

# GEM & MINERAL JOURNAL

Volume 19 Issue 5  
May 2010

## Presidents Message:

Hello To All,

It's Festival time again already! Uncle Billy's Day will be on June the 5<sup>th</sup> in Altavista, VA. Frank Midkiff has reserved three sales booth spots for the GMSL. We will fill these with the Geode Cracker and Geodes, the ever popular Gem & Mineral Sluice and the last but not least tables displaying Gem Trees, Bookends, Spheres and many assorted hand made jewelry and decorative items for sale. I hope that many of you will be able to come and help setup at 7:00 AM and be able to stay for most of the day to help sell items or replenish the Gem & Mineral buckets for the Sluice. Also Dave Callahan could use some help with the Geode sales. We have participated in the Uncle Billy's Day event now for almost 10 years and all that have helped out in one way or another has a good time. It's a great experience and lots of fun watching people's response to a freshly cracked Geode or the surprise they have in discovering minerals and crystals in the Sluice. We will also need a lot of folks there at 5:00 PM to help clean up and pack up all of our displays and material. We will have more details about this June 5<sup>th</sup> Festival at the May 19<sup>th</sup> meeting and a volunteer sign up sheet. The more people we have working the easier it will be on everyone, I

hope you will make a special effort to join us.

At the April meeting John Sorg from Gold Vein, VA displayed some of his nice Gold finds from the past few years, I would like to thank him for bringing his finds for us to see and also welcome him as a new member. He also had information sheets about the Central VA Gold Prospectors " GOLD FEST 2010 " on Memorial Day weekend. This will be three days: May 29-30-31 of gold prospecting, education, instruction and fun. All events will begin at Teresa's Place Restaurant, 15055 N James Madison Highway, in Dillwyn, VA. If you did not get an information sheet about this at the April meeting you can go to the Central VA Gold Prospectors Club website for all the details. I know that I will go for at least two days; if you don't find any gold you will at least learn how to find it in the future. I hope to see you at the May 19<sup>th</sup> meeting; we will have to finalize the details for the upcoming Festival.

Keep Looking Down,  
John Haskins

## From the First VP:

Greetings fellow rock hounds,

Our May meeting will be especially interesting because Mark Hodges will speak to us about his copper collecting field trip to Michigan. Mark is the first vice-president of the Roanoke Valley Mineral and Gem Society and has a great job as the Exhibits and Planetarium Manager of the Center of the Square Mineral Museum in downtown Roanoke. So come on out and learn how you too can find copper and some of its ores.

Working on the mineral and rock identification workshop helped me to better understand the process of differentiating one rock/mineral from another. Please feel free to forward any questions about this process if you need any help to my email address. [jacwcurtin@gmail.com](mailto:jacwcurtin@gmail.com)

Happy Hunting,  
Jack Curtin

**2010 ELECTED OFFICERS****John Haskins - PRESIDENT**

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JoAnn Mason &amp;

Tom Powers

**COMMITTEE****CHAIR PERSONS:****Field Trips**– David Callahan**Hospitality**-**News Articles**– Natalie Darling**Silent Auction**– Warren Darling**Swap for Rocks**–Warren Darling**Website**– Casper Voogt**Workshops**– Dave Woolley**FRA Adult Liaison-****Membership**- Ralph Torning

## April Meeting Minutes

**Meeting:** Wednesday, April 21<sup>st</sup>, 2010**Attendance:** 21 members and 2 guests**Hospitality:** Thanks to Hunter and Bruce Bunnell for hosting tonight's refreshments. For May Natalie Darling will host. Please let John know if you would be interested in hosting for one of the upcoming months.**On Time Drawing:** Winners this month were Nicholas Smith, Jean Midkiff, and Gabriel Desmond.**Old Business:** None**First Vice President:** Jack Curtin: tonight's program is on Mineral identification, presented by club members. We will learn how to test for hardness, mineral characteristics and other methods that may be useful to collectors. Thanks to Dave Woolley for providing some of the specimens and the informational materials.**Second Vice President:** Dave Callahan was absent, and Dave Woolley gave the following report on his behalf: Club members recently were asked to make donations to help with sponsorship of a mineral case at the JMU Geology museum. The Roanoke club has pledged to

donate \$700.00. To date the Lynchburg club has raised \$535.00 for the cause. If you are interested in making a donation, please see Dave Callahan. Field Trips: American Rutile Quarry in Nelson County 5/29. We will try to coordinate with the Roanoke Club to see if we can schedule a General Mineral Miner Safety class. This certification helps keep the mines open to our clubs.

**Treasures Report:** Franklin Midkiff: Balance: \$3730.21.**New Business:** Lloyd Watson donated some material for our sluice bags, and we will need help putting them together at the Workshop at Dave Callahan's on May 8<sup>th</sup>.Help is being sought for Uncle Billy's Day on June 5<sup>th</sup>. Please sign up at the meeting if you can commit to a time. This is the first of our two-fundraiser opportunities that we will have this year.

New library book on Agates. Our club won this in a drawing. Copies are available for purchase if you wish to own a copy.

**Minutes submitted by  
Brenda Glass, Secretary**

The purpose of the Gem & Mineral Society of Lynchburg, VA, INC. is to promote education in The Earth Sciences including: Mineralogy, Geology, Gemology, Paleontology, and Crystallography

*The Gem and Mineral Society of Lynchburg VA, Inc.  
Meets on the third Wednesday of each month,  
From 7:00pm– 9:00pm  
In the auditorium of the Parks and Recreation Building  
301 Grove St. Lynchburg, VA 24501  
Public is invited, Please join us!*

# Programs

Mineral Identification was the program for the April meeting. Thank you to all club members who participated. Photographs submitted by Don McIntyre.



See page 11 for more fun with mineral identification, featuring Mineralpoly, which was sent to me by Lynn Sharp, professor of geology at Virginia Tech.



## A Special Request from Second VP Dave Callahan

### James Madison University Mineral Museum display cabinet sponsorship

As many of you know, JMU has one of the finest mineral museums in the east. Dr. Lance Kearns has worked long and hard to fulfill his lifelong dream of establishing this world-class museum.

Many of the beautiful illuminated display cabinets have a brass plaque engraved with the name of the sponsoring person, group or club. There are several cabinets that are yet to be sponsored. The original sponsorship was to cover the cost of the cabinet at \$2000. I approached Dr. Kerns with the suggestion that perhaps the Lynchburg and Roanoke Clubs could make a combined donation to cover all or at least a major portion of the sponsorship fee. He responded favorably to the idea and said that the museum would cover the cost of the engraving. Since the cabinets are already in use in the museum, the donation will be used to promote the museum and improve the specimen holdings for everyone to enjoy.

The Roanoke Club, at their January Board of Directors meeting approved a donation of \$700.00 toward this fund. I introduced the idea to the Lynchburg Club at our March meeting. Realizing that our club's treasury does not have sufficient funds for this kind of donation, I appealed to the membership to make personal donations to the club to be used in the sponsoring fund. Immediately, hands went up and before the meeting ended, I had \$535.00. Thank you Don, Dave, Dave, Melvin, Dian and Gary for your generous contributions. There may be other members that would like to contribute to this worthy project. If so, please mail me or see me at the May meeting, a check for any amount made out to the GMSL and indicate it's for the JMU Mineral Cabinet fund. Email me and I will send you my mailing address. [dbc11@aol.com](mailto:dbc11@aol.com). We should try to have all donations received by May 19<sup>th</sup> meeting.

Thank you in advance for your participation in this worthy project. Dr. Kerns has done a lot for our club by hosting our annual field trip in January to the geology department, mineral identification and opening the museum for our viewing pleasure.

# Field Trip Report



*Field Trip Report submitted by  
Dave Callahan,  
Field trip chairman.*

For further information on field trips, contact David Callahan, 540-297-1853  
Email [dbc11@aol.com](mailto:dbc11@aol.com)

## ROANOKE VALLEY MINERAL & GEM SOCIETY INC. FIELD TRIP

### THE SMITHSONIAN INSTITUTE MUSEUM OF NATURAL HISTORY, WASHINGTON, DC

#### TRIP CANCELLED---NEW INFORMATION

The Board of Directors decided to cancel this bus trip to the Smithsonian Museum of Natural History due to the lack of interest from our membership. We only had 24 sign-up from Roanoke and 10 were on the Lynchburg reserve list to fill a 54-seat bus. We realize that there were many conflicts with this date due to school and other functions so we decided to cancel the trip. We are sorry to disappoint those that have looked forward to this trip. Anyone that has prepaid for the trip will have his or her funds returned at the next meeting.

I will personally call all those on the sign-up sheet to be sure that they receive this message.

David Callahan  
Field Trip Coordinator



## **Field Trip Reports submitted by first VP Jack Curtin**

### **Sterling Hill Mine, Sterling, NJ**

Tom, Mike, Bernard, and I traveled to New Jersey for our annual quest for new and beautiful fluorescent rocks and minerals. Bernard and I added Sphalerite to our collections. Tom and Mike found what appeared to be fantastic specimens of Rhodanite. You never really know what you might discover at the dumps and digging areas there. I picked up a rock that didn't fluoresce and later Dave Woolley identified it as camptonite, a dark-colored, medium-grained [igneous](#) rock composed of [plagioclase feldspar](#), barkevikite (a sodium-bearing [amphibole](#)) and/or [augite](#). Camptonites are one variety of a group of [intrusive](#) rocks collectively known as [lamprophyres](#), which characteristically form [dykes](#). The original camptonite was named from Campton Falls in [New Hampshire](#). We also found some really beautiful norbergite, a bright yellow fluorescing mineral. Another first for both of us were the non-iron bearing tremolites we found in the native calcite. The quest for something new and unusual lives on in Sterling, NJ. Once you've gone, you're hooked.

### **The Old Sulphur Mine, Louisa County, VA**

Scott Duresky of Shenandoah Valley Gem and Mineral Society led this field trip April 17th. The old mine and dumps are located on Contrary creek, which is acidic due to sulphur leached out by the water. This area is primarily a pyrite deposit. Years ago the pyrite was mined for the manufacture of sulphuric acid, and the iron

*Continued on page 9*



# Up Coming Field Trips



Combined Lynchburg and Roanoke Clubs  
& Special invited guests.  
Mineral Collecting Field Trip  
 Saturday May 29, 2010

**Sign-up required. Call me, email me or sign up at the meeting.**

We may need to carpool and or limit the size of the group due to the private nature of this site and respect for the landowners living there.

We will explore an old rutile quarry in Nelson County and will be able to collect some massive rutile, ilmenite, feldspar and blue quartz. Some beautiful rutile crystals have been found here before. This material is hard and will make beautiful specimens and will take a good polish. In addition to personal specimen collecting, please help the Lynchburg Club in its quest to collect hard solid material to make bookends, rock candles and spheres for sale at our two fund raising events.

We will meet in Amherst, VA, Saturday morning, at the Hardees Restaurant on US 29 business no later than 8:30 A.M. We will decide if we need to carpool and I will distribute maps. We will depart from there promptly 9:00A.M. From Lynchburg and Roanoke, follow US Rt. 460 east / US 29 north by-pass several miles east of Lynchburg. Take the new US Rt. 29 north by-pass across the James River and proceed north to the Amherst US 29 business exit. The Hardees is in the Ambriar Shopping Center at this exit. Come early and have a bite to eat. We can determine if carpooling is necessary and leave any cars here. From this point, it should take about 30 minutes to arrive at the quarry. Be sure that you are fueled up and ready to leave by 9:00 A.M. If you are coming from the north, the US 29 business exit will be about 2 miles south of the US 60 exit. If you live in Lynchburg, it might be closer to just follow US 29 business thru Madison Heights to Amherst. The Hardees will be on your left at the new US 29 bypass interchange, just before you arrive at the town of Amherst.

Dress for the weather that day and be sure to bring food, water, bug spray and warm clothing. Wear boots, gloves, long pants and safety glasses. Hard hats will not be required.

Bring a hoe or something to turn rocks and watch where you put your hands. There may be a surprise waiting underneath. Hopefully the kudzu has not over grown everything this early in the year. Bring a hammer and chisel to break rocks, buckets and newspaper to wrap any delicate specimens you might find. Digging tools and a sledge may come in handy. We can drive into the quarry if it is dry. A low-slung car or 2-wheel drive may bottom out and get stuck. We will make that decision when we observe the situation that morning. It may be wet and will be slick and muddy if there has been a recent rain. There is no age limit but children must be supervised. There are NO restroom facilities at this site.

More information will be available at our next meeting as well as samples of what you can expect to find. We must arrive together but you will be free to leave at any time.

**SAFETY NOTE...DO NOT CLIMB UP OR DOWN THE QUARRY WALL. THIS IS UNSTABLE, UNSAFE AND THE QUARRY IS FULL OF WATER. DO NOT WONDER OFF BY YOURSELF. TAKE SOMEONE WITH YOU. STAY IN SIGHT OF OTHERS. THE SITE IS OVERGROWN AND YOU WOULD BE HARD TO LOCATE IF YOU NEEDED HELP. IF YOU LEAVE EARLY, LET YOUR LEADER OR A CLUB OFFICER KNOW.**

*For more information contact: David Callahan, Field Trip Leader (contact info. On page 4)*

## Geology Concepts Part IV

Dave Woolley, Geologist

**Physical weathering** is jointing and faulting, processes of *fracturing* that reduces rock to fragments. Particle-impacts powered by gravity and water freezing also fracture.

**Soil is a mixture of rock fragments** (see page one) **and cavities variably filled with air and water**, sometimes containing organic material. **Particle sizes** range from “fine-grained” colloid, clay, and silt, through “coarse-grained” sand, gravel, cobble, and boulder. Soils are derived from the weathering of rock - residual soil, or from the accumulation of sediments - sedimentary soil. Susceptible colloid and clay-sized particles tend to weather rapidly to clay-minerals due to the high surface area of the particles.

Note: A clay-sized *rock fragment* may not be composed of a clay-mineral. Particles *adsorb* water onto their surfaces. Certain clay-minerals *absorb* water within their crystal structures making those soils expand or swell when wet, and contract or shrink when dry: these minerals are **high plasticity clay**, sometimes called “fat clay” by Engineers. Clay-minerals plus clay-sized *rock fragments* that do not *absorb* much moisture are **low plasticity clay**, sometimes called “lean clay”. Soils with clays are called cohesive: clays tend to bond particles together. Soils lacking clays are non-cohesive: internal friction poorly holds these soils together.

**A sediment is a physically and/or chemically weathered rock fragment that has been eroded, transported and deposited by gravity** through the agents of air, water, and ice, such as *aeolian* – wind, *fluvial* – river, *lacustrine* – lake, *marine* – ocean, and *glacial sediments* – ice deposited. **Colluvial sediments** are particles transported down a slope by gravity. Sediments may occur in a range of sizes, be sourced or sorted to predominately one size, or be a mixture of sizes reflecting multiple origins.

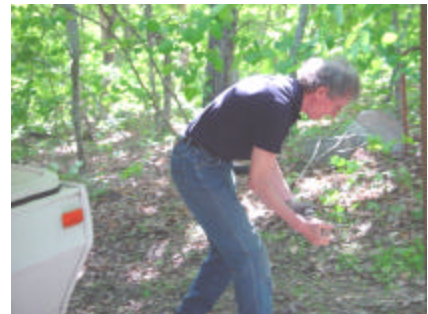
Five **clay-mineral** groups are recognized: kandite, illite, smectite, palygorskite, and vermiculite. The first three groups each have increasing water absorption and swelling properties. Residual soils derived from a one-mineral rock species tend to be composed of one clay-mineral; multiple-mineral rock species may yield a mix of clays. One rock species may weather to different clay minerals depending on variables such as acids, dissolved-oxygen content of water, and the leaching of selected elements.

High aluminum content minerals weather to yield the **kandite** clay-minerals. Kaolinite of the kandite group is the finely crystallized residue that forms as a consequence of acidic chemical weathering of aluminum silicate minerals like the feldspars and alkali mica in “granitic” rock such as granite, granodiorite, and granite gneiss. Kaolinite’s non-shrinking characteristic is useful in making ceramics. Kaolinite was named after Kao-ling or “High Hill”, a mountain in China where kaolinite was first mined, then shipped to England for the manufacturing of fine porcelain “china”. Kaolinite has been mined from the large decomposed feldspar crystals of many Virginia anorthosites and granite-pegmatites. Kandite-rich materials tend to be physically stable.

Festival time is fast approaching, and members have been working hard on preparations. Sluice bags have been filled, material cut, slabbed, and shaped into spheres and bookends. We have worked on our birthstone gem trees, and other miscellaneous odds and ends for our first fundraiser this year-

**Uncle Billy's Day, June 5<sup>th</sup> 2010  
in Altavista, VA.**

Don McIntyre submitted photographs from the May 8th workshop at Dave Callahan's. Please come out and join us on Saturday June 5<sup>th</sup>. Whether you stay all day or just an hour or two, your support is greatly appreciated. There will be a volunteer signup sheet at this months meeting.





# Up Coming Events

# May 2010

## Shows and Trips

**May 21<sup>st</sup>-23<sup>rd</sup>**- Treasures of the Earth Gem, Jewelry, Fossil and Bead show Martinsville, VA. Visit [www.toteshows.com](http://www.toteshows.com)

**May 28<sup>th</sup>-30<sup>th</sup>**- Treasures of the Earth Gem, Jewelry, Fossil and Bead show Salem Civic Center, Salem, VA. Visit [www.toteshows.com](http://www.toteshows.com)

**May 29<sup>th</sup>**- GMSL Field Trip to Nelson County to collect Rutile. Details pg. 5.

**May 29<sup>th</sup>-31<sup>st</sup>** - Gold Panning adventure and mineral collecting. Contact John Haskins for information.

**September 6<sup>th</sup> -12<sup>th</sup>**- Fall Session of Eastern Federation Wildacres Lapidary workshops. Please visit the EFMLS website [www.amfed.org/efmls](http://www.amfed.org/efmls) for complete details and application.

**June 5<sup>th</sup>**- Uncle Billy's Day festival in Altavista, VA. We will have our booth set up with our fabulous lapidary crafts, gem trees, geode cracker, sluice, and good fellowship. Please come by and support your club at our first fundraiser for 2010!

**June 26<sup>th</sup>-27<sup>th</sup>**- Nittany Gem & Mineral Show sponsored by the Nittany Mineralogical Society. Mt. Nittany Middle School, State College, PA



Sun	Mon	Tues	Wed	Thurs	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19 <i>Meeting 7:00 PM</i>	20	21	22
23	24	25	26 <i>Woolley's Workshop</i>	27	28	29 <b>Field Trip</b>
30	31					

### Gem, Mineral and fossil show and sale- Memorial Day weekend at the Salem Civic Center.

This unique show features jewelry makers, gold and silversmiths from all over the United States that can size, reconstruct, repair, design or make original jewelry from customer selected gems, stones, opals and crystals on the spot. Wire wrap, wire [sculpture](#), stone beads, pearls, stone setting, amber, opal, fossil and mineral dealers will be featured as part of the show. The dealers are hand picked for the quality of their work.

Hourly door prizes. Grand Prize (A Gold Ring/with a precious stone) to be awarded on Sunday evening. You do not have to be present to win the Grand Prize.

Location: Salem Civic Center, 1001 Boulevard, Salem, VA

Hours: Friday & Saturday 10-6; Sunday 11-6

Admission: Adults \$4.00- children under 16 free with paying adult. Ticket good all three days.

[www.toteshows.com](http://www.toteshows.com)



**Field Trip Report** *continued from page 4*

Oxides formed by roasting the pyrite were utilized for making pig iron. The pyrite ore bodies are enclosed by rocks, which have extensively metamorphosed and consist mainly of micaceous and chloritic schists with considerable hornblende, magnetite, garnet, etc. Impure crystalline marble bands are also present. I found a neat, but broken, almandine garnet crystal with several smooth faces and several nice staurolite crystals in one particularly large rock. Thank goodness we had the sledgehammer available. Another rock hound found a perfect magnetite crystal using his antennae type magnet. Scott Duresky and his friend Scott, a geologist, found lots of gahnite spinel crystals. They'll further examine them under their microscopes when they get back home.

**Glendon Pyrite**

Anyone going to Glendon this time around? If you have not collected here in the past, you should not miss an opportunity to go to this quarry for quality specimen/cabinet grade pyrite. The Glendon pyrophyllite mine is an open pit quarry that has produced many perfect pyrite crystals up to 4 inches on a side and 6 inches long!! Generally, you can find a cube approaching 2 inches or so and a bunch of others in all shapes and sizes up to one inch or more. The pyrite cubes are located loose on the surface or in seams down a foot or less in the bottom of the quarry floor. If it hasn't rained for some time, the light gray pyrophyllite soil seems to coat everything with a gray goop that makes it difficult to identify the pyrite crystals on the surface. Using a VERY GOOD metal detector makes the hunt almost a "no brainer"! A basic metal detector may offer some help in finding those cubes containing the most iron but just digging anywhere in the quarry floor will probably yield much quicker results. You may also find small greenish blue fluorite crystals in crevices on some of the larger boulders strewn about the middle of the quarry floor.



*Pyrite collected by the Darlings at the Glendon Quarry.*

Happy Hunting,  
Jack Curtin

# Welcome New Members

John Sorg  
Goldvein, VA

Jim Clapper  
Elgin, IL

Randy  
Murphy  
Lynchburg,  
VA

## ALL AMERICAN CLUB AWARD

by Cathy Patterson, AACA Chair



The time has now passed to submit your 2009 All American Club Yearbook. Sadly, there were no entries from EFMLS clubs! Actually, that's not so surprising since in addition to the usual holidays, many of us had horrid weather in December, January and February. There were just too many events those months and places to go and too little time to prepare. Not to be discouraged because NOW is the exact right time to start your 2010 club history yearbook. So let's get started. I'm in this with you.

### A Plan for Your 2010 Yearbook

The American Federation has set up guidelines to follow. Think... road trip! Good planning and "maps" will get you there. Your yearbook will include 6 sections (stops along the way).

Let's complete this first section (first leg of the trip) this month. This is by far the easiest part of your year long journey – listing your club's basic information. You can do this in a very short time. It's the very first page of your **All American Club Yearbook** so you can be as creative or basic as you wish. Special paper with a border, plain with no border, anything is OK. You can do this!

Fill out the general information outlined below and stash it in a safe place in your working folder. Get a vivid color folder so it "won't

get legs." I hope I'm not the only one who is paper challenged! Remember, last month I suggested you get a few colored folders and a portfolio to start collecting your club information, newsletters, and photos in.

### The Beginning

#### Section 1 – CLUB INFORMATION

- just the basics of who you are and how to contact you. This section is awarded no points, but will be the first page of your book. This includes:

- Your club name and address
- Date your club was organized (see your archives)
- Statement that your affiliation is with the EFMLS
- Number of members: Adults, Honorary/Life, Juniors (separate Honorary/Life members from total number of adults.
- Meeting place address
- Person filling out this information along with that person's address, phone # and email
- Finally – Your club's **Mission Statement**. This is often printed right on your newsletter mailer or should be. We all have a mission in life, what is your club's mission.

That's all you need to do this month. That was easy, right? Next month we'll start the real "drive" and begin digging deeper. Just a

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hint of what's coming up the next few months....

Section 2 – Offerings to Members or Guests (25 points)

Section 3 – Club Publications and Publicity (15 points)

Section 4 - Support for Regional Federations, AFMS and other clubs (20 points)

Section 5 - Community Relations (15 points)

Section 6 – Government Agency and Legislative Relations (10 points)

You can do this. I'm in this with you. Let's get started today!

I would like to put together a team of judges with members from each of the 8 Regions. Scrapbooking experience and/or powerpoint experience helpful, but not necessary. Please contact me!

CathyPatterson  
<cathypatterson@gmss.us>  
315-638-8817

To download the current All American Application and rules to use as a reference in building your yearbook, go to <www.amfed.org/AACA.htm>.

## 2010 MEETING REPORTS

Copies of the reports from the 2010 Annual Meeting are available if you wish to have one. Just e-mail, call or write Secretary Cathy Patterson to request one. Deadline for doing so is April 15.

*If there is anyone in the Lynchburg Club interested in starting a Club Yearbook, I would be happy to provide information and materials that I have acquired over the last 10+ years as a member of the club. Send me an email or call- Natalie*




























<p><b>ERODING</b></p> <p><b>TRAPPED IN FOSSIL</b></p> 	<p><b>PEARLY</b></p>  <p>Pearly Luster</p>	<p><b>MAGNETISM</b></p>  <p>Magnetism</p>	<p><b>GLASSY</b></p>  <p>Glassy Luster</p>	<p><b>FLUORESCENCE</b></p>  <p>Fluorescence</p>	<p><b>DULL</b></p>  <p>Dull Luster</p>	<p><b>METALLIC</b></p>  <p>Metallic Luster</p>	<p><b>GEODE</b></p> 		
								<p><b>DIAMOND</b></p> <p>Hardness 10</p> 	<p><b>CORUNDUM</b></p> <p>Hardness 9</p> 
<p><b>MINERALPOLY</b></p> <p><b>The Game of Mineral Properties</b></p> <p>2009 Amy C. Smith Photos by R. Waller Cochise College Created for the Museum of Geosciences, Virginia Tech</p>									
<p>How do fluorescent minerals look different in UV light than in normal light?</p>				<p>Show someone a mineral with your favorite luster, and tell him or her which luster it demonstrates.</p>					
<p>Mineral Crystals are classified into groups with long, technical names based on their geometry. However, you can describe differences between the crystals of different minerals just by comparing their overall shapes!</p>				<p>The color of a mineral's streak is not always the same color as the mineral itself. For example, hematite produces a red streak. Which color would you initially expect hematite's streak to be, and why?</p>					
<p>Cleavage in a mineral displays straight, defined edges. How is conchoidal fracture different?</p>				<p>In the Moh's Hardness Scale, diamond is the hardest mineral (it can scratch glass), and talc is the softest (it is easily scratched with a fingernail). Based on this information, what products or tasks could diamond and talc be individually used for?</p>					
<p>Specific gravity actually refers to the mineral's density. Which mineral looks denser, galena or fluorite?</p>				<p>3 Direction Cleavage</p> 					
<p>2 Directional Cleavage</p> 				<p>Mineral Streak</p> 					
<p>1 Direction Cleavage</p> 				<p>Twinned Crystals</p> 					
<p>Irregular Fracture</p> 				<p>Monoclinic Crystals</p> 					
<p>Conchoidal Fracture</p> 				<p>Tetragonal Crystals</p> 					
<p>High Specific Gravity</p> 				<p>Hexagonal Crystals</p> 					
<p>Mineral Color</p> 				<p>Resinous Luster</p> 					
<p>Low Specific Gravity</p> 				<p>DISSOLVE IN WATER DO NOT CRYSTALLIZE DO NOT COLLECT 200 MOLECULES</p>					
<p><b>CRYSTALLIZATION</b></p> <p>Collect 200 Molecules</p> 									

Image contributed by Llyn Sharp, professor of geology, Virginia Tech.

## The Gem & Mineral Society of Lynchburg, VA Inc.

Natalie Darling, Editor

211 Chesterfield Rd.

Lynchburg, VA 24502 [www.lynchburgrockclub.org](http://www.lynchburgrockclub.org)

The purpose of the Gem & Mineral Society of Lynchburg, INC. is to promote education in The Earth Sciences including: Mineralogy, Geology, Gemology, Paleontology, and Crystallography



Lynchburg Rock Raiders is the official FRA association of The Gem & Mineral Society of Lynchburg, VA INC



### Websites to visit:

[www.cvdp.net](http://www.cvdp.net) colorful and informative website. Great starting point for those interested in pursuing the search for gold in our area, or those just interested in learning more.

[www.toteshows.com](http://www.toteshows.com) for schedule of up coming gem and mineral shows in our area. Photo gallery and links also provided on this site.

[www.lynchburgrockclub.org](http://www.lynchburgrockclub.org) Lynchburg Gem and Mineral Society

The SFMS Newsletter, the Eastern Federation Newsletter, and the AFMS Newsletters are available for all members to read on line at the Federation Websites:

[www.amfed.org/sfms](http://www.amfed.org/sfms), [www.amfed.org](http://www.amfed.org) and [www.amfed.org/efmls](http://www.amfed.org/efmls)

**Hobby Related Newsletters** are available free of charge by emailing the editors below. Both are great sources of information and worth checking out. (Available only via email) [rudybland@worldnet.att.net](mailto:rudybland@worldnet.att.net) (*Mineral Mouse, editor Rudy Bland*)  
[rockhound\\_zack@yahoo.com](mailto:rockhound_zack@yahoo.com) (*Zack's Rocks and Minerals, editor Zachary McKinney*)

