

MINERALS IN MY HOME



**The Woman's Auxiliary to the
American Institute of Mining, Metallurgical
And Petroleum Engineers, Inc.**

Presents the 2003
National Poem/Essay Contest

Minerals in My Home

WAAIME began in 1916 during World War I when a small group of dedicated women established a tradition for service in response to wartime needs. Later that service focused on education in the form of scholarship loans for engineering students. While scholarship loans for college students in earth sciences are still our major purpose, it is only one focus of WAAIME's educational programs. Education for Tomorrow promotes the study of earth sciences, particularly as relates to mining, in elementary and secondary grades.

The main goal of the essay/poem contest is to encourage students and teachers to read, think and write about useful minerals in their everyday lives. This year there were 468 student entries from 24 schools in eight states (Arizona, Colorado, Oklahoma, Pennsylvania, Nevada, Tennessee, Utah and West Virginia). Twenty-nine teachers had their students participating in this contest. Forty winners were selected - twenty from Grades 4-7 and twenty from Grades 8-11. Winners received a Certificate of Achievement and a cash prize of \$25. Their entries are published in this booklet. All participating teachers were awarded \$100 to purchase earth science materials for their classrooms.

Judging was once again done by an independent panel of college students majoring in earth sciences. Many thanks to Dr. Tom Novak and Christine Wattanson of Virginia Polytechnic Institute Department of Mining Engineering, who coordinated the judging. Our deepest appreciation goes to the members of the Burkhart Mining Society, VPI's Student Chapter of SME, who spent many student hours reading and rating the essays and poems. Our special thanks to Steve Miller, the Chapter President.

Iris Whinnen-Owens
2002-2003 National EFT Chairman

**2002-2003 Poem/Essay Winners of the WAAIME
“Minerals in My Home” Contest**

Mrs. Bais’ Class
Prescott, Arizona
Aryn Taylor

Ms. Fanella’s Class
McMurray, Pennsylvania
Leah Adams
Brigid Knoll
Angelina Magreni

Ms. Hanley’s Class
McMurray, Pennsylvania
Christine Elderkin
Nick Fazio
Mark Lacy
Natalie Palamides
Jen Tomayko

Mr. Hruby’s Class
Uniontown, Pennsylvania
Sarah Anderson
Brianne Kyle
Nicole Palo

Ms. Poole’s Class
Germantown, Tennessee
Saralyn Heindel
Lauren Lipe
Carrie Marino
Sara Rudolph
Stephanie Strong
Rebecca Williams

Mr. Barnickle’s Class
Jackson, Tennessee
Nandini Mehta

Ms. Boyd’s Class
Murfreesboro, Tennessee
Thomas Fugate
Elizabeth Thomason

Ms. Wonderly’s Class
White Bluff, Tennessee
Season Dawson

Ms. Ward’s Class
Cleveland, Utah
Lane Gardner

Ms. Dimick’s Class
Helper, Utah
Brett Davis
Samantha Olson

Mr. Martinez’ Class
Helper, Utah
Hollie Grange
Katelyn Johnson
Yvette Parish
Kaijsa Saling

Ms. Johanson’s Class
Huntington, Utah
Tanner Euell

Mr. Moss’ Class
Huntington, Utah
Camille Fehlberg
Dean Owen
Shandee Potter

Ms. Hunt’s Class
Price, Utah
Travis Richardson
Jessica Taylor

Ms. Thayn’s Class
Price, Utah
Collin Fleck

Ms. Bays’ Class
Beckley, WV
Nikkita Hudson

Mr. Lowe’s Class
Glen Daniel, WV
Allison Daniel
Logan Ellis

Silver

Silver is my favorite mineral. The symbol for silver is AG. It's very shiny and worth a lot. Silver can be in rings, necklaces and other jewelry. Like most minerals silver is made in the ground and mined. It is not very hard. It's hardness is between 2.5 -2.7. Silver is harder than gold, but softer than copper. The luster of silver is metallic. Silver is usually combined with other minerals when it is mined. U.S. mines usually produce an estimate of 53 million ounces of silver each year. Most silver mined in the world comes from Peru, Canada, Mexico, Australia and the U.S.A. About 71% of all silver ore were mined in the U.S.A in 1989. Those are the reason why silver is my favorite mineral.

Hollie Grange
UT

LEAD

Lead is found deep inside the earth.

Lead is something that you don't want to eat or suck on. It will poison you!

In the Roman Empire lead was used in water pipes, drinking and storage vessels.

Lead has also been used in paint, some containing a high percentage of lead.

In the 1920's lead was added in gasoline.

Lead is used for tin can lids, pewter, ceramics and pottery glazes.

In 1971 congress passed the lead act limiting the use of lead in paint.

As stated, children are especially at risk for lead toxicity.

For instance, teething children may be exposed to lead; it is especially true for children living in older or low-income housing or who live and play near busy streets.

Much less exposure than would affect adults can lead to problems in children, because their absorption is better and their bodies are smaller.

A small amount of leaded paint can increase body levels enough to create symptoms of toxicity.

Katelyn Johnson

UT

My favorite mineral is a DIAMOND

Diamonds are very valuable. It is said that a diamond is a girl's best friend. A diamond is actually a type gemstone. But gemstones are considered to be minerals. Diamonds are the hardest gemstones. Diamonds are used for weddings and industry. Most diamonds have eight sides which form a double pyramid. Diamonds can be big or diamonds can be very small. Diamonds are worth lots of money. Diamonds are made from coal under a lot of pressure. Diamonds are very brittle. Most diamonds are transparent and colorless. The diamond is my favorite mineral because it is so shiny and pretty.

Kaijsa Saling
UT

Garnet

Not Just Another Red Mineral

As I look around my home I see many minerals that we use everyday. There is coal that we burn in our fireplace, there is a silicone chip that runs the computer that I am typing this report on, and copper that is used for the pipes and money. The one mineral that interests me the most is the one that is my birthstone, the Garnet.

I never realized that garnets could come in so many colors. The colors are: Colorless, white, gray, yellow, yellowish green, green, brown, pink, reddish, black, yellow-green, greenish brown, crimson, deep red, brownish red, brownish black, violet-red, reddish orange, orange, yellow-brown, reddish brown, and blackish brown. A few garnets can be of color-change. These garnets are one color in natural light and another color in other light. The only color a garnet cannot be is blue.

Garnets are found in many states in the United States. Garnets are even found in Utah. The color of the garnet found in Beaver County is apple-green. The color of the garnet found in Mexican Hat is bright red.

All colors of garnets are used as gemstones (like my earrings). When you see different color gems in the stores a lot of them can be garnets.

Garnets are my favorite gemstone and that is why I decided to write my essay on this mineral.

Yvette Parish

UT

Minerals in our Home

When you wake up in the morning and switch on the light you use minerals. When you wash your face, brush your teeth, and get dressed you use minerals. When you eat your breakfast, whatever you eat, you use minerals. When you head out the door for the day you use minerals. Everything you do in your day would be impossible without minerals.

We depend on minerals for the most basic need, food. Minerals are everywhere in our food. The foods we eat supply us with iron, calcium, phosphorous, magnesium, copper, and zinc. The food is grown with fertilizers and nitrogen and most often are packaged in metals made from minerals. We also take vitamins to make sure we get the minerals that we need.

Minerals are also used in the products we build our houses from. Mostly brick, stone, concrete, asphalt, and gravel. There is also a lot of copper wires, copper pipes, and cables that bring water, light, and power. Other minerals used in the building of our homes are cement, clay, sand, tile, lime, glass, aluminum, iron and steel.

Minerals also take us to and from our homes in our cars. Cars are made of iron, steel, manganese, lead, zinc, platinum, copper, and aluminum. We drive them on the streets made of asphalt, sand, gravel, and concrete.

Electronics and computers use almost every mineral possible. Minerals put light, power, communication, information, and entertainment everywhere in the world.

As long as there is life there will be minerals used.

Tanner Euell
UT

Fluorite

Fluorite is a very useful thing in our homes. It is used in water and toothpaste. The pretty rocks' colors are sometimes white, purple, green, pink, and yellow. It forms when hot water is heated by magma or watery molten rock flows through cracks and leaves some minerals behind. Over the time that the rock sits there, the minerals build up in the cracks of the rock. Fluorite is often found with galena, sphalerite, and barite. I know that everybody uses toothpaste almost everyday. People drink drinking water everyday to cool themselves down.

Travis Richardson
UT

Copper

Copper is used in many things,
More then you could think.
At home, at school, and even at play,
We use copper every day.
Jewelry, coins, machines too,
I love copper, don't you?

Copper is in computers.
Computer games I love to play.
It's also in my jewelry
I wear everyday.

It comes from deep inside the ground,
And mined in our state you see.
The biggest mine in all the world
Is west of Salt Lake City!

So next time you get a drink,
Soak in the tub, or take a shower.
Be grateful that the water gets there quick,
And doesn't take an hour.

Hauling water in a bucket is just
What you would have to do.
If it wasn't for the copper pipe,
That brings the water to you!

The burnt orange color of copper
Is more then just pretty to see.
I hope that you now know how
Important it can be.

Jessica Taylor
UT

Minerals

In my home I use the mineral salt. The way I use it is on foods like mashed potatoes and turkey so it can have flavor. Salt is also used on ranches. The ranches use the salt in the winter and spring for cattle's diet. Salt is also used on roads to make the ice melt. We get the mineral called salt from the Great Salt Lake. Then it is packaged and taken to the stores. Then we buy it from the store. Salt helps us with animals. Like moose and some other animals. The moose eat the salt buy the roads. So if we don't have salt the animals and us would actually die. We also need salt for on the roads so we don't slip and fall off the road and down a cliff. Other ways salt could help is it puts fires out. That is why the mountain is not completely burned downed. It also keeps the cattle alive, and all of the animals that I talked about. We need the salt so we can live at home with our families. In the old days they would have to soak their meat in it for a long time so they would not get worms. Now we can cure the food with salt. It can help us make food. The salt can make medicine like spray for your nose. You can make a saline solution to rinse your mouth out with when you have canker sores.

Lane Gardner
UT

“The Most Useful Mineral In My Home”

December 16, 2002

In a brochure from the Mineral Information Institute (2002), it says that more than 47,122 pounds of minerals are used by every person in our country each year. One of these minerals is copper. Every person uses about 21 pounds of copper each year.

The reason that I think copper is the most important mineral in my home is because it is used in electrical wiring. If you want to stay warm with an electric heater, have lights in your house, cook on an electric stove, or keep your food cold in the refrigerator, you have used copper to conduct the electricity. I've listed some things that are necessary, but there are also fun things that use electricity, like television, computers, and, of course, Christmas lights!

There are lots of other uses of copper. Pennies contain copper. It would be hard to go shopping without pennies! Some batteries contain copper. The roofs of some buildings are made of sheets of copper, because it does not rust. Inside the JB's Restaurant in Price, part of the ceiling is covered in copper. Copper is used in cooking utensils, like pots and pans, because it conducts heat well. Your body needs copper to be healthy.

Copper is actually a metallic element that is found in many minerals that are dug out of the ground. The chemical symbol for copper is “Cu,” and an ancient symbol for copper is q' . Copper is found in the minerals chalcopyrite, bomite, chalcocite, cuprite, malachite and azurite. Many of these copper minerals are mined at the Bingham Canyon Mine in the Oquirrh Mountains of Utah. You can see the waste pile from this mine when you are driving on I-15 south of Salt Lake City. It is one of the biggest copper mines in the world.

See how useful copper can be! The next time you use electricity or spend a penny, think about copper!

Collin Fleck

UT

MINERALS IN MY HOME

TALC

The mineral I chose to report on is Talc. Its' color is green, gray and white to almost silver. It's chemical name is $Mg_3Si_4O_{10}(OH)_2$, Magnesium SilicateHydroxide. It's class is Silicates and subclass is phyllosilicates. Talc is used as an important industrial mineral. It is resistant to heat, electricity and acids. This makes it ideal for lab counter tops and electrical switchboards. It is also an important filler material for paints, rubber and insecticides. Most people only know talc as the primary use in talcum powder. It often replaces other minerals on an atom by atom basis called pseudomorphs (false shape). The talc takes the form of the mineral it replaces. It has a soapy feel but can be scratched by a fingernail.

Talc is found in mines in the Appalachian Mountains and in California and Texas, USA; Germany; Italy; Austria. It is usually open pit mined. There is 7 steps to get it the each industry for processing. After the Talc is extracted, it is sorted. Sorting is a key phase of the production process. It is then milled to get the size needed. Certain grades are treated, some for fertilizers, the rubber industry, papermaking, paint and cosmetics. Talc is usually delivered in bulk bags.

Talc is used in the home in paint and counter tops. It is used in the paper industry and could even be in this paper. I may have used talcum powder when I was a baby.

This is a useful mineral.

Brett Davis

UT

Minerals

Minerals, minerals all around,
Minerals, minerals on the ground.
Nickel, Copper, don't forget Zinc,
A little Micas to make your lips pretty pink.
In sinks and paper you will find Clays,
They suit you in the finest ways.
Get some Coal tar for your hair,
But you might turn into a fuzzy bear.
You can find Halite in your salt,
But don't pour too much come to a halt.
There are minerals were you live,
Use them wisely and they will give.

Samantha Olson
UT

Hematite

Hematite has a deep red color
There are thousands of these stones and many others
Hematite is mined in many western states
And the largest supply is in the five great lakes

Hematite is in magmatic rocks
And when they are mined they come out as blocks
Hematite is very small
And they look like a mini-golf ball

Hematite is in your mirror
So you can look at yourself and have no fear
Hematite is in your trash can
And it is also in your watchband

Hematite is in your blender
And on your car and your fender
Hematite means blood in Greek
Because it has a dark red streak

Hematite makes up many different things
Like your mirror, lipstick, and bed springs
I think Hematite is very cool
Even though I had to do this paper for school

Mark Lacy
PA

Galena

“People think that I’m the worst!
They think that I have no worth!
I just wish that they could see,
 just what life would be,
 Without me.”

“I wonder why, they can not see,
 That they need me deeply.
But they do not know, maybe
 That I’m in their batteries.”

“A lot of people may not know,
 That I am in the stove
And there is something else you should know,
 That I’m found in the walls of a cove.”

“I maybe in an appliance,
 And I maybe in their house.
But the fact that they never thank me,
 I might as well be a louse.”

“You can find me in most of the countries,
 And underneath the seven seas,
 I am silver and bluesy,
 And my hardness level is three.”

“Cube-like is my head,
Octahedron shape too.
I’m the ore of lead,
 And silver too.”

I have a luster that is so shiny,
 And an uneven fracture.
I have an opaque transparency,
 And a hard and rough texture.”

“I hate the cold,
 I love the heat.
 I’m so old,
 I smell like feet”

“At least 7.5 you see.
 That is my gravity.
And if you took a part of me that is like a pea,
 I assure you that I would be very heavy.”

“I hope this has convinced you,
 Everything is important in your home.
The yard with the owl that goes HOO-HOO,
 And the little gnome.”

Jen Tomayko
PA

Fluorite

It makes your teeth so sparkling white
Although the colors are very bright
You can find it in Canada the U.S. and Russia
So brusha brusha brusha

You need this mineral to take care of your teeth
And your gums underneath
So you should never put this mineral to rest
Unless you want to get cavities and dentures, I guess?

It is very common made out of calcium and fluorine
And is used in many steel making scenes
You may find it in your eyeglass's lenses to help you see
That means fluorite helps you and me.

The crystals look glassy and are cubed with a square on each side
It gives off light when the sun shines so it never can hide
Although it is clear when it is pure
I like the colors even more.

It is most popular to be found on a toothbrush or in a glass in your home
So don't let fluorite roam
You need this mineral every day
And we always want to keep it that way

It is very fluorescent and it is in black lights
This light makes things glow when it is dark at night.
So don't be frightened by this crazy thing
Find out what it can bring

This mineral helps in every which way
So pray for this to be at your house every day
It can do so many different things
That is the joy that Fluorite brings.

Natalie Palamides

PA

GOLD

Gold is yellow in color
And it has a very shiny tone
Gold is very rare
And is found throughout your home

It is in your computer
It is in your phone
Its is found in your stereo
And it is very well known

To most people
Gold is a valuable thing to save
It is also found
In your microwave

It can be mined in sedimentary
And in igneous rocks
It is commonly found
In your jewelry box

In some countries
Gold is used for money
It may also be considered
Sweeter than honey

Gold may be in your camera
It's in your radio and drinking glass too
It's in a lot of things
I hope you've got a clue

As you can see gold is in a lot of things
It's even found in your mirror
I really hope this poem
Helps you understand gold much clearer

Nick Fazio
PA

Lepidolite

Lepidolite is a lithium mica mineral
Its color is a beautiful lilac, in general
Lepidolite is mined in Maine
The way it is mined is hard to explain

Lepidolite is a very rare stone
Its colors can be very confusingly shown
Lepidolite can be lilac, gray-green, or pale yellow
It is most commonly a lilac fellow

Lepidolite is made-up of many parts
Lithium, aluminum, and potassium help this stone to be
used in fine arts

Lepidolite is found in your home
Look for these places, and begin to roam

Lepidolite is found in your mirror
It helps your reflection to be seen clearer
Lepidolite, in your window, will watch you
What else can it do the whole day through?

Lepidolite hides in the medicine bottle
In your body, it fights against viruses, full throttle
Lepidolite is used to make glasses
It serves you drinks, as the time passes

Lithium is quite a fine rock
If you research it some things can give you a shock

Angelina Magreni
PA

A Quartz Crystal Poem

What's so great about Quartz Crystal?
All it does is run your clocks
Maybe it does other things
But all it is, is a bunch of rocks

It even comes in lots of colors
It can be clear, or rose, and even blue
It has white streaks through the middle
All in all it's a lovely hue

It's in the clock in your living room
Keeping all of the time
Now I can tell you
Where it is mined

It's found in every
Rock and form
It may be formed
In a lava storm

It may be formed
Under great pressure
It's the most abundant,
To be sure

The quartz may run
Your radio
Thanks to quartz
You can hear your show

It may be a necklace
Around your neck
It's so simple
Holy Heck!

Quartz is mined
From many mountains
It is an ornament
For mirrors or fountains

That's it, that's all
There's no more to know
Now go find out
Minerals in your home!

Leah Adams
PA

Hematite

You may have heard of the mineral called Hematite,
But thinking of your house it may seem out of sight —
It's found in cosmetics, toasters, and many other things,
Looking much closer you'll see the help it brings.

It's blood red color very pretty indeed,
That's why cosmetic companies use it for their color need.
It's also used as a pigment in your house paint,
Its Greek derivative, 'blood-like' should never make you faint.

Hematite a mineral in the oxide class,
It's found in hinges and handles, too, often replacing brass.
Hematite's abundant and not real hard to find
Minnesota, Michigan, Wisconsin, Utah, Mexico and Colorado only some
of the places it's mined

It lies in a hardness class of one to six,
Now let's get specific, it's an Iron Oxide mix.
The best way you can tell if it's a hematite mineral or rock,
Is to test hardness, cleavage, streak, which should come as no shock.

Focusing on the color a bit more than before,
You may find crystalline gems are
midnight black, but there is even more-
The colors vary greatly from "iron rose", black-brown to red
Depending on how they were formed, try keeping this in your head.

Hematite is an important household mineral,
and I hope you found that, too,
Some awesome mineral deposits in Elba-Italy, Brazil just to name a few.
Hematite is the most important iron ore, formulas Fe_2O_3
Is found so many varieties it's the most common mineral you'll see.

Christina Elderkin
PA

Gold

I am the mineral known as gold,
My beauty and rareness can never get old.
I am quite stubborn as you may see,
Don't mix another mineral with me.

I am mined in North and South Dakota,
I can also be found in South America.
My presence is in seawater, too,
But how to get me out, no one ever knew.

People work the mines all day long,
Hitting their picks as they sing a song.
They then put me on an electric cart,
And soon I will be at a Jewelry Mart.

People also discover me by panning in water,
Sift through the sand; you may have something to barter.
Soon I will be in your home with you,
I can be pretty useful; you probably never knew.

I can be found on doorknobs, chandeliers, and on rugs,
The fringe on the edges is where I'm snug.
Look on your finger, you may see me,
I look very pretty, and fit to a tee.

One ounce of me can be rolled out to 300 square feet,
Never under estimate me; I am really very neat.
That's how I go from the mine to your house,
I am very useful, but as quiet as a mouse.

Brighid Knoll
PA

The Three Gremlin

The first little gremlin was named coal. The second little gremlin was named Obsidian. The third little gremlin was named phosphate. One day they met downtown at a restaurant called Bauxite. They went inside for lunch and talked. Once they got inside they wanted to know about each other. So, coal told a little about himself.

My name is coal. I am primarily used in the production of heat, steam, and electricity. I am dug from underground. More than 55% of all electrical energy produced in the United States is derived from the burning of me. This makes me the number one giver of electricity to power computers, lights, TV, radios, hair dryers, air conditioners, and heat. I am also used in making dyes and medicine. The dyes are used for color pigment for our clothes and other materials.

The second gremlin said, “Hi my name is Obsidian. I was used by primitive people to make knives, spears, and projectile points. I was also used in conjunction with steel as a common fire making tool until the mid nineteenth century.

The third one said, Hey, my name is Phosphate, I am used in laundry detergents to enhance cleaning. I am also the source of phosphoric acid used to make scores of useful chemicals and as an additive to soft drinks such as coke. And Pepsi to add a tangy sensation to the taste.

They all ended up friends and lived together and that is how rocks and minerals came along creating minerals in our homes.

Nikkita Hudson
WV

Minerals in My Home

Zinc I think is in my door,
The handle turns to go to more.
Computers are aluminum and gold
But usually ones that are quite old.
I brush my teeth with minty paste,
Its source I know is petroleum based.

Limestone comes in many forms
But used in wallboard it makes me warm.
To enclose a room with wood and nail
I must use iron or else I'll fail.

To buy my food I need some money
Copper pennies seem so funny.
But if I look and am not fickle,
I will find the mineral nickel.

All these minerals are everywhere,
In the house both here and there.
The best I find of minerals for me,
Are in my vitamins I take daily.

Stephanie Strong
TN

Minerals In Your Home

The word mineral can be defined as “inorganic matter”. When most people think of minerals the words copper, gold, silver, coal and petroleum come to mind. What some people do not know is that there are many other minerals out there that you use every day that you aren’t aware of.

Lets start in the kitchen of your home. A can opener is composed of these 4 minerals: Hematite, Chromite, Galena, and Copper. Hematite is an ore of iron, Chromite an ore of chromium, Galena an ore of lead and silver, and Copper is a minor ore of itself. Your oven contains the above minerals plus Cinnabar, which is used as the thermometer, and Pentlandite, which is an ore of Nickel. The Chromite in the oven is used for stainless steel and resistance in electrical heating equipment. If you look in your dishwasher you can find Quartz, a commonly known mineral.

The next room in the house that we will venture into is the bathroom. Here are a few facts about your bathtub. Copper is used in the piping and tubing, Chromite is used in most plumbing fixtures, Feldspar is the porcelain that the bathtub is made of, and Pyrolusite provides the coloring of the porcelain. Even your deodorant contains minerals. For example, Cassiterite is a major ore of tin, and it provides that greasy feeling deodorant can leave behind.

The last stop in the house is the living room. The bricks around your fireplace are made up of Kaolinite, and Pyrolusite and Hematite play a role in the color of your fireplace. The phone, one of the most used items in my house, is made up of Copper for the wiring, Chromite for the plating. Silver, which is used in all electronics, and batteries made up of Graphite.

Many of these minerals aren’t well known at all, but my research on them helped me realize that they are just as important as the commonly known ones. Without minerals, unheard of or frequently spoken about, almost all of the objects in our house wouldn’t work. In fact, you wouldn’t even have a house if it weren’t for Kaolinite. Can you imagine a life without minerals?

Carrie Marino
TN

Salt

Sodium Chloride, Salt, is an essential mineral known as Halite. It makes up 80 percent of ocean water and serves as a major role in the human body. In the human body, it regulates osmotic pressure, which is the balance of salt and water. This keeps the body from losing too much water. Also, salt helps in the transmission of impulses in the nerves. If too much salt is consumed it could lead to hypertension, which is abnormally high blood pressure.

Salt is used the most and is the most common out of any mineral. It is used in many ways such as chemicals, seasonings for food or a food preserver, and a refrigerant. As a chemical, it produces numerous products. Some include textile dyes, soap, glass, and pottery. Also, without salt our streets would remain icy during winter.

Salt is produced more than any other commercial chemicals except iron. Salt is produced in three ways, evaporation from sea water, rock and salt mining, and solution mining. Evaporation from sea water used to be the primary source for salt. It is still important to maritime regions with long summers. Today in the world, most salt comes from rock salt and salt domes. Salt from salt domes requires ordinary mining. Solution mining requires freshwater to be pumped down in to the dome and the dissolved salt solution pumped back up to the surface.

Leading producers of salt include Ukraine, Turkmenistan, China, Germany, and Canada. Today the United States remains the worlds largest producer averaging 1,874 tons.

Lauren Lipe
TN

“Minerals in My Home”

My house is full of minerals,
I will explain and you will see,
We have all kinds in our abode,
They range from A to Z,

My mother wears a diamond,
It shines upon her hand,
In a lab under controlled conditions,
It is made by man.

My father takes daily medicine,
To stay fit and healthy,
He takes his blood pressure daily,
With a machine full of mercury.

My sister wears these on her ears,
Her fingers and toes I'm told,
They come in different shapes and sizes,
But there're always made of gold.

I keep this mineral in my mouth,
The dentist put it there,
The silver keeps my teeth in line,
So I haven't got a care.

Science can be really fun,
If you look around you will see,
We all have minerals in our homes,
That range from A to Z.

Rebecca Williams
TN

Minerals ‘Round the Kitchen

In the kitchen of our home, minerals abound;
In the cupboard and under the sink, they can all be found.

The sterling silver candlesticks are silver with some copper,
The stainless blades of chromium and Iron constitute our chopper.

The copper bottoms on our pots protect the food from charring;
But when It does the steel wool pads clean It without scarring.

Phosphorus, in the form of phosphates, keeps our dishes clean;
The Iron skillet cooks so well, but doesn’t have a sheen.

The marble board of quartz and mica Is good for cutting meat;
And when I bake either cookies or bread I use an aluminum sheet.

Arsenic and lead can poison us and sulfur has a stink;
But minerals are important in my house; this poem has ended, I think.

Saralyn Heindel
TN

“Aluminum in my Home”

What won't rust and is very light,
The thought of your favorite drinks a wonderful sight.

It is used for transporting and in cans,
You'll find it lining cooking pots and pans.

It was produced in 1854,
And food industries use it more and more.
Professor Oersted separated it in a new form,
But be careful with it in a storm.

Most acids are stored in this,
Did I mention that professor Oersted was Danish.

If you guessed Aluminum you are right!

Thanks to it you can drink your Sprite.
In the kitchen is where you'll most often see it,
But trust me there is more than a little bit.

Aluminum is important in more ways than one,
One day there may be none.

So recycle and help everyone out,
Then Aluminum will be here with out a doubt!

Elizabeth Thomason
TN

Magnetite, Magnetite

Were art thou magnetite

In the refrigerator holding the door shut

Or is thy holding the windows close

Or maybe ye

Is in thy speakers of ye old boom box

Ah, thy may be guiding my true love, her, to me

In the compass

Ah yes magnetite's power will finely bring us together

But,

Do we really need magnetite's magnetic power, to bring us

Together

I don't need it to find her in this house.

Thomas Fugate

TN

Minerals In My Home

I was one just a mineral in the ground,
Now a new home is where I'm bound.

I'll be put in a bountiful of things,
From your everyday pipes to your beautiful rings.

You will never see me rust or stain,
I'm in the gutters on you house to keep you free of rain.

I'm malleable and gorgeous,
In a piece of jewelry I could be quite enormous.

Silvery-white,
I'm anything but light.

Platinum is what I am,
I'm useful day by day to man.

I was once just a mineral in the ground,
Now a new home is where I'm found.

Aryn Taylor
AZ

Minerals In My Home

In order to trace the route of coal from when it was formed, to my home, I'll have to go back about 300 million years ago. The decomposition of prehistoric species such as dinosaurs, plants, and other animals was the first stage of the coal we know today. As the Earth changed the decomposed material was buried deep under ground by mud and sand. They were then pressed down on by the weight above and the oxygen, hydrogen, and moisture was squeezed out of them. This left rich deposits of carbon under the many layers of compressed mud and sand now becomes sandstone, limestone, shale, etc.

Millions of years passed and by the time we (man) discovered coal it had become the coal we know today. We soon found use for coal and began to figure out how to get it. We found that sometimes we could just simply remove a small layer of dirt and get at the coal but sometimes we would have to make underground mines by building shafts or tunnels down to the coal seams.

After we get the coal it is then loaded on to trains and hauled to wherever it is needed. A lot of the coal is sent to power plants that use the coal for electricity. The electricity is then used to run lights, televisions, radios, refrigerators, computers, etc. Some homes still coal bines to heat there homes. You can see that without coal then life would be much, much different.

Dean Owen
UT

Nature's Wonder

3 hundred million years ago, the earth was very green.
And when you looked around, even dinos could be seen.

But the wheels of life keep turning, and that which lives must die.
Nature's stomach's churning, and many long years roll by.

And as all of them passed away, and went beneath the ground.
Mother Earth could sense a change, new things would come around.

With lots of help from pressure, from things laid up above.
Black gold was soon invented and that's what coal's made of.

By miners that are rock hard, like the harvest that they gather,
The coal is mined and treated. Hard work, but it's done together.

The coal will now be sent to plants, not shrubs, but plants with power.
The process of this shipping, takes lots longer than an hour.

And when it's burned and boiled, to just the right degree.
The coal is then transformed, into light for us to see.

But coal is not a product, who just says "Let there be light".
If I told you all it's uses, we might be here all night.

But one thing I will mention, because it's rather neat.
The heat we get from furnaces, comes from coal. How Sweet!

It's not like coal's the only, natural resource that we need.
But without this carbon substance, our petroleum veins would bleed.

So the next time that you wonder, where you get light and heat.
Remember Natures' wonder, there's more digesting beneath your feet.

Dean Owen
UT

Aluminum in My Home

Aluminum is in many things
Cans, foil, even rings
It's light, but dependable
Sometimes even expendable
You can cover your food
Appropriate for every mood
It's in some floors
It's in your doors
It's easy to use
It's in every fuse
It's very helpful and convenient
Sometimes it's really lenient
Aluminum is everywhere in my home
Who knows...maybe even in my phone!

Sara Rudolph
TN

MINERALS IN MY HOME

Talc is an important industrial mineral. Its resistance to heat, electricity, and acids make it an ideal surface for lab counter tops and electrical switchboards. It is also an important filler material for paints, rubber, and insecticides. Even with all these uses, most people only know talc as the primary ingredient in talcum powder. Mineral specimens are not very common, as it does not form very large crystals. However, it often replaces other minerals on an atom by atom basis and forms what are called pseudomorphs (false shape). The talc takes the form of the mineral it replaces. A specimen of what looks like milky quartz is quite a surprise when it not only has a soapy feel but can be scratched by a fingernail.

The color of Talc is a green, gray, and white to almost silver looking substance. The luster is dull to pearly or greasy. The transparency crystals are translucent and masses are opaque. The crystal system is monoclinic; $2/m$. The crystal habits are never in large individual crystals, but if found are flattened tabular crystals with a hexagonal cross-section, usually talc is found in compact or lamellar masses. The class that Talc is in is silicates. Its uses include an ornamental and heat, acid and electrically-resistant stone (soapstone) used as counter tops, electrical switchboards, carvings, etc. used as an ingredient in paints, rubber, roofing materials, ceramics, and insecticides. Minerals that are associated with Talc include serpentine, dolomite, magnesite. quartz, pyroxenes, and olivine.

Allison Daniel
WV

MINERALS IN MY HOME

Although many people are scarcely aware of it, minerals are very important parts of our daily lives. Remember turning on your lamp this morning, brushing your teeth, and then getting in your car to drive to work or school? None of that would have been possible if people had not come up with ingenious uses for minerals.

Can you imagine living in a world where your only light source after the sun went down was a candle? No computers, no televisions and no telephones to let us communicate with our loved ones or inform us of the events going on across the world. That is what life would be like if we did not have coal to create the steam used to generate electricity or copper to make the wiring that runs through our homes.

There are many other useful minerals we use every day in our homes. For instance, the mirrors in your bathroom or bedroom, the light bulbs in your light fixtures, and the drinking glasses in the kitchen are made from quartz. Toothpaste contains fluorite and wolframite is used in everything from filaments to computer and television monitors.

Most people don't associate technological breakthroughs with minerals, but many of the things we now have that were not available one hundred or even fifty years ago are all thanks to minerals. From the chromite plating on your wristwatch to the hematite in your vacuum, our lives are filled with minerals.

Logan Ellis
WV

Minerals in My Home: Gold

The mineral, gold
Makes shiny things,
Such as wires, necklaces,
Money, and rings

It melts about 1,000°C
Maybe even a bit hotter,
You can pan it out in pieces,
From cool river water

It's a great gift for Christmas
Definitely not a disgrace,
It guarantees a smile
Across your sweethearts face

If it wasn't for gold
There would be no TV at all
So we couldn't turn to channel 4
And watch Bill Hall

Gold is very handy
I like it, a whole lot
We might could live without it
But I think I'd rather not!!

Season Dawson
TN

Gypsum, a Mineral in My Home

Gypsum is a mineral that is mined locally where I live. Hydrated calcium sulfate (gypsum) is a common form of sedimentary deposits. There are gypsum deposits all over the world. Places such as Australia, Mexico, France, and right here in the United States are a few examples of places where gypsum is found.

Gypsum has many uses. I would like to tell you how gypsum is used every day in my home, because it was used to help build my home. All homes need a foundation, and my home has a foundation made out of Portland cement. Portland cement has large amounts of gypsum used in it as a retarder. So gypsum helps to keep my home standing.

Also, the walls that make my room and the roof above my head are made out of sheet rock. Sheet rock is made of gypsum panels. There is one more thing that is all over my home, inside and out. This product is paint. Gypsum is used as a basis for paint pigments.

Without gypsum my home wouldn't be complete, sturdy, or very comfortable. So as you can see gypsum is a mineral that is in my home constantly. I have only given a few examples of the uses for gypsum. Still, gypsum is a very important mineral used in my home and homes all around the world.

Camille Fehlberg
UT

MINERALS IN MY HOME

Chalcopyrite is a mineral, which in metal form is called copper, is used mostly to make coins, brass, bronze and electrical wiring. If your home like mine has electricity, then the wiring is most likely made from the mineral chalcopyrite, {copper.} Copper ore is mined in either open pits or in underground mines. The copper ore is then taken to a crushing plant where it is crushed to the right size for the grinding process, and then fallen to the concentrator. The crushed copper ore is then ground in rod and ball mills, and then floated in a machine where the copper rises to the surface. After a few turns through a furnace all the non-copper elements are burned off, resulting in ninety-nine percent pure copper. It is then molded and tested some more, thus ending in 99.9999 percent purified copper, which can then be sent to a rod plant, where it is spun into small coils of cast copper wire. An electrician uses this or sometimes aluminum wires to put electricity into our houses, cabins, etc..... There are tons of minerals that are used to make our homes, although some may be more important than others they are all greatly needed, and appreciated by most people. Without the mineral chalcopyrite,{or copper,} I could not have typed this essay.

Nicole Palo
PA

Minerals of my house

Minerals of my house
Can help me catch a mouse
Like Chromite, stainless steel
Helps my mom to cook a meal
Helps our dog to drink water
I think metal dishes are smarter
Then there's Galena, lead
Please don't put it in bread!
It's better in batteries
Help's my video-games memories
And there's gold
In my grandma's necklace, it's old!
Hey! Carbonates, used for building stones
Builds a house, no more groans!
It makes cement
Usefulness, will never stop its relent
Sure, then there's Sulfates
Used to make pretty paints
Sulfides, used in electronic parts
Now that's using tech smarts!
It's in my medicine box
Can be used to cure a sick fox
It's still in batteries
Running tourist cameras at art galleries
Lastly, there's copper in water pipes
If they freeze, my dad gripes
Minerals are essential to our lives
Helping mankind, in their homes, thrive

Sarah Anderson
PA

Minerals In My Home

You know, I would really hate,
If this world did not have sulfate.

Sulfates help to make your teeth white
And their in paint to make your walls bright.

Cosmetics contain some of them, too.
Without them, what would women do.

If you should get a bump or bruise,
Epsom Salt (a sulfate) will reduce the swelling for you.

And even when you get an ache,
Some sulfates are in the medicines we take.

As far as minerals in your house, there are many more,
Just look at the diamonds in your mom's jewelry drawer.

But if you came in late,
This poem is not about diamonds, but sulfates.

Brianne Kyle
PA

“MINERALS IN MY HOME”

With the Symbol, Fe, it is known;
Iron occupies a large ratio in the ordinary home.
The fourth most abundant in the Earth's crust;
Iron does more than just rust.
The Fe compound transporting Oxygen,
It is in our blood's hemoglobin.
Recalled as hematite and magnetite,
This mineral is necessary to prevent much plight.

It is used in the kitchen and eatery.
For iron is a plethora in Cutlery.
Used in the stainless steel Sink,
We exhibit iron when getting a drink.
In Toasters, Refrigerators, and Microwaves,
Iron is there when we have craves.

It is used in the bathrooms,
Whenever one grooms.
In the Tub and Faucet,
And all the layers of your closet.

It is used in the laundry,
Crossing its boundary
Iron is in Washing Machines.
It goes beyond the extremes.

It is used in rooms and entertainment let us not forget.
In Stereos and TVs; iron I will never regret.
Metal Desks and Cameras are made of this mineral,
To capture the world, it is a large essential.

Thus the mineral iron as you can see,
In the home is quite necessary.
Used in the bathroom, kitchen, entertainment, dormitory,
and laundry too,
Iron is a profound necessity for both me and you.

Nandini Mehta
TN

MINERALS IN MY HOME

There are so many minerals in my home. The most important one is coal because it gives me light, energy and a job for my dad and family.

COAL

Coals are hot true minerals but are organic compounds of many types formed from the remains of living trees, shrubs and plants that flourished millions of years ago during periods of uniformly mild and moist climate. Coal is a fossilized plant material. Coal consists of varying amounts of carbon and volatile material and if impurities rock materials and is used as a power resource and other useful resources.

COPPER

Copper in nature occurs widely distributed and in many unusual places. It is found in many rocks and soils as well in oceanic clays and rivers silts, in the ashes of seaweed's and other plants. In the human liver and in many Mollusca and Arthropoda such as snails and spiders. The major portion of the production of copper is unutilized by electrical industries; of the remainder the greater part is combined with other metals to form alloys. The most important series of alloys, in which copper forms the chief constituents are the brasses (copper-zinc), bronzes (copper-tin) and nickel silver (copper-zinc-nickel).

Shandee Potter
UT