

MAPLEWOOD ROCK AND GEM CLUB

2021
MARCH



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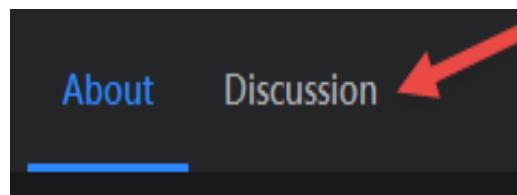
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General meeting: March 15

We hope you will join us at our March meeting which will be Monday, the 15th at 7 pm. Members will receive a Zoom link in an email. If you have never used Zoom, you might find [this video introduction](#) helpful. Do you have questions about the meeting? Contact our Board President, Sandra: ask.sandra@yahoo.com

Online auction

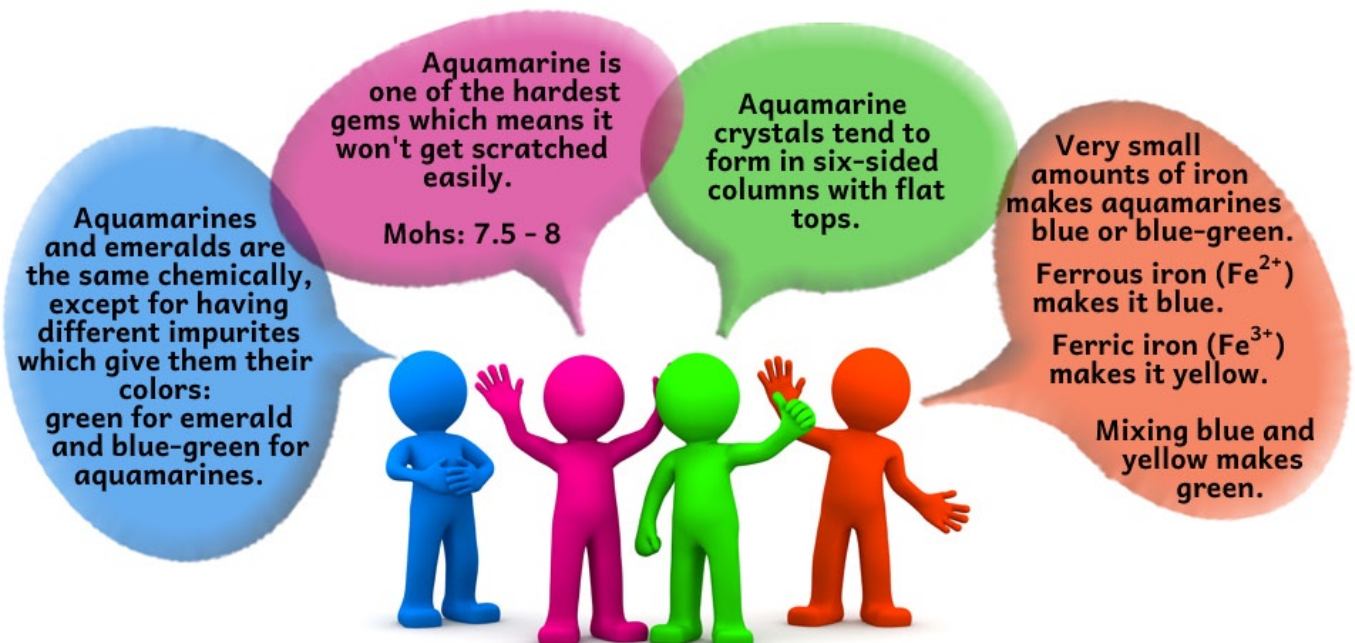
Watch for the online auction on our [Facebook page](#). To participate, go to our [Facebook page](#) and click on the event, "MRGC silent auction". On the event page just below the title you will see a small menu like the one here. Click Discussion. To bid on an item comment with a dollar amount.



Here is a photo of one of the rocks being sold on our online auction. The auction ends at 10 pm on the evening of our meeting, March 15.

Juniors' Page - Aquamarine

One of the March birthstones is aquamarine, which is a gorgeous stone that can be cut into a sparkling gem. Here are some factoids about aquamarine. On the next page is a matching game for you to try.



Juniors' Memory Challenge

Match each phrase below to its picture.
Some of the pictures do not have a matching phrase - they are here just to make this puzzle harder.

Aquamarine crystals as they were found (not cut and polished)

Aquamarine gemstone cut with many facets (flat sides)

Find a place you might find aquamarines if you could get there.

When polishing and grinding aquamarines, what should you wear?

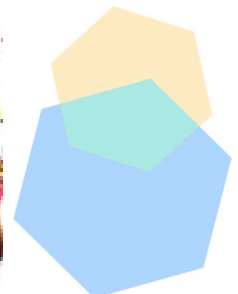
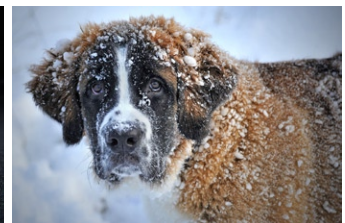
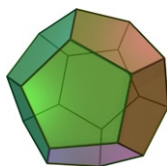
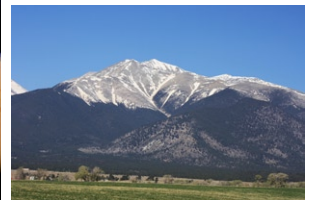
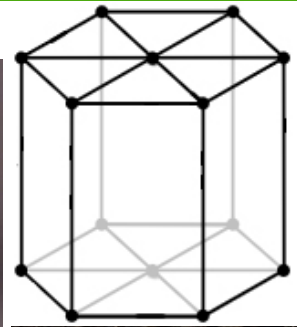
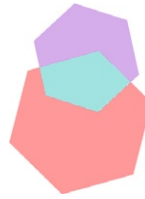
The largest aquamarine found weighed as much as St. Bernard or a large St. Bernard dog?

Two types of iron (ferrous and ferric) give this gem a little of one color and a little of another color. What colors?

An aquamarine crystal is usually what shape?

Find a gem with the same Mohs hardness rating as aquamarine. (Hint: it has the same chemical formula.)

Answers are on [page 9](#).



Were you a March baby?

Happy birthday to everyone born in March. As we wait for Spring to set in and the days to warm up, your aquamarine birthstone evokes thoughts of clear aqua inlets on tropical islands. Wouldn't it be a dream to celebrate somewhere like that this year?



Bloodstone by [James St. John](#)

Your other birthstone is also beautiful but in a different way. Bloodstones are dark green with red splotches that often look like blood splatters. These stones are more likely to draw up thoughts of dark medieval castles than sunny tropical

isles. The stone is cryptocrystalline quartz of green jasper and red hematite or jasper; together they form an aggregate.

Green chalcedony is rarely found with accents of only red, as with bloodstone. When a green chalcedony is dotted with red as well as other colors, such as orange, yellow, brown, or white, and when the red does not dominate, the stone is called fancy jasper rather than bloodstone. Jasper is a lapidary (not geological) term for any opaque chalcedony. So, bloodstone is a type of jasper.

Lapidarists and geologists do not always define a term the same. Geologists identify some jasper as chert, not chalcedony, and to them jasper has no scientific definition. Bloodstone is always chalcedony.



Brazilian Aquamarines
by [Mauro Cateb](#)



Aquamarine and silver ring
by [Mauro Cateb](#)

Bloodstone basics

Category: mineral

Family: chalcedony

Formula: SiO_2

Crystal system: trigonal

Mohs: 6.5 - 7.0

Fracture: conchoidal

Color: green with red spots

Diaphaneity: opaque

Luster: vitreous

Specific gravity: 2.61

Clytie's transforming love



Heliotrope by [Angie Shyrigh](#)

In the first century AD the Roman poet, Ovid, wrote in his most acclaimed work, *Metamorphoses* (meaning *book of transformations*) how the flower heliotrope came to be. Clytie, a water nymph, fell in love with Helios, the sun god, but her love was unrequited. In a deep sadness, she began wasting away, until she finally turned into a heliotrope. Her flowers forever face the sun.

The heliotropium (formal name for *heliotrope*) flower clusters turn toward the sun as it moves across the sky, and it is named for that phenomenon. *Helios* is Greek for *sun*, and *trepein* means *to turn*.

Surely, by now you are wondering why we have an article about a pretty flower in our rock and gem newsletter. Please read on.

Do bloodstones turn toward the sun?

Another name for bloodstone is *heliotrope*, which seems odd given these rocks do not follow the sun. In 8 AD in his publication, [Natural History \(37.60\)](#), Pliny the Elder tells us that the stone heliotropium is a leek-green color with blood-red veins, and when placed in a bowl of water at sunset the sun's reflection is blood-red. When out of the water the stone reflects the image of the sun like a mirror. Clearly, the dual associations of blood and the sun are ancient. The name doesn't mean *turning toward the sun* as for the flower, but more likely, *turning into the sun*.



A page of Ovid's "Metamorphoses"

Magical powers and beliefs

- Five thousand years ago in Mesopotamia, bloodstone was key to a detox regimen. They used bloodstones for healing and purifying internal organs.
- The ancient Greeks and Romans wore heliotropes to enhance their renown, to bring good fortune, to increase wealth, to build endurance, to win at games, and as a charm to discourage venomous snakes and other poisonous creatures from biting them.
- In those times business people benefited by wearing bloodstone, because it protected them from deception and helped them win legal and court matters.
- Ancient people believed bloodstone protected people and gave them courage.
- Long ago people ground bloodstone to a powder and mixed it with honey to be used as a salve for curing tumors, drawing out snake venom, and stopping bleeding. It was believed to cure infections in abscesses in a single day.
- By looking at a bloodstone you could prevent eye disease, according to old beliefs.
- Bloodstone was known to be an audible oracle that made a sound to alert the wearer that danger or evil was near. It would also banish negativity.
- Ancient Roman soldiers wore heliotrope because they believed the stone transmitted the power of the sun to heal wounds and to prevent injury. Bloodstone also helped them conquer enemies in battle.
- People thought the stone could stop lightening, summon rain, and conjure storms.
- In the 4th century Damigeron mentioned the stone's power in making rain, causing solar eclipses, aiding divination, and preserving health and youth.
- The Gnostics wore the stone as an amulet for longevity, for wealth and courage, to strengthen the stomach, and to dispel melancholy.
- Today, as in antiquity, some people believe bloodstone is a gem of noble sacrifice. It offers courage and comfort to those who sacrifice their own interests to help others. The stone draws out powers of altruism for those who wear or carry it.



Christ's Stone

In the Middle Ages Christians thought bloodstone was created when Jesus' blood fell upon the green earth during the crucifixion.

Another version of the story is that when soldiers thrust a spear into Jesus the last time, his blood splattered onto green jasper beneath him.

Invisibility cloaks can't measure up to heliotrope

In reading the Harry Potter series of books, many of us thought the invisibility cloak that Harry inherited from his father was an amazing magical gift. But, Harry had to carry the floor-length cloak around, when he wasn't using it and wanted it handy. In Pliny the Elder's day, many believed in a more convenient magical source to become invisible. In *The Natural History* Pliny reveals:

In the use of this stone, also, we have a most glaring illustration of the impudent effrontery of the adepts in magic, for they say that, if it is combined with the plant heliotropium, and certain incantations are then repeated over it, it will render the person invisible who carries it about him.

[~ Pliny the Elder, The Natural History](#)
[John Bostock, M.D., F.R.S., H.T. Riley, Esq., B.A., Ed.](#)

Science behind the magical powers

Both ancient Romans and Indians believed in the stone's power to stop bleeding if it were dipped in cold water and then placed on a wound. This belief has some scientific backing, because the iron oxide in hematite is an astringent and will help blood coagulate. Many of the other ancient magical powers might be explained by the [placebo effect](#).

Field trips

Many of us are eager to get out there and resume rockhounding. The Washington State Mineral Council is our main source of information on field trips, and they have not yet published a list of 2021 excursions.

We will publish the trips, once we learn the schedule, so watch future issues of this newsletter. Or, you can periodically check the Washington State Mineral Council's website. On the [home page](#) click *Field Trips for 2021* in the left navigation menu.



Magic and Myth Trivia Quiz

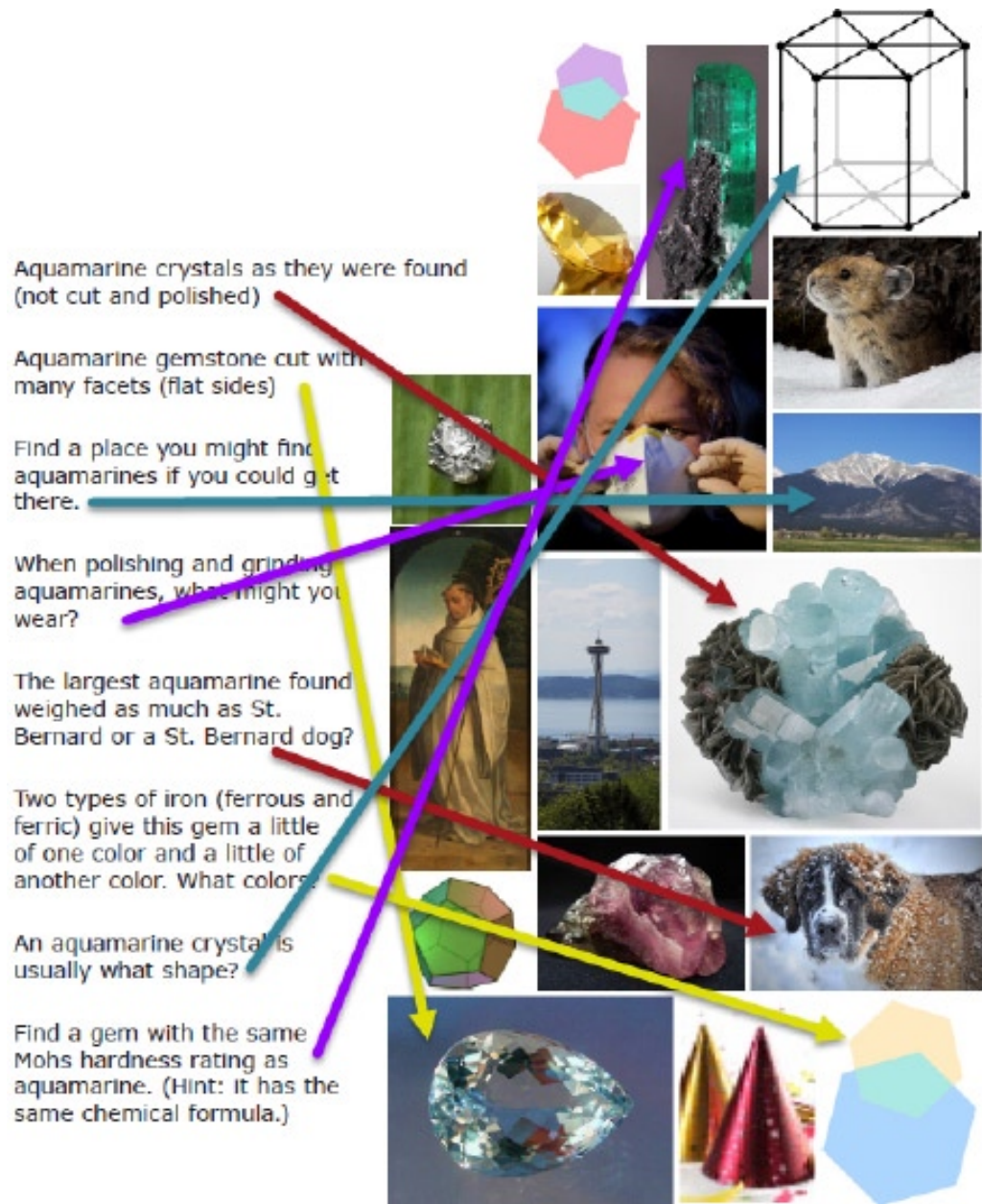
Throughout the millennia people have attributed a plethora of magical powers and created myriad myths about bloodstone. As you read the previous pages, how well were you paying attention? Here is a quiz for you to try.

1. The stone's name *heliotrope* comes from
 - a. a popular figure of speech about the god, Helios, in ancient Greece
 - b. Ovid's poem, *Metamorphoses*
 - c. when placed in water the sun's reflection turns blood-red
 - d. the flower because they look similar
2. What did ancients do to prevent eye disease?
 - a. place bloodstones on they closed eyelids while sleeping
 - b. boil a bloodstone in water and sip the tea
 - c. wear or carry a bloodstone daily
 - d. simply look at a bloodstone
3. Why might it be a bad idea to wear a bloodstone to a scary movie?
 - a. it would make a sound when evil was afoot
 - b. it would glow in the dark
 - c. its oracle ability would convey the upcoming plot twists to everyone nearby
 - d. none of the above
4. Why might casinos ban guests from having bloodstones?
 - a. People wearing bloodstones would hit the jackpot more often.
 - b. The glow from the rocks would distract people from the slot machines.
 - c. The rocks sing, too often off key.
 - d. all of the above
5. Heliotrope stones might be good in jewelry for business people because the stones
 - a. enhance one's renown
 - b. make people wealthier
 - c. help people win
 - d. all of the above
6. Bloodstones were thought to affect weather by
 - a. creating cyclones
 - b. summoning rain
 - c. preventing blizzards
 - d. draining floods
7. Early Christians thought bloodstone was created when
 - a. Jesus' blood fell on the green earth
 - b. Francis of Assisi knelt on a green stone to pray
 - c. Dark green Easter eggs with red splotches became popular
 - d. none of the above
8. Why might a non-profit organization give bloodstones to volunteers?
 - a. as a pretty token of appreciation
 - b. to rub as worry stones
 - c. The stones give comfort to altruistic people.
 - d. The stones sing in praise of good deeds.
9. Heliotrope helped soldiers by
 - a. giving courage
 - b. staunching bleeding
 - c. defeating enemies
 - d. all of the above

Answers are on [page 10](#).

Juniors' Memory Challenge - Answers

It's a bit messy, but here are the answers. Count how many you got right, to find your puzzler level.



Puzzler levels



1 - 4 correct



5 - 6 correct



7 - 8 correct

Magic and Myth Trivia Quiz - Answers

1. C	4. A	7. A
2. D	5. D	8. C
3. A	6. B	9. D

Puzzler levels



1 - 3 correct



4 - 6 correct



7 - 9 correct

Beryl varieties

Aquamarine is one of the many varieties of beryl ($\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$). All of the varieties have this chemical formula but with different impurities which alter their colors.

- aquamarine - blue or blue-green
- bixbite - red
- emerald - green
- goshenite - colorless
- heliodor - yellow
- maxixe (pronounced "mashish") - dark blue
- morganite - pink
- trapiche emerald - green

In ancient Greece they crafted the first eyeglass lenses out of Goshenite, because at the time, they could not make glass as clear as this crystal. The pure clarity of goshenite also makes it an ideal choice for crystal balls.

Goshenite can be transformed into colored gems by irradiating it with high-energy particles. The resulting color is determined by its Ca, Sc, Ti, V, Fe, and Co impurities.

Word of the Month

Diaphaneity

One of the characteristics we use to identify rocks and minerals is its diaphaneity (translucency) which refers to its ability for allowing light to travel through it. The opposite of diaphaneity is opacity.

A translucent rock allows light to pass through, although the rock might change the angle of the light waves so they exit the back side at a different angle. This change in angle is measured by the index of refraction.

A transparent material has a uniform index of refraction, so it does not alter the direction of light waves passing through.

Gift from the Board

The due date for membership fees is coming up and the board decided to do membership a little different this year.

Since Covid 19 took pretty much all our club activities away from us, we are not going to charge current members dues for 2021.

The dues you paid for 2020 are going to be carried over.

Giving back, if you can

In lieu of membership dues and if you wish to and can, please consider making a donation in the amount of your membership fee to help our club pay bills such as building upkeep. Our club is a 501(c)(3) organization, so if you itemize deductions, you might receive a tax deduction. Ask your tax expert.

Since the silent auctions and grit sales are our only sources of income right now, donations are greatly appreciated. Checks can be sent to the club and be made out to "MRGC". The club address is

8802 196th Street SW
Edmonds, WA 98026

Bidding on items in the silent auction is a way to give back to the club with a win-win outcome. You get a gorgeous specimen of rock or mineral and the club has a little more money for paying bills. All the items available in the silent auction were donated, so even before you bid, people have already generously supported our club.

When bidding, remember that this is a fundraiser where you might get a huge bargain or you might pay a fair price. Don't be afraid to bid up on something you like. The previous bidder, might respond in kind to your bid.

Facebook

Our [facebook page](#) has up to date information about what is happening at our club. When we have online auctions, they happen on our page.

We also have a Facebook group — [MRGC Sales and Trades](#) — which is open to members of our club.



Looking for Bloodstone?

Bloodstone can be found in Washington, Oregon, California, and Nevada as well as around the world. Most bloodstone is found in India with other significant sources being Australia, Brazil, China, and Madagascar.

Board meeting

Until it is safe for the Board to meet again, their meetings are on Zoom. If you have questions for the board or if you'd like to attend a meeting, please email our Board President, Sandra: ask.sandra@yahoo.com

Washington State Mineral Council

Our club, along with many other rock and gem clubs in the state, is a member of the [Washington State Mineral Council](#).

This organization helps us by

- advocating for access to public lands
- advocating for beneficial land use policies
- compiling and sharing maps and other information
- publicizing shows and field trips so members learn about and can participate in events at other clubs

Read their latest [Newsletter](#).

Connect with us

Website: <http://www.maplewoodrockclub.com/>

Facebook page: [Maplewood Rock & Gem Club](#)

Facebook group for members: [MRGC Sales and Trades](#)

Address:
8802 196th St SW, Edmonds, Washington 98026



Sister club in Australia

Our sister club in Australia is the Atherton-Tableland Mineral & Lapidary Club in Tolga, Queensland. Connect to them on Facebook:

www.facebook.com/groups/197340266987276

One hundred million years ago the eastern edge of the Australian continent extended much farther to the east. Tectonic forces broke off and submerged into the ocean the eastern section while a rising mantle caused the remaining land to lift.

Beginning 4 million years ago large basalt flows filled river valleys and formed a relatively flat landscape. Following that period the volcanoes became more gaseous spewing lava in violent eruptions. This landscape is now called the Atherton Tablelands. You can learn more on Wikipedia.



This issue

Maplewood Rock and Gem
Club News

Volume 3

Publication Year: 70

News to share? A suggestion? A correction?

Please send news ideas and images you'd like to share to the newsletter editor, Nancy Samuels at mrgc@nancysamuels.com.