The official bulletin of the Dothan Gem & Mineral Club, Inc.

Rockhounds Herald

920 Yorktown Road, Dothan, AL 36301-4372

www.wiregrassrockhounds.com

February 2013

Words from…

The President

We had great club representation at the Panama City show last month; some as vendors, but most as shoppers. Special congrats to our own Samantha Merino for winning the big fossil offered as the door prize. I expect the meeting on Sunday, February 24th to be another busy one. We've got lots more to discuss and decide before the show in April and it will be here before you know it. Also, for the folks who have one of the yard signs we used last year, please contact me at 334-673-3554. I need a count of how many signs need to be updated with the new show dates. See you Sunday. Jeff

Announcements

Beaded Bracelet Class – JoAn Lambert will teach a bracelet beading class at 10:00 AM on March 9th in the Fellowship Hall. For complete details, see Page 10 of this newsletter (right after the Beaded Spider Workshop pictures).

Cabochon Class – Arnie Lambert will teach a cabochon class at 10:00 AM on March 16th at his home in Dothan. Space is limited to eight participants so you must call to reserve a spot. For Arnie's phone number and complete details, see Page 10 of this newsletter (right after the Beaded Spider Workshop pictures).

T-Shirts – Since we have so many new members, Pat LeDuc, Club Secretary and Webmaster, is putting together a new order for T-shirts. The shirts display the club logo on the left front side and are available in four colors: grey, dark tan, navy and dark green. They will be distributed at the March meeting. Shirts in the last order cost $10 each and she expects this batch to be about the same price. If you'd like to order a T-shirt, please see her at the February meeting or send her an e-mail at pal2948@yahoo.com. Be sure to include the color, size and quantity of shirts you want.

Membership Dues – Folks, here's a second reminder that it's time to pay your annual membership dues: $15 for singles and $20 for a family. Membership Chair, Diane Rodenhizer, will again be collecting payments at the February meeting, or you can mail her a check at: 478 Private Road 1106, Enterprise, AL 36330. **Please get your payment to Diane before the end of February.**

Upcoming Shows

February 23	**Imperial Bone Valley Gem, Mineral & Fossil Society**	**Lakeland, FL**
March 1 – 3	**Suncoast Gem & Mineral Society**	**St. Petersburg, FL**
March 8 – 10	**Aiken Gem Mineral & Fossil Society and Augusta Gem & Mineral Society**	**Augusta, GA**
March 15 – 17	**Rome Georgia Mineral Society (ROGAMS)**	**Rome, GA**

Source: www.amfed.org/sfms/

Meeting Minutes – January 2013 – by Secretary

The meeting was called to order by club President, Jeff DeRoche, at 2:00 PM. He wished our January members a happy birthday and let the group know the Panama City Gem & Mineral show would be February 2 – 3. One of our club members, Arnie Lambert will be setting up a table there. Jeff thanked last year's president, JoAn Lambert, and the other outgoing officers for all their work and reminded everyone that it is time for membership renewal. He also passed out copies of the club bylaws. We had an excellent 2013 kick off meeting with 40 people, including 3 new members -- Jane and Elliott Whitton and our youngest club member, Alexandra Pollan.

CORRESPONDENCE: The club received the AFMS newsletter.

OLD BUSINESS: The November minutes were approved without changes. There were no minutes from December. Diane Rodenhizer presented the treasury report.

NEW BUSINESS: Show dates have been set for April 27 – 28. Joan Blackwell updated our show flyer with the new dates and Arnie will be taking a stack to the Panama City show. We spent considerable time discussing show committee rosters and roles, as well as different activities for kids, such as Grab Bags, Sand Sifting and Spin-the-Wheel. Arnie volunteered to build a wheel for us to use at the show. Joan proposed the club sponsor a scholarship to the William Holland School of Lapidary Arts. Members would get points based on criteria determined by the club and the points would be converted to entries for a random drawing. We will discuss and vote on the issue at the February meeting. In light of all the new members, we discussed ordering another batch of club T-shirts. A list was circulated and an order will placed in time for them to be passed out at the March meeting. JoAn volunteered to teach a beading class on February 9th. We will be learning to make those cute spiders. Class will be at 10:00 AM in the fellowship hall. JoAn said she had enough materials for everyone to make at least one spider, so everyone should bring wire cutters and small needle nose pliers.

SHOW & TELL: Margie Cody started off Show & Tell with a beautiful druzy she found at our dig at L. J. Ward's place. Joe Cody brought the giant green beryl he found at Hogg mine. He was not able to extract it the day of the dig, so the mine folks jackhammered it out and brought it to one of our meetings to present to him. Diane showed agate, petrified wood, opal, double-terminated smoky quartz and thunder eggs she bought or collected while on her trip to Australia. L. J. displayed a collection of knives he made from agate, deer antler, glass, snowflake obsidian and novaculite. Arnie brought in clocks he made from thin slabs of crazy lace agate. He also had a big chunk of silver he found in the stash pile in his backyard. It was part of the collection he bought from Curtis Bains' estate. JoAn had samples of the beaded spiders we'll be making on the 9th and a new bracelet pattern for us to look over. Ben Ferguson had a couple of fossilized oysters he found in the Choctawhatchee River. Ken Johnson displayed beautiful pieces of picture and ocean jasper. Diane Tetzlaff brought in a nice collection of points she found while walking her dog through fields near her house. Laural Meints showed a curiosity called African Archean Butterstone and Grady Dunn displayed some beautiful Ethiopian Welo Opals. (Note: It was good to see Grady and Esther out and about again. Both have recently spent time in the hospital; Grady had gallbladder surgery and Esther had bronchitis.)

PROGRAM: No program was presented. The group spent quite a bit of time discussing our upcoming show and various club activities while nibbling on brownies, cookies, fruit, veggies, chips and dips graciously provided by Ellen and John Webber. Door prizes went to Barbara Meredith, Samantha Merino, Abbey Pollan, Ben Ferguson, Esther Dunn, and yours truly.

Respectfully submitted by Pat Leduc

Quartz with Inclusions

Why would anyone want a gem with inclusions? Generally the more inclusions in a gem, the lower its value. This is particularly true if these inclusions discolor the gem, degrade its transparency, or make it more likely to fracture. Strangely enough, there are numerous gems whose value is enhanced by the presence of inclusions, which either identify its species or origin, or give it certain optical or color characteristics. Examples would include demantoid garnet whose "horsetail" inclusions verify valuable Russian origin, sunstone whose reflective platelets give it sparkle, Baltic amber with trapped insects or plant parts, and star rubies and sapphires which depend on included rutile needles for creation of the star phenomenon.

Value Raising Inclusions

[Bryssolite asbestos "horsetail" in Russian demantoid, sunstone with hematite platelets, insect in Russian amber, star ruby.]

This short discussion, however; will focus on just one species: quartz, and some of the inclusions which can give it added value.

Rutile

The most common and familiar inclusion in quartz is rutile. The needle-like crystals can be thick or thin, pale gold to rich orangey brown and arranged in dense or sparse patterns.

[Rutilated Quartzes]

What might be considered the "Holy Grail" for quartz inclusion collectors is the rutile/hematite starburst. In these pieces a six sided, shiny black hematite crystal serves as an alignment point for the rutiles which, in the best examples, line up in parallel bundles along each face forming a six rayed star with a hematite center. Such pieces are sought after and highly valued even when the stars overlap or are incomplete.

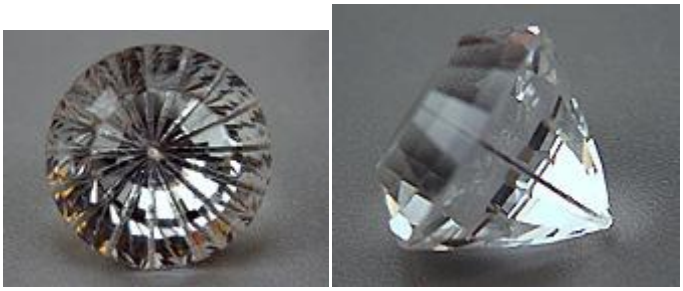
[Pendant with near perfect rutile/hematite starburst, partial starbursts]

Other Needle-like Inclusions

Other needle-like crystals such as edenite, Goethite, and tourmaline produce attractive and interesting gems with various colors and patterns.

[Quartzes with green edenite, golden Goethite needles in "sheathes" and tourmaline inclusions]

The tourmaline crystals are most often opaque black and are particularly desirable when they occur as large isolated individual crystals. One sought after type of this gem is a round faceted quartz with a single black tourmaline needle captured in it. If it runs from the center of the table to the culet it will reflect in all the pavilion facets and form a perfect "pinwheel".



[Tourmalinated quartz "pinwheel" from front showing multiple spoke-like reflections, from side, showing single central needle]

Not Only Needles

Besides the needle-like crystals there are other types which create attractive interior landscapes. For example, pyrite with its metallic silvery-gold color can occur as random shapes, as "flowers" or "suns" or, most sought after, perfect cubes! Platelet-like forms of red hematite or lepidocrosite can give an overall pink or red color to a clear quartz as in

the strawberry and raspberry quartzes. Some materials, such as manganese oxide, form crystal "dendrites" within quartz which look like snowflakes, fern fronds or tree branches. Many newcomers to the gem hobby have mistakenly taken these to be fossil plants within the stone, as the form is so realistic.

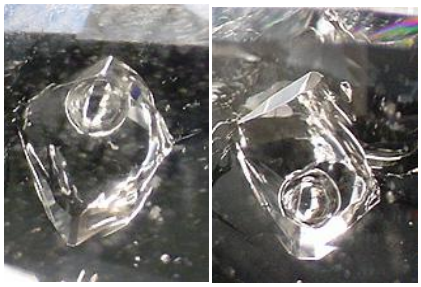
[Quartzes with pyrite "suns", perfect pyrite cubes, strawberry quartz with hematite platelets, dendritic quartz with manganese oxide dendrites]

Growth Phenomena

Growth phenomena such as starts and stops during crystal formation sometimes provide interior interest. "Phantoms" which show the outline of a host crystal face with deposited material of a different color or transparency, and "negative crystals" which are voids bounded by the growing host crystal walls are examples.

[Quartzes with edenite phantoms, landscape of negative crystals]

One of the most interesting quartz inclusions for the collector to own is an "enhydro". This is the case where a bubble of gas is trapped within a pocket of liquid inside the crystal. As the piece is tilted, the bubble freely moves within its chamber.



[Quartz with moving "enhydro" in different positions as the stone is tilted]

Non-transparent Quartzes

Certain microcrystalline quartzes, the chalcedonies, also can be improved by their inclusions. Examples include dendritic chalcedony with its flower-like patterns, "amethyst sage", and the iron stained channels of Indonesian chalcedony which create random (but

sometimes meaningful) patterns. Such inclusions can be microscopic as in the case of chrysocolla in quartz (gem silica) which gives a tough-as-quartz gem with the sublime color of the much more fragile chrysocolla.

[Dendritic chalcedony, "amethyst sage", Indonesian chalcedony, "gem silica"]

[Indonesian chalcedony alphabet]

Quartzite Rock

Crystals of metals like gold, silver and copper within white quartzite rock have long been valued for their beauty.

[Gold in quartz ring and bolo tie, copper in quartz pendant]

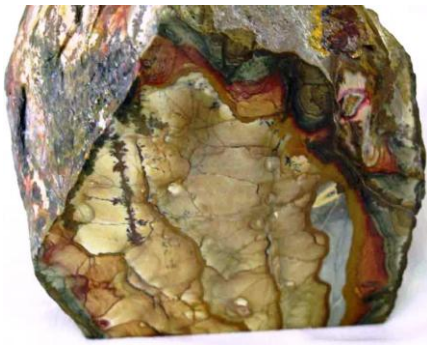
Value Factors

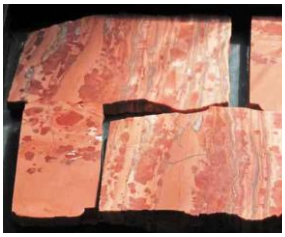
When considering the purchase of an included quartz, the main factors to consider would be the distinctiveness, rarity and beauty of the inclusion(s) within the stone. In addition, it is usually true that the more centrally placed and the less obscured by extraneous inclusions the desired ones are, the higher the value. The general factors of value for any stone such as clarity, carat weight, color and cutting perfection would provide secondary value points.

Source:
Reprinted with permission from Dr. Barbara Smigel
http://www.bwsmigel.info/GEOL.115.ESSAYS/Gemology.Included.Quartz.html

Club Meeting – January 2013

Photos by Pat

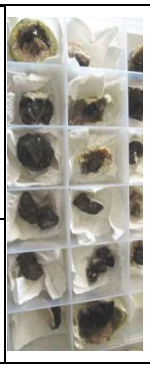




Biggest crowd in a while!!! A lot for Show & Tell, too.

More Club Meeting – January 2013

Photos by Pat



The day's many treasures came from all over – some handmade, some hard won, a few obtained for a tidy sum. All stunningly beautiful… including the refreshments.

Beaded Spider Workshop – February 2013

Photos by Pat

More than a dozen folks showed up on a pretty Saturday to craft some beaded spiders… and other critters.

JoAn Lambert provided instruction and most of the supplies for the class. Since not everyone wanted to make and take home a spider (I can t-o-t-a-l-l-y understand that), they made bees instead. Everyone enjoyed the fellowship…and the desserts!

Beaded Bracelet Workshop – March 9

On Saturday, March 9 at 10:00 AM at the Fellowship Hall, JoAn Lambert will conduct a jewelry making workshop where attendees can make a beaded bracelet like the ones she displayed at the January meeting.

Everyone should bring the following tools and supplies:

#12 beading needle
6 lb. FireLine® fishing string
Ruler
Scissors
Jewelry tools – such as pointed pliers, round nose pliers or flat nose pliers
Bracelet fastener or clasp
Bicone Beads – 2 sizes

For a standard 7½-inch bracelet you will need:

29 6mm bicone beads
58 4mm bicone beads
This figures about 7½ beads to the inch.

For a more delicate looking 7½-inch bracelet (smaller beads) you will need:

38 4mm bicone beads
76 3mm bicone beads
This figures about 9½ beads to the inch.

Note: If you want a bracelet that is longer than 7½ inches (plus fastener), you'll need to bring extra beads.

If you have questions about the materials or the class, call JoAn at 334-792-7116.

Cabochon Workshop – March 16

On Saturday, March 16 at 10:00 AM, Arnie Lambert will conduct a cabochon workshop at his home in Dothan at 920 Yorktown Road.

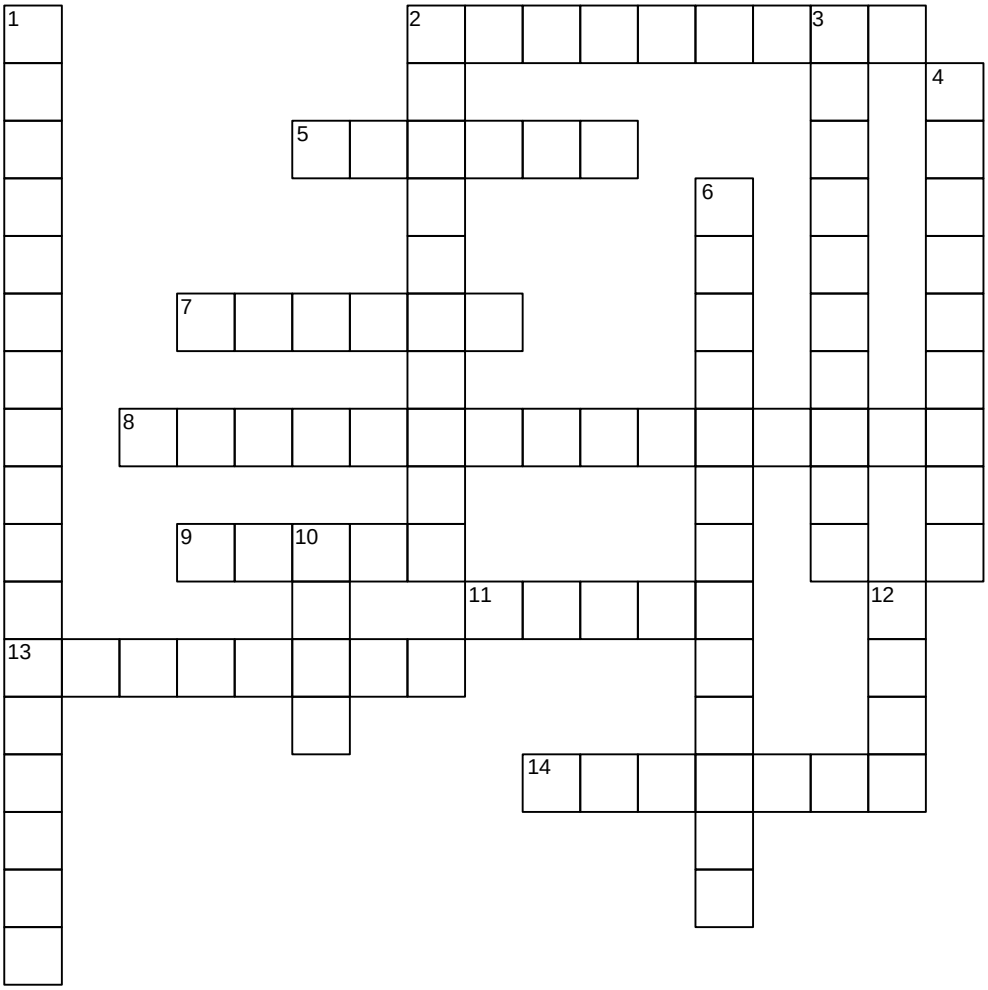
Class size is limited to eight folks due to time constraints and available space on his patio. (Note: If more than eight people are interested he says we can have another class later.)

There is no supply list for the class; Arnie will provide everything. All you have to do is show up.

To reserve a spot in the class, please call Arnie at 334-792-7116.

Kid's Corner

The Quartz Family



Source: www.rocksandminerals4u.com

ACROSS

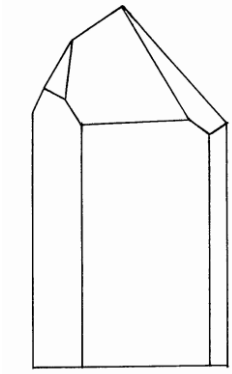
2. a clear red chalcedony
5 . one of the most common of minerals in the continental crust
7. an opaque red variety of cryptocrystalline quartz
8. the chemical formula for quartz
9. _____quartz is a brown type of quartz
11. the name of a group of silicates made of chalcedony.
13. a purple variety of quartz
14. a yellow variety of quartz

DOWN

1. crystals are only visible with magnification
2. one of the cryptocrystalline varieties of quartz, the mineral in agates
3. a green variety of cryptocrystalline quartz
4. a chatoyant gemstone containing asbestos
6. mechanical pressure generates electrical charge
10. a black and white banded variety of cryptocrystalline quartz
12. _____quartz is a pink type of quartz

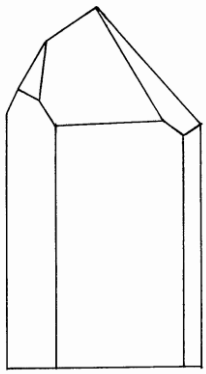
Triboluminescence

Luminescence means *light*. *Triboluminescence* is light that is produced when certain objects are rubbed against each other, or pressure (force) is applied to some objects. You will see triboluminescence in the mineral quartz.



What you will need:
Safety goggles, two clear quartz crystals (not display quality specimens).

This activity may take a little practice. You will need fairly large quartz crystals, about palm size or larger. To make this work, you will have to be in a dark room.



What to do:
Step 1: Hold one crystal in each hand.

Step 2: Rub the edge of one crystal back and forth across the face of the other crystal. A "face" is the flat surface of a crystal. The "edge" is where two faces come together.

For best results, repeat this with the lights out.

When you rub the edge of one crystal against the face of the second, push down so that you are really grinding the two crystals together. If you cannot create light, try again, this time pushing even harder.

Step 3: What do you see? You will see a brief flash of light on the *inside* of the quartz crystal.

Triboluminescence: Making Light with Candy

What you will need:
A roll of **Wint-O-Green Lifesavers™**. No other flavor will work! A dark room. A friend to do the experiment with.

What to do:
Step 1: Face a friend in a dark room or under a blanket.
Step 2: Bite into a wintergreen lifesaver with your mouth open! Be sure to really crunch it into lots of little pieces all at once. When you do it right, your friend will see a very fast, small *flash of blue light*.

What makes it work? Do a Google search and find out!

Source: Mini Miners Monthly, Vol. 6, No. 8, August 2012

Crossword Answer Key: Across – 2. carnelian 5. quartz 7. jasper 8. siliconedioxide 9. smoky 11. agate 13. amethyst 14. citrine
Down – 1. cryptocrystalline 2. chalcedony 3. aventurine 4. tigerseye 6. piezoelectric 10. onyx 12. rose

Who What Where When Why How

February Birthdays

FEB 3 – Patrick Nealey
FEB 15 – Steven Ward
FEB 20 – Gary Meredith
FEB 23 – Chris Wisham
FEB 24 – John Webber
FEB 26 – Samantha Merino
FEB 28 – April Rockwell
Bill Tharpe

Random Rock Facts

Single Crystal Quartz v. Aggregate Quartz – Both amethyst and chalcedony are quartz, but the differences in their respective crystal size and arrangement create notably different physical and optical properties in the two varieties. For example, amethyst and other **single crystal quartzes** are commonly transparent and one color, while chalcedonies, agates, and other **aggregate quartzes** are translucent to opaque and often have complex color patterns. Although single crystal and aggregate types of quartz are equally hard, the aggregates are notably tougher.

Amethyst is a single crystal quartz in the trigonal crystal system and is the modern birthstone for February.

Source: http://www.bwsmigel.info/Lesson3/DEPhysical.Properties.html

Meeting Information

Time: 2:00 PM
Date: Fourth Sunday of each month (except June, July and August)
Place: Fellowship Hall – Tabernacle United Methodist Church
4329 S. Brannon Stand Road
Dothan, AL

Website: www.wiregrassrockhounds.com

Objectives

To stimulate interest in lapidary, earth science and, when necessary, other related fields.

To sponsor an educational program within the membership to increase the knowledge of its members in the properties, identifications and evaluations of rocks, minerals, fossils and other related subjects.

To cooperate and aid in the solution of its members' problems encountered in the Club's objectives.

To cooperate with other mineralogical and geological clubs and societies.

To arrange and conduct field trips to facilitate the collection of minerals.

To provide opportunity for exchange and exhibition of specimens and materials.

To conduct its affairs without profit and to refrain from using its assets for pecuniary benefit of any individual or group.

Classified Ads

Looking for an item to round out your rock collection?

Got a specimen, tool or handicraft for sale or trade?

Submit the pertinent details to me by the 10th of each month and your inclinations will be made known to the membership in the next bulletin.

N. J. Blackwell
28 Lakeview Trail, Apt. C
Daleville, AL 36322
Phone: 334-503-0308
Email: Tsavorite7@aol.com

Annual Dues

Single $15
Family $20

Officers

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Membership Chair – Diane Rodenhizer
334-447-3610

Show Chair – Arnie Lambert
334-792-7116

Field Trips Chair – Ken Wilson
850-547-9577

Hospitality Chair – JoAn Lambert
334-792-7116

Club Hostess – Laural Meints
334-723-2695

Refreshments

FEB – JoAn & Arnie Lambert

MAR – Brooke Brown & Jeff DeRoche

APR – No meeting due to show

ROCKHOUNDS HERALD
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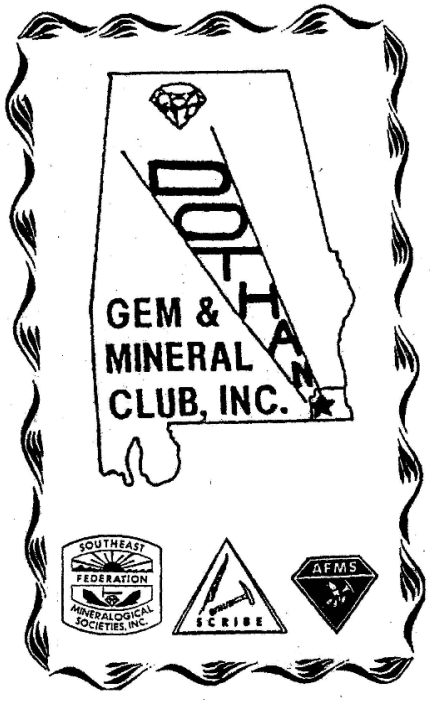

Where you might hear…

Generally, a mineral is a naturally occurring, inorganic solid with a fixed chemical formula and an orderly crystalline structure. However, this is an example of where that definition gets a little tricky:

Sugar is a naturally occurring crystalline solid with a fixed chemical formula and an orderly crystalline structure, but it comes from plants, i.e., sugar cane or sugar beets. This classifies it as an organic compound, so it is not a mineral.

Coal, on the other hand, shares those same traits—*including the fact that it comes from plants*—but it is considered a mineral.

Source: http://www.rocksandminerals4u.com/what_is_a_mineral.html

Member of
Southeast Federation of Mineralogical Societies, Inc.
American Federation of Mineralogical Societies