocks moving down into the earth are subjected to high heat and pressure and with the influx of liquids but not completely liquefying. In the case of Steatite talc is combined with varying amounts of chlorite, micas, amphiboles along with carbonate, magnesium, silicate, and other minerals.

Both Steatite and Talc are considered a magnesium silicate hydrate with the chemical formula $Mg_3(Si_4O_{10})(OH)_2$, but the actual formula for Steatite can vary greatly, depending on other minerals it is associated with. These variations in the chemical composition of Steatite allow us to connect a sample to its location of origin, and in some cases to the exact quarry it came from.

In summary, Steatite and Talc are often listed with the same chemical and same hardness of 1 on Mohs scale. In many cases the terms Steatite, Soapstone, and Talc are used interchangeably even though they are not the same. **Remember Talc is a mineral and Steatite is a metamorphic rock.** Talc has a hardness of 1, Steatite can have a varying hardness. Talc has a chemical composition of $Mg_3(Si_4O_{10})(OH)_2$ and Steatite is usually given this same composition; Steatite's composition is highly variable depending on associated material.

This month's rock or mineral:



Those of you that have been on the clubs Facebook page know what this is. If you haven't, you should check them out.

Unakite: A multipart series

(https://geologyscience.com/rocks/metamorphic-rocks/non-foliated-metamorphic-rocks/unakite/)

Geological Occurrence of Unakite

Unakite is a metamorphic rock that forms through the alteration of granite. The original minerals in the granite undergo metamorphic processes, such as recrystallization and mineral reactions, resulting in the unique combination of pink orthoclase feldspar, green epidote, and clear to bluish-gray quartz that characterizes Unakite.

The metamorphic conditions involve elevated temperatures and pressures, typically associated with the deep burial and deformation of rocks in the Earth's crust. These conditions cause the minerals to undergo changes in their crystal structures and compositions, leading to the distinct appearance of Unakite.

The formation process of Unakite involves several key steps:

1. **Original Granite Formation:** Unakite starts as a granite, which is an igneous rock composed of minerals like quartz, feldspar, and mica. Over time, geological processes such as tectonic movements and uplift bring these rocks to the Earth's surface.
2. **Metamorphism:** As the granite is subjected to increased temperature and pressure during burial in the Earth's crust, metamorphic processes begin to alter its mineral composition. Feldspar undergoes changes that result in the pink coloration, while epidote forms to introduce the green hues. Quartz remains relatively unchanged but may recrystallize.
3. **Cooling and Uplift:** After undergoing metamorphism, the Unakite-bearing rocks may experience cooling and uplift, bringing them closer to the Earth's surface. This allows for the eventual exposure of Unakite through erosion and weathering processes.

Locations where Unakite is Found:

Unakite was first discovered in the Unaka Mountains of North Carolina, USA, from which it derives its name. However, Unakite can be found in various locations around the world where the geological conditions conducive to its formation exist. Some of the notable locations include:

1. **United States:** Besides North Carolina, Unakite is also found in other parts of the United States, including Virginia, Colorado, and Georgia.
2. **South Africa:** Unakite deposits are known to occur in the Bushveld Igneous Complex in South Africa.
3. **Brazil:** There are occurrences of Unakite in Brazil, particularly in regions with metamorphic activity.
4. **China:** Unakite has been reported in some metamorphic terrains in China.

These locations represent just a few examples, and Unakite may be discovered in other regions where the geological conditions are suitable for its formation. The rock's distinctive appearance makes it a sought-after material for lapidary work, jewelry, and ornamental purposes.

Some Pics from Our VERY Successful Show This Year!


2023
Scholarship
Recipients


Entry







$0.50


ustic Rocks
Glynis Hall

SILENT AUCTION


Membership Dues:

$20.00 per **household** per year is due to the club Treasurer Frank Stratton on the third Tuesday of November for regular members. Dues can also be sent to: Panorama Gem and Mineral Club c/o Johnie Pitman, 701 B Williams Lake Rd, Colville, WA 991114.

Webpage: http://panoramagem.com/

Facebook Group: Panorama Gem & Mineral Club

We**, The Panorama Gem and Mineral Club**, are a multi-faceted group of mineral-minded people. Our proud members include some real gems, a few fossils, and even some diamonds in the rough. A few have lost some of their marbles, but they know where to get more! A few need to polish their coordination because they are always tumbling! And some are miners who use the "silver pick" as their tool of choice! It should be crystal clear, that we all enjoy this unique conglomeration and above all else we strive to **HAVE FUN.** And we never throw stones (away).

A Quick Note from The Editor (Glynis)

We had a great show! If you have a special show story to share contribute to OUR newsletter! Send ideas for articles, internet finds, jokes, pictures, adventure stories, science articles or your own articles to me.
gghull@comcast.net

Refreshment Schedule for 2023

Last names that begin with the letters posted bring refreshments for that month

January – H, I, J
February – K, L, M
March – N, O, P
April – Q, R, S, T
May – W, A, B, C
June –D, E, F, G
July – H, I, J
August – Club Picnic
September – K, L, M
October – N, O, P
November - D, E, F, G
December – Christmas Party

Panorama Gem and Mineral Club: Organizational Chart

Officers

President:	Lynne Calvert	lynnecalvert501@gmail.com	559-906-5923
Vice-President:	Bob Bristow	bristow71@outlook.com	509-935-4375
Secretary:	Glynis Hull	gghull@comcast.net	509-981-9714
Treasurer:	Frank Stratton	frstratton@outlook.com	509-207-8503
Trustee 1:	Kevin Youngblood	squaredeal.lic@live.com	509-680-0207
Trustee 2:	Jim Peters	jimnbetty17@gmail.com	509-992-6921
Trustee 3:	Cyndi Doppler		509-216-5473

Committee Chairs

Program Coordinator:	Sheila Stratton	skstratton@hotmail.com	509-207-8506
Hospitality:	Betty Peters	jimnbetty17@gmail.com	509-992-6921
Historian:	Sheila Stratton	skstratton@hotmail.com	509-207-8506
Newsletter:	Glynis Hull	gghull@comcast.net	509-981-9714
Show Chair	Johnie Pitman	jgpitman@outlook.com	509-684-8887