

TAR HEEL



ROCKHOUND

MAY 2026

Catawba Valley Gem & Mineral Club, Inc.

2026 Officers and Committees

President:	Ben Houston 704-284-2565	Education:	George Max 828-328-9107
Vice President:	Joan Glover 828-446-7633	Show Chairman:	Amanda Redfern 704-450-2273
Treasurer:	Terry Russell 828-303-1563	Scholarship:	George Max 828-328-9107
Secretary:	Dean Russell 828-303-1448	Field Trip:	Cindy Wechter 828-514-2142
Editor:	Tracie Jeffries 828-430-1341		

Club Address: PO Box 2521, Hickory NC 28603-2521
 Regular Meetings: Second Tuesday, 7:00 PM
 St. Aloysius Catholic Church, 921 2nd St. NE Hickory, NC
 Annual Dues: Family, \$25, Individual, \$18

The purpose of the Club is to increase the individual's knowledge of the earth sciences and to aid in the development of lapidary and related arts and skills; to promote fellowship and exchange of ideas; to hold exhibitions, contests, lectures and demonstrations for educational purposes; to help interest more people in the gem and mineral hobby; and to capture and preserve the beauty of nature, the arts, and the works of man.

**CATAWBA VALLEY GEM AND MINERAL CLUB,
 INC.**

Web Master: Mike Streeter

<http://www.cvgmc.com>

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CVGMC MINUTES FOR APRIL 14, 2026

The April 14, 2026 meeting of the CVGMC was called to order by President Ben H. at 7:00 PM.

Visitors:

Program: "A New Gem Mine in Mitchell County" by Ron Ruschman

Minutes: A motion was made by Camilla L. and seconded by Terry R. to accept the March 10, 2026 minutes. Motion was passed by the Club membership.

Treasurer Report: Bank balance was reported.

Education Committee:

1. Tracie J. did a presentation for 150, 6th graders in Alexander County.
2. Richard and Shelda A. are going to have their fossil display at the Heritage Days.
3. There are three (3) future events that need volunteers. Contact Tracie J. for more information.

Show Committee:

1. The CVGMC Annual Show for next year is April 9-11, 2027. We will be using the Hickory Room again.

Field Trip Report:

1. Cindy W. has volunteered to be Field Trip Organizer. She requests help from all members for ideas for future field trips.
2. Possible Diamond Hill trip on May 2, 2026. Contact Cindy W. if you are interested in going. Adults - \$20.00, Seniors \$10.00, there are also discounts for Military Veterans.
3. Possible Enigma Mine in Hiddenite trip. Possible dates are May 23, May 30 or June 13. Contact Cindy W. for more information. (Possible machine dig)
4. North Carolina State Museum on July 18th with the Forsyth Club. Contact Cindy W. for more information. (No cost to Club members).

Old Business: None

New Business: Make sure you sign up for the picnic, so Tracie knows the numbers attending to order the meats that the Club provides for the meal. Refer to email Tracie will send.

Announcements:

1. CLUB PICNIC; Tracie J. needs help planning the club picnic in May. The picnic will be May 12th at 6 PM. The location will be Glenn Hilton Memorial Park in Hickory. I will need some people to arrive early and help set up the tables. I also need someone to cook the hamburgers and hotdogs. If you can help, please contact Tracie.
2. Richard B. invited Club members to find a date to come to his property and stream to help research where the origin of rubies and sapphires. The members that help will be invited back to dig in the future.

Closing of Business: The meeting was adjourned at 8:19 PM

Respectfully submitted,

Dean Russell, Secretary

MAY PROGRAM

There will not be a May program. The club is having its annual picnic 6:30, May 12th at the Glen Hilton Park in Hickory.

CLUB PICNIC

WHEN: Tue, May 12, 2026 at 6:30 PM

WHERE: Glenn Hilton Park Shelter #1 (next to parking lot),

[2000 6th St NW, Hickory, NC 28601](http://www.perfectpotluck.com)

WHAT: Cookout

The club will provide all the paper products and hamburgers, hot dogs, and buns. Club members will need to bring drinks, desserts, and sides.

SIGN-UP:

The picnic information and food sign-up is at: <http://www.perfectpotluck.com>

Coordinator last name: **Jeffries**

Password – **Rockhound**

We will do our first quarter drawing at the picnic. You do not have to be present to win.

You may want to bring some lawn chairs for sitting.

GEOLOGY MADE EASY: MINERAL HARDNESS

Hardness refers to a mineral's resistance to being scratched, which is commonly measured using the Mohs Hardness Scale. The scale was created in 1812 by Friedrich Mohs, a German geologist. It ranges from one to ten, with one being the softest and ten being the hardest (See Table 1). Since its introduction, the Mohs Hardness Scale has become a vital tool in identifying minerals.

SCALE NUMBER	MINERAL NAME	OTHER INFORMATION
1	TALC	Softest mineral, can be scratched with a fingernail
2	GYPSUM	Can be scratched with a fingernail
3	CALCITE	Can be scratched by a copper coin, must be 1982 or older , newer pennies have a softer alloy
4	FLUORITE	Can be scratched by a steel knife blade
5	APATITE	
6	ORTHOCLASE	Can be scratched with a steel file
7	QUARTZ	Easily scratches glass
8	TOPAZ	
9	CORUNDUM	Often used as an abrasive
10	DIAMOND	Hardest natural mineral, can scratch all other minerals

TABLE 1: Mohs Hardness Scale with reference minerals.

To use the scale effectively, remember that it's for minerals, not rocks. According to the United States Geological Survey (USGS), a mineral is "a naturally occurring inorganic element or compound having an orderly internal structure and characteristic chemical composition,

crystal form, and physical properties.” Since minerals are pure, their hardness stays consistent unless impurities are present. Rocks are composed of two or more minerals. Minerals that compose a specific rock may have different hardnesses; therefore, the Mohs hardness test is not appropriate for rocks.

The Mohs Scale is ordinal (not linear), meaning the differences between numbers are not equal. The difference in hardness between Calcite (3) and Fluorite (4) is about 25 percent. But the difference between Corundum (9) and Diamond (10) is over 300 percent.

Although the scale is relative, the Mohs Hardness Test is fast, easy, can be performed anywhere, and doesn't require expensive equipment. The test can help identify an unknown mineral and give the relative hardness of minerals/materials for construction, drilling, mining, carving, lapidary arts, and other industrial uses. If needed, there are more precise tests available for industrial materials, such as the Rockwell and Vickers Hardness Tests.

What can you use to test for hardness?

1. Create or purchase a set of reference minerals to test unknown samples (See Image 1). Refer to Table 1, the Mohs Hardness Scale, for reference minerals. Due to cost, kits will not have a Diamond (10). If Corundum can't scratch the sample, then it is harder than nine.
2. Use common household objects to create a hardness test kit (See Table 2). Compare your items against items of a known hardness to determine their exact hardness. For example, nails may be composed of several different metals or alloys. Test the nail you use to determine its actual hardness; this will make your kit more accurate. Glass scratch plates, of a known hardness, can be purchased from scientific and geological supply companies.
3. A third option is to buy a set of hardness picks (See Image 2). Sets usually include eight picks ranging from two to nine on the hardness scale. Pick two has a plastic tip, pick three has a copper tip, and the others have metal alloys that match a specific hardness. Hardness picks make testing easy and precise. The downside is the price, with most kits costing well over \$100. Hardness pick sets may be purchased from Amazon and various geological supply stores/websites.



IMAGE 1: Here is a nice example of a set of reference minerals that can be used to test other minerals. It would be easy to make your own.

COMMON OBJECT	APPROXIMATE HARDNESS
Fingernail	2 -2.5
Copper Coin, or Copper Sheet	3 – 3.5
Nail	4 - 7
Glass	5.5
Knife Blade	5 – 6.5
Steel File	6.5
Streak Plate	5 - 7

TABLE 2: Common household items can be used to create your own Mohs hardness test kit. Test your specific item to determine its exact hardness.



IMAGE 2: This is a nice professional set of picks that can be used to scratch and test minerals hardness. The picks range from two to nine.

<https://yegepoxy.com/products/mohs-hardness-test-kit>

How do you do the test?

Basic steps:

1. Select a fresh/unweathered, clean, smooth surface on the specimen to test.
2. Hold the sample firmly on a solid surface, such as a table top.
3. Take your pick or reference rock and firmly drag it across the surface of the test specimen.
4. Wipe the surface clean. You want to be sure you are looking at a scratch and not powdered residue from the pick or reference rock. You should not be able to wipe the mark away.
5. Look closely on the test surface for a distinct groove cut in the mineral surface. You may need to use a magnifying glass.

6. Retest on a different spot to be sure.

How do you determine the value? In general a mineral of a given hardness can scratch all minerals of a lesser hardness but, can't scratch minerals of a greater hardness. If two minerals have the same hardness, they will scratch each other equally. This may not be as clear-cut as it sounds. The scratches may not be deep and there is usually a mix of powder and scratches. Let's look an example below.



Unknown Sample

B

C

D

E

B. The sample was tested with Apatite and was scratched. So the unknown mineral is softer than five.

C. The sample is tested with Fluorite (4) and was scratched. So the unknown mineral is softer than four.

D. The sample is tested with Calcite (3) and was lightly scratched. So the unknown mineral is softer than three.

E. The sample is tested with Gypsum (2) and there was no scratch. So the unknown mineral is harder than two.

Conclusion, the unknown mineral has a hardness between 2 and 3.

Tips:

- To lessen damage on delicate or costly samples start with the softest point and work up towards harder points; this reduces the number of scratches on the specimen.
- There are a few minerals, such as Calcite and Kyanite, that will give a different hardness depending on which cleavage face the scratch is made. Therefore, do the test on more than one plane.
- Practice with a few minerals with a known hardness to see if you get the same results.

I hope this article simplifies the concept of mineral hardness and the Mohs Scale.

FIELD TRIP OPPORTUNITIES

Our new field trip coordinator, Cindy W. is doing a great job. There are several trips the club may do depending on interest. **If you are interested in any of the trips below or need more information, please contact Cindy at 828-514-2142.**

May 3 - Diamond Hill Mine / Calhoun Falls, SC (weather permitting)

Meet at the entrance at 9am and mine together until 3:30, Ben Houston will be guiding us to his favorite digging spots.

July 18 - NC State Museum, Raleigh (joining Forsythe Club)

Aug 1 - Emerald Village (Spruce Pine) Guided Black Light Tour 9:15 PM

Come early and visit the NC Mining Museum and/or take the Mine Tour (all daytime mine activities & tours close at 6 PM).

- Guided Black Light Tour - \$22
- NC Mining Museum - self guided underground mine tour \$15 (ages 13+)
- Discovery Mill Building - 12 levels of exhibits \$8

WHAT'S HAPPENING IN OUR AREA

WHAT	WHEN	WHERE
Franklin Gem & Mineral Society Show	MAY 8 - 10 Fri. and Sat. 10 - 6 Sun. 10 - 4	Robert C. Carpenter Center - 1288 Georgia Road Franklin, NC
G&LW Wholesale Gem Show	MAY 15 - 17 Fri. and Sat. 10 - 6 Sun. 10 - 3	6295 Sylva Road Watauga Festival Center Franklin, NC 28734
13th Annual Piedmont Open Air Gem, Mineral & Jewelry Show & Sale	JUNE 6 Sat. 9:00 - 5:00	Piedmont Triad Farmers Market Address: 2914 Sandy Ridge Rd Colfax, NC 27325
Treasures of the Earth	JUNE 12 - 14 Fri 12:00 - 6:00 Sat/Sun 10:00 - 5:00	North Carolina State Fairgrounds Address: 4285 Trinity Rd Raleigh, NC 27607
Land of the Sky Rock Show	JUNE 12 - 14 Fri/Sat 9:00 - 6:00 Sun 10:00 - 4:00	39 Spring Cove Rd Land of the Sky Event Venue Swannanoa, NC 28778
Greater Charlotte Gem & Mineral Show	JUNE 28 - 30	Cabarrus Arena & Events Center 4751 State Highway 49 Concord, NC 28025

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Club Meetings

**2nd Tuesday of Month, 7:00PM
St Aloysius Catholic Church
921 2nd Street NE Hickory, NC**

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