

Rock Hound Kids



Quarry

The Place for Kids
who love Rocks!

Newsletter



Pebbles

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Ruck's Pit Fossil Dig

Ruck's Pit in Fort Drum, Florida which is owned and operated by Eddie Rucks, is the PRIME locality to find minerals and fossils combined in the same specimen. Specimens from this locality range from 1.6 to 2 million years old.

The area north of Lake Okeechobee used to be flooded since it was so close to sea level. Once the water receded the clams died and calcite crystals began to form inside. The best calcite clams from Ruck's Pit are found in the middle and lower sections of the Nashua Formation. You can find a wealth of excellent specimens there. The best specimens are the ones in the "living" position. Living position means that the clam is vertical, not horizontal. Clams that were vertical allowed more material to get in for the growth of calcite crystals.



A calcite clam

Ruck's Pit is a great locality, especially for the beginning rockhound kid. The sheer wealth of specimens at this locality guarantees that you will come home with a bucket full of them. Ruck's is usually very wet. Water is usually pumped out, so that people can dig, but you will still get wet. So better come prepared.

In the wall, you can find many excellent specimens; even ones with multiple clams in one! Some time ago, this shelf of rock collapsed because it was undercut too much!

Ruck's Pit hosts two open houses a year and you can dig everyday of the year for a slightly larger fee. On non-open house days, you can pull out one 5 gallon bucket full and one matrix piece (a specimen with multiple clams in one). On open house days, there is no limit. I have recently been in contact with Eddie and he has told me there will be an open house in November. The pit is being filled in with water in the next few years, so make sure you get to come out and dig before it's too late.

*This article was written by
Guriel Zeigerman*

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Rock of the Month

Sulfur



Sulfur Photo from MIT, courtesy of the Smithsonian Institution

Chemical Composition: S

Hardness: 1.5-2.5

A native element that is included in the periodic table of elements, Sulfur is well known for the awful smell it gives off. What you smell isn't the sulfur but hydrogen sulfide gas, produced when it mixes with water. Only a small amount of gas is formed from just the moisture in the air, so don't worry too much about it. Sulfur is usually yellow, and few other minerals can match its bright

color. Impurities can cause it to be brown, black, red, and even green. Crystals are often orthorhombic (meaning its crystals resemble a matchbox), though it also forms bubble-like crystals, and crystals that resemble stalactites and stalagmites. This element is formed when sulfur-rich gas meet cool open air, and in volcanos.



The name sulfur comes from the Sanskrit, "sulvere" and the latin, "sulphurium". In the book of Genesis, it is referred to as brimstone, and though poisonous, it is used as a medicine. A poor heat conductor, sulfur becomes brittle when heated. So much so, that holding it tightly in your hand can cause it to crack! Sulfur is used as a

component of black gunpowder, large amounts are also used to make sulfuric acid which is the most important manufactured chemical. Another important use is in vulcanization, a process in which sulfur is added to rubber to make it stronger and more elastic. Found throughout Italy, specimen quality crystals are hard to find from North America due to how it is mined. Heated brine (salty water) is pumped below the ground dissolving the sulfur, then when brought back up the brine is removed leaving only the sulfur but this process destroys many of the beautiful crystals.

Did you know???

A dark area near the crater, Aristarchus, on the moon is belived to be a sulfur deposit.





Ask Jessy

QUESTIONS ABOUT GEOLOGY

Send your questions about geology, rocks, minerals and collecting to Jessy and she'll pick one or two questions a month to answer for you! And stay tuned... everyone that submits a question will be eligible for our monthly drawing for some neat rock goodies!

Email Jessy Questions at Jessy@Rockhoundkids.com



Shauna sent me a e-mail asking where she could find a rock pick for her daughter who loves to look for rocks with her father, but his pick is too big.

Well, Shauna I looked around a little and found a nice website called amateurgeologist.com. This site contains lots of cool gadgets, some even I would like. But unlike most sites I saw, they list the sizes and weight of their picks and hammers. So that way, you can find the one that best suits your geologist in the rough. I also had a nice idea if you can't find a pick that is the right size. There are many different tools a geologist uses, many smaller and lighter than a pick. Maybe you can find one that she would like, and that way she would have her own special job to do while hunting and digging for rocks.

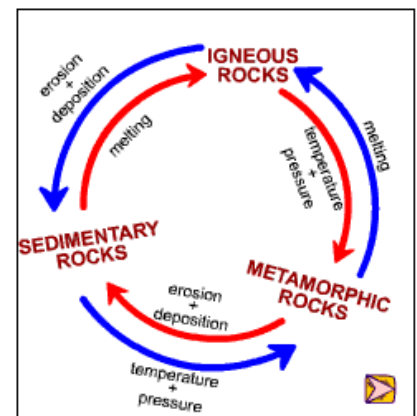
If you know anywhere you could find a rock pick for kids, send me a letter and I'll be sure to pass it on.

Leanna asks "Dear Jessy, What exactly is the difference between igneous, sedimentary, and metamorphic rocks?"

The difference is in how each rock is formed. Igneous are formed when magma from the Earth's crust or mantle hardens into rock. There are two types of igneous rocks, intrusive (formed underground), and extrusive (formed above ground). Sedimentary rocks are made up of broken bits of rocks, dead plant material, and even mud. The sediments (all the bits and pieces) are deposited by various sources in layers called strata. As more layers are added the lower ones get squashed and eventually become rock. There are four different groups of sedimentary rocks detrital (made of broken rocks), organic (made from remains of plants), biogenic (made of shells and fossils), and chemical (when water evaporates and leaves minerals behind). The last ones are metamorphic rocks. They're formed when existing rocks are subjected to intense heat and/or pressure, and change into totally new rocks. As with the other classifications metamorphic rocks are broken into groups thermal (changed by heat), structural (changed by pressure), and regional (changed by both heat and pressure).

So, I hope that I have answered your questions, if not please tell me and I'll see what I can do.

Email Jessy Questions at
Jessy@Rockhoundkids.com



Rock cycle.

(TAT)

My visit to Cranbrook

Recently, I visited the Cranbrook Museum and Institute of Science located in Bloomfield Hills, Michigan. Contained on the grounds are a graduate Academy of Art, natural history museum, contemporary art museum, house and gardens, and Pre-K through twelve independent college preparatory schools. The Institute was founded in 1904 by George and Ellen Booth of Detroit. Through the years, it has become one of the world's leading centers of education, art, and science. The campus features the work of world-renowned architects and sculptors, and was designated a National Historic Landmark in 1989.

Interesting as all this is, I bet you're wondering what any of it has to do with rocks. Allow me to explain. Cranbrook's founder, George Booth, started a mineral collection in 1926 with a few hundred specimens. Now, his few hundred specimens have grown to over 11,000, including 300 minerals native to Michigan. Most of which are housed in the Institute of Science, near the stegosaurus. Cranbrook features two exhibits containing George's collection. Every rock has a story focused more on how rocks are formed. Larger and intriguing specimens, including a large sheet of native copper, are also on display here. The second exhibit is the Mineral Study Gallery. It is my personal favorite and is home to 1,800 specimens. From quartz to silver and most minerals in-between, this exhibit is so cool! Arranged by mineral groups, the study gallery includes minerals displayed with their streaks, a large amethyst crystal in the center, and even a display for fluorescent minerals. I even found my favorite mineral, howlite, and took a picture, of course. My family had a good laugh at my constant going from case to case, staring at every thing, pointing out minerals I own and taking pictures of as many of them as I could!

I hope that if you are ever in the area, you'll stop by and visit this awesome place to learn about and see wonderful minerals.



The entrance of Cranbrook's Institute of science.



Here is one of the displays, it talks about how atoms affect a crystals shape.



This display shows some minerals, and their streaks.



Look, it's howlite!!!!

Cool Web Links



science.cranbrook.edu

Cranbrook's Institute of Science is one of my favorite places to visit. Their website offers lots of information if you plan to visit as well as some for their featured and permanent exhibits. It also has educational programs and info on scouts as well as summer camps.

www.gottrocks.com/know.html

Did you know that there is no such thing as "jade"? This fact and more on this page. The facts are only about gemstones since the rest of the site is for Mrs. Gottrocks Fine Jewelry and Gifts. But, think of all the other rock hounds you'll impress with the info you'll pick up!

www.mindat.org

The largest mineral database and mineralogical reference website online. Mindat has a wealth of info for any rock hound. News for around the world, photos added by members, and a directory of people selling everything from minerals to tools, as well as clubs, shows, and personal websites.

www.minsocam.org

This is the website for the Mineralogical Society of America. It includes a separate site for kids, and tons of info on just about everything having to do with mineralogy, petrology, and crystallography. The site also includes a collectors corner for identification, a crystal structure database, and ask a mineralogist.

www.webmineral.com

Wow, this site is HUGE! If you ever wanted to know just about everything about any one mineral then this is where you should go. This site has a database of 4,442 individual mineral species descriptions that include links for more info as well as a comprehensive image library. Minerals are sorted by their crystal system, structure, physical and optical properties, and more. They even go as far as to list them on how radioactive they are.

If there are any websites you feel should be mentioned send them into

SubmitALink@Rockhoundkids.com

TheHomeschoolshop.com

Brings to you

Rock-TOBER

We're going to be celebrating the Month of October as our new **ROCKTOBER!**

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