



MAY-JUNE, 2023

NEWSLETTER OF THE

SOUTH CENTRAL FEDERATION

Of Mineral Societies



Member of: American Federation of Mineral Societies

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ON THE COVER

May birthstone: Emerald (shown raw on matrix, cut, and in a brooch belonging to the Smithsonian Institution collection.)

June birthstone: Pearl (Shown in shell, as a necklace, baroque style in a pendant, and in a brooch belonging to the Smithsonian Institution collection.)



SOUTH CENTRAL FEDERATION OF MINERAL SOCIETIES, INC.

2022 SCFMS OFFICERS

President: Roger Burford

Executive V-P: Don Shurtz

Secretary: Liz Burford

Treasurer: Henry Rojas

Web Master: Don Shurtz

**Exec. Secretary:
Kimberly Brannon**

**AFMS Endowment Fund Raffle:
(temporary) Jerrold Simpson**

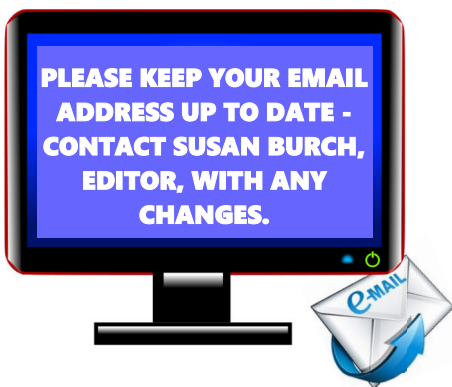
**SCFMS Endowment Fund Com.
Treasurer: Empty**

**Nominating Committee –
Ron Carmen**

Past President: Jerrold Simpson

**For more information or to send in-
formation to the SCFMS or an
officer, please email:**

scfmsinformation@gmail.com



PURPOSE

*To promote popular interest and education in the various earth sciences, in particular those hobbies dealing with the art of lapidaries and the science of minerals, fossils, as well as their associated fields.

*To cooperate with educational and scientific institutions or other groups engaged in increasing knowledge in the earth sciences.

*To cooperate with or become members of similar Federations in the United States and elsewhere.

*To assist in the formation of earth sciences societies in localities where public interest justifies their formation.

E-MAIL ADDRESS CORRECTION AND CHANGES

It is each members responsibility to send your email address corrections to the SCFMS Editor:

Susan Burch,
scfmseditor@yahoo.com

NEWSLETTER PUBLISHED BIMONTHLY

DUPLICATION

In most instances material in this newsletter may be duplicated for non-commercial purposes providing full credit is given. There are exceptions, please do not assume permissions. For Commercial use, the individual author(s) must be contacted for their approval.

A NOTE FROM THE EDITOR

THE FINAL DEADLINE, ETC.



For each newsletter the deadline is the 20th of the month prior to scheduled publication. February-April-June-August-October-December all provide the deadline for the following bi-monthly issue. Although, the Editor may chose to adjust the deadline due to circumstances.

As a reminder! Shop hints and tips that are used in this newsletter have not been evaluated for safety or reliability by myself. Please use caution and safety when trying out any new idea. Please, if you have something urgent give me a call, but send newsletter content via email.

ANNUAL SHOW 2023

TBD

ANNUAL MEETING

TBD

SCFMS WEB-SITE:
WWW.SCFMS.NET

The SCFMS is a member of the American Federation of Mineral Societies. amfed.org

NEWSLETTER EDITOR/BEAC:

Susan Burch
scfmseditor@yahoo.com



President's Message



Roger Burford
SCFMS President

Our convention will be held in New Orleans (actually in Westwego) again this year on October 13 – 15. Please remember, the host clubs spend a great deal of time trying to make each convention special for the attendees. Why not reward them with your presence! There will be a lot of business to attend to and we need all club presidents and regional VP's to attend to vote and help us make our Federation even better than it already is because of the input of members like you!

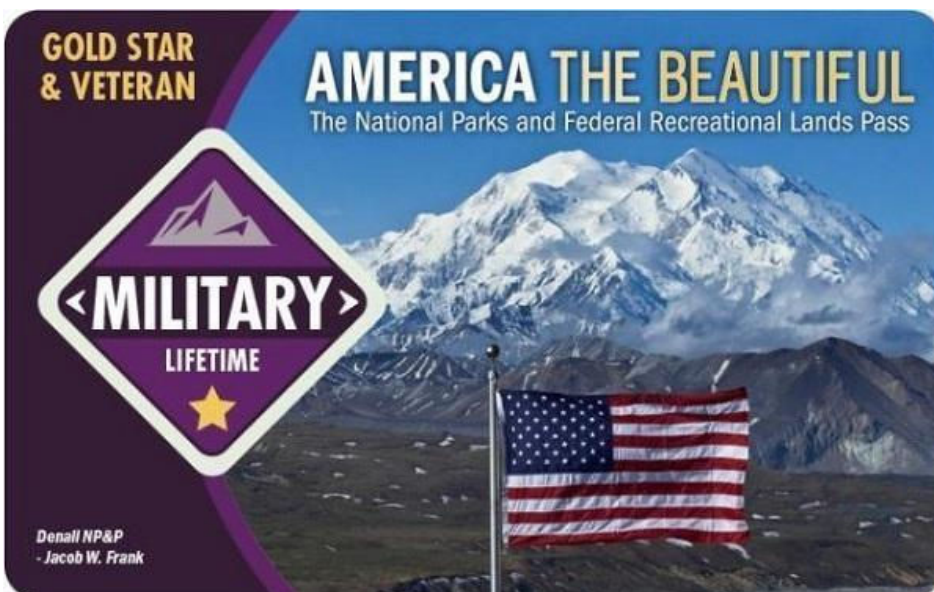
Spring has sprung and when it isn't raining the weather has been really nice in most of our areas making rock hounding opportunities more pleasant and I trust that everyone has had the time to get out to your favorite secret gathering spot to find some really nice specimens, when you are getting ready why not contact other club members to come along and make it a field trip for your club. Every time we get out with others it always makes the trip more interesting.

The same goes for shop time. Is there another member who would like to learn how to cut a rock or how to polish a cab, make a necklace or a ring. You don't have to have a formal class to teach others our lapidary trades or how to identify great rocks to collect.

Spring is also the time that gem shows start popping up all over. There have already been several in Texas, Grapevine's show is June 18 – 19, Baton Rouge August 20-21, Bossier City August 20 – 21, Lubbock September 24 – 25, San Antonio September 24 – 25 just to name a few. There are also shows going on all over the country you can check out the AFMS website as well as our SCFMS web site for dates and locations of many of the shows going on.

Last time I let you know again that there are many open positions that need to be filled and the most important one at the moment is the nominating committee. I need some volunteers by the end of May or I will appoint people to the positions, I don't want to have to do that, I would rather have people who want to get the job done. There are numerous positions like Regional VP, Executive VP, Secretary and President. I currently have no names for these positions except President and need to get a committee working on this ASAP. Please remember all club presidents are required to attend the annual meeting, you are the voice for your club in the federation and without our clubs there would be no federation so please make plans to attend our convention which will be held October 14 – 16 in Westwego, Louisiana with most meeting being held on the 15th. If you are not able to attend, please assign a delegate to attend in your stead. Delegates must be assigned in writing. More information will be distributed later but please mark your calendar and make plans to attend.

And a final note, there is a:



New lifetime public lands pass available for Veterans and Gold Star Families

Veterans of the U.S. Armed Services and Gold Star Families can now obtain a free lifetime pass to more than 2,000 federal recreation sites spread out across more than 400 million acres of public lands, including national parks, wildlife refuges, and forests.
(DOI News)

**SCFMS SCHOLARSHIP HONOREE SELECTED, SCHOLARSHIP RECIPIENTS NAMED
by Don Shurtz, SCFMS Executive VP**

We have an SCFMS Scholarship Honoree, and two students nominated to receive this year's scholarships from the AFMS Scholarship Foundation. And we did it on time! Our SCFMS Scholarship Honoree is Dr. Robert Gregory from Southern Methodist University. Dr. Gregory received his B.A. in Physics - Earth Science from the University of California San Diego (UCSD), La Jolla, CA. He then earned his Ph.D. from the California Institute of Technology (CalTech), Pasadena, CA. After working in California, Arizona, and Australia, he joined the staff at SMU as an Associate Professor in the Department of Geological Sciences in 1989. In 1994 he became a full Professor in the Department of Earth Sciences. He was Chairman of the Earth Sciences Department from 2001 to 2022. I first met Dr. Gregory at a Pleasant Oaks Gem and Mineral Club meeting in the mid-1990s when he gave a presentation to the club. He was also a visitor at the Pleasant Oaks show in Richardson and the Dallas Gem and Mineral Society show in Mesquite. He told me he continues to visit local shows to promote Earth Science education. His nomination as the SCFMS Scholarship Honoree is well deserved.



*Don Shurtz,
SCFMS Executive
Vice-President*

Dr. Gregory has named two SMU students to receive the \$4,000.00 scholarships. The first nomination goes to Mariah Holloway who is completing her Master of Science in May and will continue her work for a Ph.D. starting in the fall semester. She is currently studying the stable isotopes of Carbon and Oxygen from the tooth enamel of a Pleistocene mastodon. The work may offer better paleoenvironmental reconstruction efforts. For her Ph.D. work, she plans to continue her work by examining the amount of carbonate (CO₃) dissolved in phosphate from warm-blooded mammals as a function of latitude. Samples from Alaska to southern California will be examined. The second nomination goes to Katelyn Lehman Franco. Katelyn is currently working on her Ph.D. and will use the scholarship to help her studies next fall. She is examining the Potassium (K), Rare Earth Elements (REE), and Phosphorus (P), together known as KREEP) concentration and distribution on the moon as a surrogate for rocky planets such as Earth. The Earth's crust and mantle are continually modified by plate tectonics. The moon may be bombarded by meteorites, but the disturbance to the surface is not as dramatic as the continued tectonic plate movement on the Earth. The study is designed to answer two questions: (1) Is there a relationship between KREEP reservoir evolution over time and are they correlated with changes in the stable isotopic composition? And (2) have there been modifications in the Chlorine (CL) isotopic compositions by localized degassing or chemical alteration due to fluid intrusion.



**NOTICE TO ALL CLUBS IN THE SOUTH CENTRAL FEDERATION
by Don Shurtz, SCFMS Executive VP**

At the upcoming [SCFMS](#) convention in October, we will need nominations for persons to serve as SCFMS officers for the coming term. All members who are interested in serving the federation are encouraged to submit their names for consideration. Also, all SCFMS clubs are invited to submit the names of their members who would be willing to take an office for the upcoming term, which will begin January 1, 2024. You can find more detailed information in the SCFMS Bylaws.



Ron Carman has agreed to take the names submitted and use them to prepare a slate of nominees for the annual meeting in October. His e-mail address is: rrcarman@centurytel.net and his home telephone number is (512) 754 66 87. Please feel free to send all submissions to him. If you have any questions, please feel free to ask him also.

Please, send your nomination to Ron as soon as possible. Thank you in advance for your consideration and recommendations.

OTHER SCHOLARSHIP-RELATED NEWS
Don Shurtz, SCFMS Scholarship (AFMS) Chair



Scholarship Donations: The Rollin' Rock Club continues to auction off the rights to the Traveling Treasure Chest at shows hosted by SCFMS clubs and societies. By the time this article is published, the Rollin' Rock Club will have donated over \$2,500.00 to the AFMS Scholarship Foundation. The good news is that the Rollin' Rock Club is no longer the only club making a donation to the Foundation. The second smallest club in the SCFMS, Pleasant Oaks Gem and Mineral Club, with a total membership of 12, made a \$102.50 donation. That exceeds the recommended one dollar per member by over 8 times, and they are not through yet. The donations resulted from a 50% portion of the sale of items donated to the club. The items sold were small amethyst specimens, geodes, and obsidian rough. The sales were at a Rock Swap hosted by the Dallas Gem and Mineral Society, and the next 2 sales will likely be completed before this article is published. So, if one of the smallest clubs can make a donation, how about some of the larger clubs? A silent auction at a club meeting, the passing of a hat at a club meeting, club sales at a rock swap, or possibly even a small percentage of gross or net sales at a club show – all would go a long way to helping the AFMS Scholarship Foundation keep up the \$4000.00 scholarships to two graduate students in six of the seven Regional Federations each year.

Scholarship Honoree for 2024: What's this– we are still in the process of finalizing the 2023 scholarships, and someone wants to bug you about next year's Scholarship Honoree? YES! Last year the SCFMS Scholarship Honoree was Dr. George Maxey, nominated by the Hot Springs Geology Club, who selected students from Southern Methodist University (SMU) and North Texas University. This year's Honoree, Dr. Robert Gregory, nominated by the Pleasant Oaks Gem and Mineral Club (of Dallas), selected two students from SMU. So North Texas has been getting the lion's share of the scholarships awarded in the SCFMS. Why, you ask? In 2021 there were only 2 nominations received, and this year only one nomination was received. Would it be too hard for someone from Houston to reach out to Rice or the University of Texas, someone from Austin to reach out to Texas A&M, or someone from Waco to reach out to Baylor, or someone from Lubbock to reach out to Texas Tech, or someone from Hot Springs or East Texas to reach out to the University of Arkansas, or someone from Baton Rouge or New Orleans to reach out to LSU? I am sure most of these Universities have Earth Science programs with Master of Science and/or Doctorate programs. It would be nice if we had enough nominations to make it hard for next year's Executive Vice President to pick a winner. The nominations are not limited to one per club – be generous and nominate several. And the nominations can roll over to future years for those not selected in the initial round. The 2024 Honoree needs to be selected by the end of March 2024 so that the scholarships can be awarded and funded before the end of the spring semester. Please, think about it now while the schools are still in session.

Written Contributions Welcome!

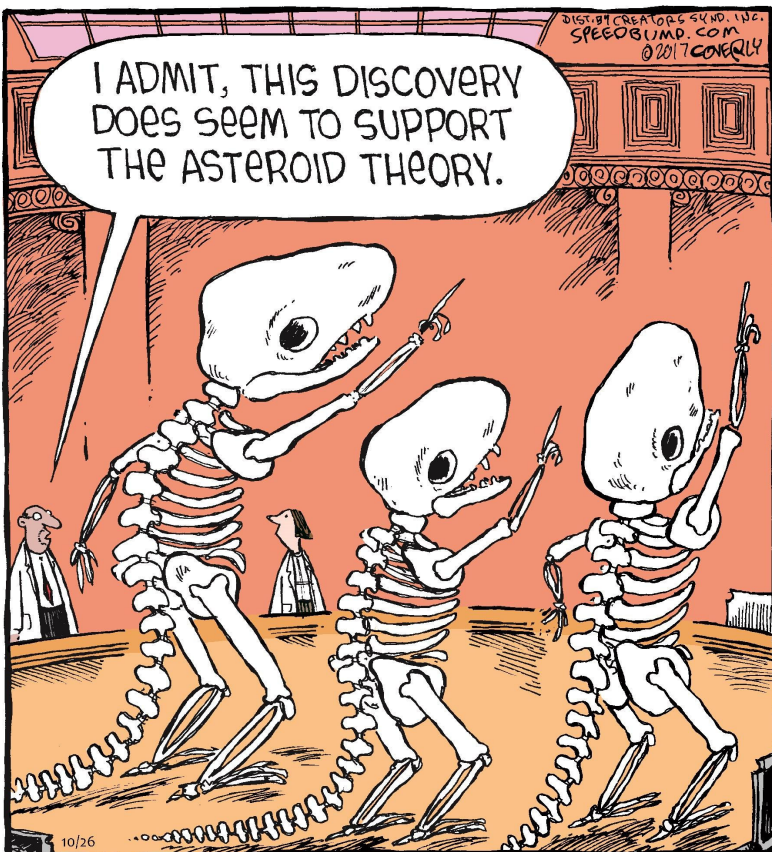
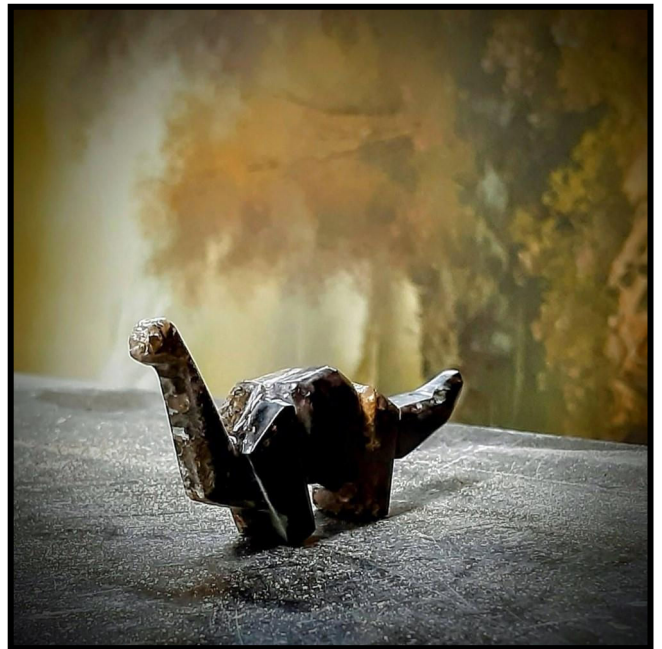
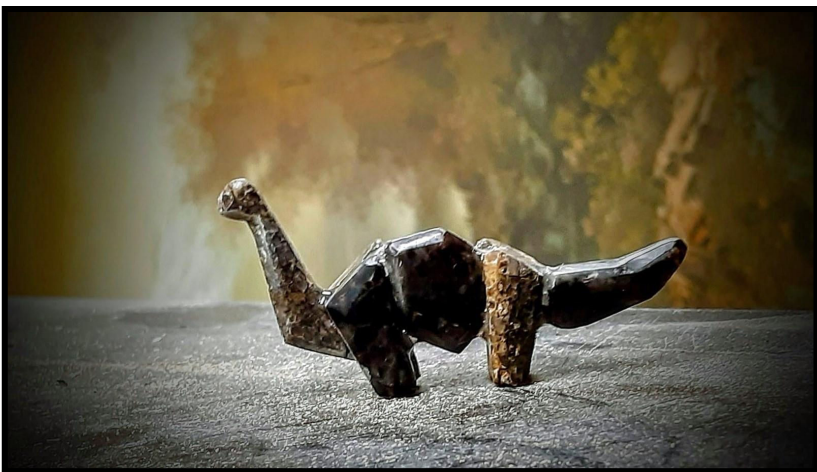
The SCFMS newsletter exists mainly for the benefit of our member clubs and we are all volunteers. Please consider enriching our Federation by making a written contribution to the newsletter about a geology or earth science related topic.

Pick a topic that interests you and give it a go. Please send it to Susan Burch, Editor, who will work with you to finalize your item for this newsletter.



A DINO BONE DINOSAUR

This cool critter was carved by Jason Harris of Utah. There are no lapidary clubs in his area but he is a member of the Wasatch Gem Society and volunteers as Moderator/Expert of the Beginners Lapidary Group on Facebook. The bone was not collected by Jason but it is old stock from the Moab UT area.



51st Annual Gem & Mineral Show

Alario Center

2000 Segnette Blvd. Westwego, LA 70094



October 13th-15th, 2023
Friday & Saturday 10a-6p
Sunday 10a-4p



ADMISSION CASH ONLY

\$6 per day - \$10 weekend pass

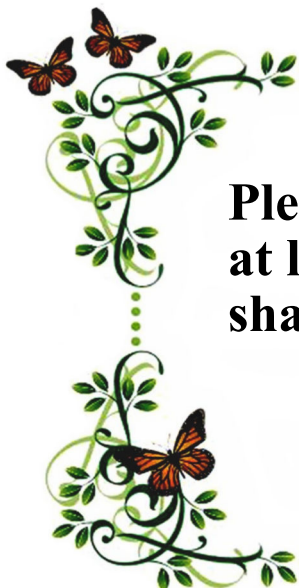
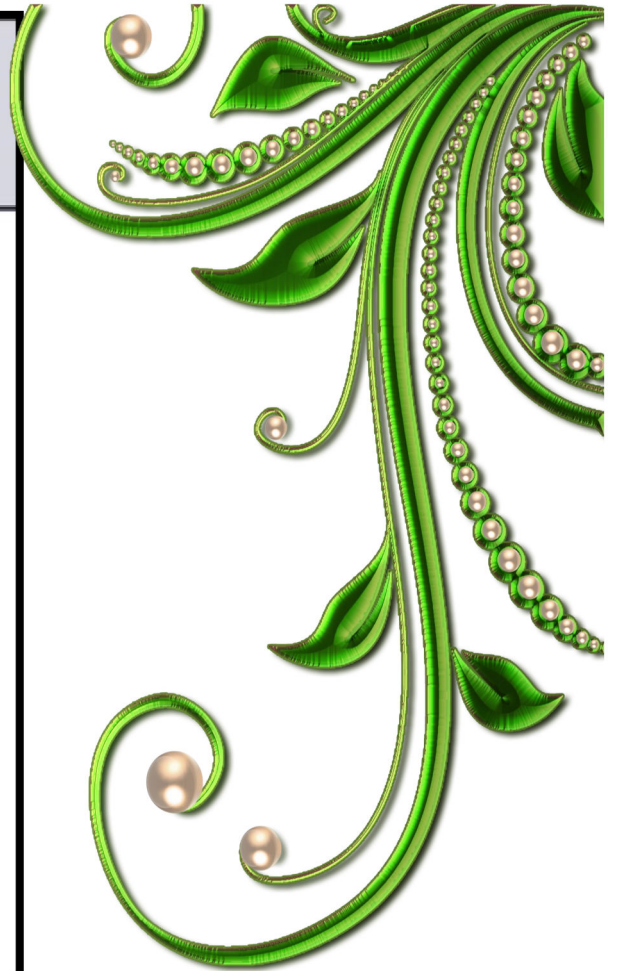
Scouts in uniform & Kids under 12 FREE

\$3 Students, Military, & Members w/ ID

Hosted by: Gem & Mineral Society of Louisiana



www.gmsofla.org

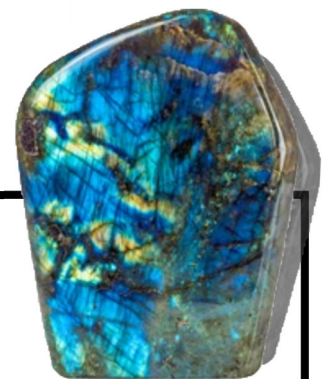
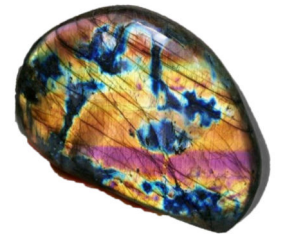


Please, be sure to send me your show flyer at least several months in advance so I can share it in our newsletter.

Susan Burch, Editor

SPAR WITH ME

Word Search Puzzle by Susan Burch



E M S M L G A G R A N I T E I
 C P U W A A G V W D S W T S O
 N F D X R N M Y U I R Y Z A Z
 E D S F V L F O L A W P I L F
 C E D O I L D I P J Y I O C Y
 S Y U S K N C S E E C R D O W
 E Z A D I A D B L R T L P I S
 R X K X T L X X F H N I A G N
 O F B E E T I R O D A R B A L
 D K F F R H P C P Z A M A L W
 A L P E N I L C O R C I M P A
 R Y U A M A Z O N I T E X L S
 B C E J S V E Z D N A O B V A
 A O H E O D V F B J T M B D V
 L Y J N L I Q O R O J H G R O

Find the word in the puzzle.

Words can go in any direction.

Words can share letters as they cross over each other.

ALBITE
 AMAZONITE
 FELDSPAR
 GRANITE

LABRADORESCECE
 LABRADORITE
 LARVIKITE
 MICROCLINE

ORTHOCLASE
 PLAGIOCLASE
 SILICATE
 SPAR

Puzzle solution on page

**DEADLINE FOR THE
JULY-AUGUST, 2023 NEWSLETTER
WILL BE JUNE 20, 2023**



Quick reminder...

Future Rockhounds of America (FRA) is running **Two New Contests** for juniors!

The top prize is a \$100 rock, mineral, or fossil specimen!

You can print and handout the attached flyer and check the junior's website for details.

www.juniors.amfed.org/juniors-newsletter

The contest deadline is June 30th, and winners will be announced at the AFMS Convention in Billings, Aug. 3rd-6th.

Email entries to youth@amfed.org.

Lora Hall

AFMS Junior Programs Chair

ROCKS for KIDS & TEENS!

Future Rockhounds of America* is starting a JUNIORS Newsletter!

Before the first issue goes to print, it needs a

- Newsletter **NAME** and
- Newsletter **MASCOT!**
- And they want YOUR help with that.
- Entry form is attached.



They will also be looking for your original news articles



SOON, like stories about your favorite rocks, field trips, photos of things you make with rocks and fossils. Maybe about why you like Rock Club. Maybe about projects you are doing, or awards you win with rocks. Check with your leader for more details.





Juniors Newsletter Contest Form

American Federation of Mineralogical Societies

Juniors need to be 17 years or younger to enter. The top part of this form is for the junior to fill out and the bottom part needs to be completed and signed by a parent.

FOR THE JUNIOR TO COMPLETE

Name: _____ Age: _____

My idea for a **newsletter name** is: _____

My idea for a **newsletter mascot** is: _____

My favorite rock, mineral, or fossils is: _____

Rock club name: _____

Signature of junior: _____

FOR THE PARENT TO COMPLETE

I grant permission for the American Federation of Mineralogical Societies to publish this idea or work of art, along with your child's name, age, and rock club, both electronically and in print.

Please note that any photo(s) with identifiable children's faces will need each child's parent's permission to publish.

Parent's name (printed): _____

Parent's signature: _____

Parent's email address: _____

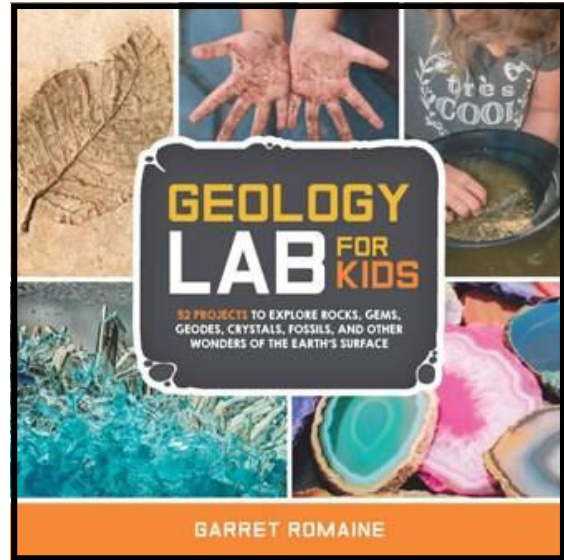
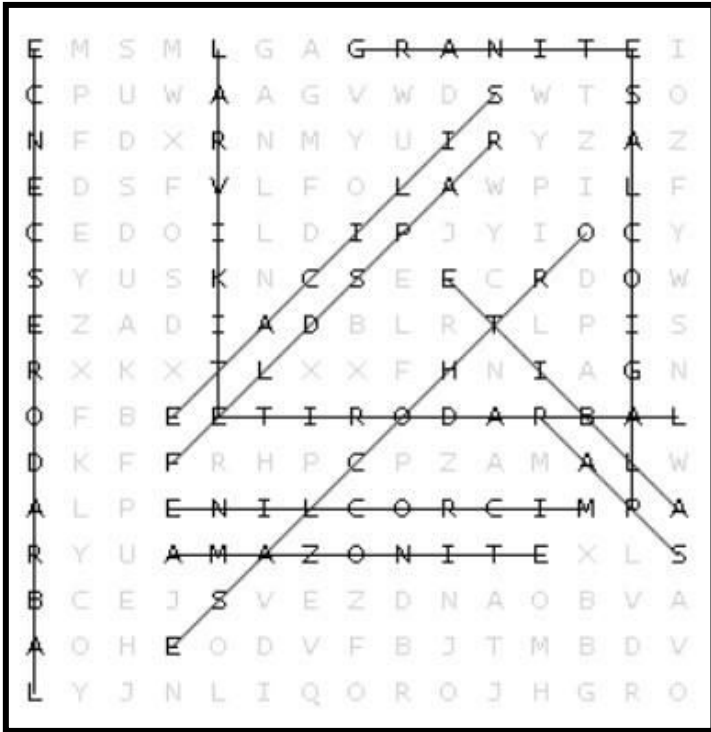
Street address: _____

City or town: _____ State: _____ Zip: _____

Please scan or photograph this completed form and send to youth@amfed.org along with a sketch of your mascot idea. Please note that both the winning Mascot and Newsletter Name will become full and complete property of the AFMS.

The deadline for the newsletter name contest and the newsletter mascot contest is June 30, 2023.

SPAR WITH ME PUZZLE SOLUTION



Reprinted with permission from Author, Garret Romaine. Please, include the link below.

<https://www.amazon.com/Garret-Romaine/e/B0037187T8>

LAB 17 COCOA CRUST

Instead of just making hot cocoa on a cold winter day, make a model of how the Earth's crust moves around thanks to heat from inside the planet.

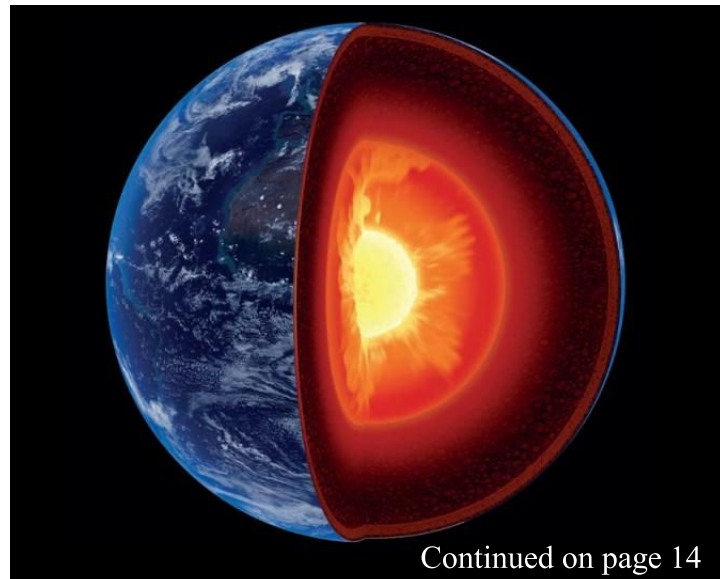
MATERIALS

- 1 quart (946 ml) of heavy cream
- Medium cooking pot
- 1 cup (86 g) of powdered cocoa



Safety Tips

- Be cautious around the cooking stove to avoid burns.
- Ask an adult for help using the stove



Continued on page 14



Continued from page

PROTOCOL

STEP 1: Pour the heavy cream into a medium cooking pot

STEP 2: Cover the cream with a layer of cocoa, the thicker the better—close to 1/4" (6 mm). Make the edges around the pan walls slightly thicker. You just created a model of a “super-continent.”

STEP 3: Turn on the heat and slowly bring the cream to a boil.

STEP 4: Watch where cracks form as the system gets hotter, and imagine how many earthquakes you could feel if you were standing on such a piece of the crust. See if you can predict which cracks will grow the biggest.

STEP 5: Keep heating, and avoid the temptation to stir. By the end of the experiment, you may be down to one remaining “island” of crust.

STEP 6: Don’t waste the ingredients! Add a little sugar to make hot chocolate.



Creative Enrichment

1. What happens if you make the chocolate layer 1/2" (1 cm) thick? Or use instant hot cocoa mix?
2. What happens if you use milk instead of cream?



THE SCIENCE BEHIND THE FUN

The interior of our planet is very hot—probably over 9,032°F (5,000°C) at the inner core, and ranging from 2,912°F to 6,692°F (1,600°C to 3,700°C) in the mantle. With all that heat and pressure, the rocks in the mantle don't behave much like rocks; they're more like plastic or toothpaste. That heat at the core of the Earth must go somewhere, however, and scientists believe it swirls around in currents through the mantle, just like the heat from the stove moved the heavy cream around.

As the heat increases, the currents in the cream scrape away at the chocolate layer that represents the Earth's crust, and finally, you started to see cracks begin. Wherever the crust was thin, the boiling cream

found the weakness. At the end, you may even see the “plates” start to rock as the heat shifts them. At the Earth's surface, there are several rift zones where the rocks are pulling away from each other. These are *divergent* boundaries or zones where the crust is expanding. You should have also seen a “triple junction” where there were three lines of weakness and, eventually, the cream broke through. You could imagine that being a small shield volcano if the cocoa layer was hard enough for the cream to build up.

The theory of continental drift, also called plate tectonics, was first advanced by Dr. Alfred Wegener in 1912. However, it wasn't accepted until the 1960s.

BENCH TIPS BY BRAD SMITH

DRILLING SMALL ITEMS—Small pieces need

to be held securely while drilling to prevent them from spinning if the drill catches. Having sliced my fingers occasionally in my younger days, I avoid band-

aids now by using flat-jaw pliers or a ring clamp. Pliers also save you if the piece gets hot. Put a little tape over the plier jaws if needed to avoid scratches.

DRILLING A STONE—One of the things my students often ask to do is drill a hole through a piece of gemstone. The usual thought is to get a diamond drill,

but I've been disappointed with them. I think the reason is that the tip of the drill is just pivoting in the hole and fails to cut well. When it looks like the drill isn't cutting,

the tendency is to push with more force. The drill gets hot, and the diamond grit falls off.

A much better approach is to use a core drill. This is a small hollow tube with a coating of diamond grit at the business end. The diamonds easily carve out a circular arc without undue pressure or heat buildup.

Core drills are readily available from lapidary and jewelry supply companies. They come in sizes as small as 1mm and are very reasonable in price. For instance, a 2mm diameter drill is about \$6.

Chuck the core drill in a drill press, Dremel or Foredom and be sure to keep the drilling zone wet to cool the tool and to flush out debris. Also, if you're drilling a through hole, go very easy on the pressure as the drill is about to cut through. Otherwise you will usually chip off some of the stone surface around the hole. Making jewelry involves a multitude of skills, intricate hand work, and a lot of problem solving.

Books in this series help to:

- Broaden your metalworking skills
- Improve productivity at the bench

Save money on tools and supplies

You'll find hundreds of low cost and really practical tips and techniques that the author uses in his work and teaches in his classes and workshops.



<http://amazon.com/dp/B0BQ8YVLTJ>

I've been an active member of my club for 26 years and am glad to share my jewelry bench tips with editors of other newsletters. All I ask is that you include an attribution like this whenever you use it.

See Other Tips in my [Smart Solutions for Jewelry Making Problems](#)

<http://amazon.com/dp/B0BQ8YVLTJ>

Happy hammering,
- Brad Smith

BradSmithJewelry@gmail.com

Please, check out more Smart Solutions for Your Jewelry Making Problems

[Amazon.com/author/bradfordsmith](https://www.amazon.com/author/bradfordsmith)





To those who helped make this issue possible...

Roger Burford
Don Shurtz
Jason Harris
Dave Coverly

Lora Hall
Garret Romaine
Brad Smith

UPCOMING SHOWS 2023

August 12-13
August 19-20
September 23-24
September 23-24
October 13-15

Baton Rouge, LA—Baton Rouge GMS
Bossier City, LA—Ark-LA-Tex GMS
SAN ANTONIO, TX—Southwest GMS
Lubbock, TX—Lubbock GMS
Gem & Mineral Society of Louisiana