DISCOVER

4-H GEOLOGY CLUBS

EXTENSION
UtahStateUniversity

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Libby Porter | Dave Francis | Stacey MacArthur
Utah State University Extension

Description

The Discover 4-H Clubs series guides new 4-H volunteer leaders through the process of starting a 4-H club or provides a guideline for seasoned volunteer leaders to try a new project area. Each guide outlines everything needed to organize a club and hold the first six club meetings related to a specific project area.

Purpose

The purpose is to create an environment for families to come together and participate in learning activities that can engage the whole family, while spending time together as a multi-family club. Members will experiment with new 4-H project areas.

What is 4-H?

4-H is one of the largest youth development organizations in the United States. 4-H is found in almost every county across the nation and enjoys a partnership between the U. S. Department of Agriculture (USDA), the state land-grant universities (e.g., Utah State University), and local county governments.

4-H is about youth and adults working together as partners in designing and implementing club and individual plans for activities and events. Positive youth development is the primary goal of 4-H. The project area serves as the vehicle for members to learn and master project-specific skills while developing basic life skills. All projects support the ultimate goal for the 4-H member to develop positive personal assets needed to live successfully in a diverse and changing world.

Participation in 4-H has shown many positive outcomes for youth. Specifically, 4-H participants have higher participation in civic contribution, higher grades, increased healthy habits, and higher participation in science than other youth (Learner et al., 2005).

Updated June 2014

Utah 4-H

4-H is the youth development program of Utah State University Extension and has more than 90,000 youth participants and 8,600 adult volunteers. Each county (Daggett is covered by Uintah County) has a Utah State University Extension office that administers the 4-H program.

The 4-H Motto

"To Make the Best Better!"

The 4-H Pledge

I pledge: My HEAD to clearer thinking, My HEART to greater loyalty, My HANDS to larger service and My HEALTH to better living, For my Club, my Community, my Country, and my world.

4-H Clubs

What is a 4-H Club? The club is the basic unit and foundation of 4-H. An organized club meets regularly (once a month, twice a month, weekly, etc.) under the guidance of one or more volunteer leaders, elects its own officers, plans its own program, and participates in a variety of activities. Clubs may choose to meet during the school year, only for the summer, or both.

Club Enrollment

Enroll your club with your local Extension office. Each member will need to complete a Club/member Enrollment form, Medical History form, and a Code of Conduct/Photo Release form (print these from the www.utah4h.org website or get them from the county Extension office).

Elect Club Officers

Elect club officers during one of your first club meetings. Depending on how many youth you have in your club, you can decide how many officers you would like. Typical officers will include a president, vice president, pledge leader, and secretary. Other possible officers or committees are: song leader, activity facilitator, clean-up supervisor, recreation chair, scrapbook coordinator, contact committee (email, phone, etc.), field trip committee, club photographer, etc. Pairing older members with younger members as Sr. and Jr. officers may be an effective strategy to involve a greater number of youth in leadership roles and reinforce the leadership experience for both ages. Your club may decide the duration of officers–six months, one year, etc.

A Typical Club Meeting

Follow this outline for each club meeting:

- ☐ Call to order–President
- ☐ Pledge of Allegiance and 4-H Pledge–Pledge Leader (arranges for club members to give pledges)
- ☐ Song–Song Leader (leads or arranges for club member to lead)
- ☐ Roll call–Secretary (may use an icebreaker or get acquainted type of roll call to get the meeting started)
- ☐ Minutes of the last meeting–Secretary
- ☐ Business/Announcements–Vice President
- ☐ Club Activity–arranged by Activity Facilitator and includes project, lesson, service, etc. These are outlined by project area in the following pages.
- ☐ Refreshments–arranged by Refreshment Coordinator
- ☐ Clean Up–led by Clean-up Supervisor

Essential Elements of 4-H Youth Development

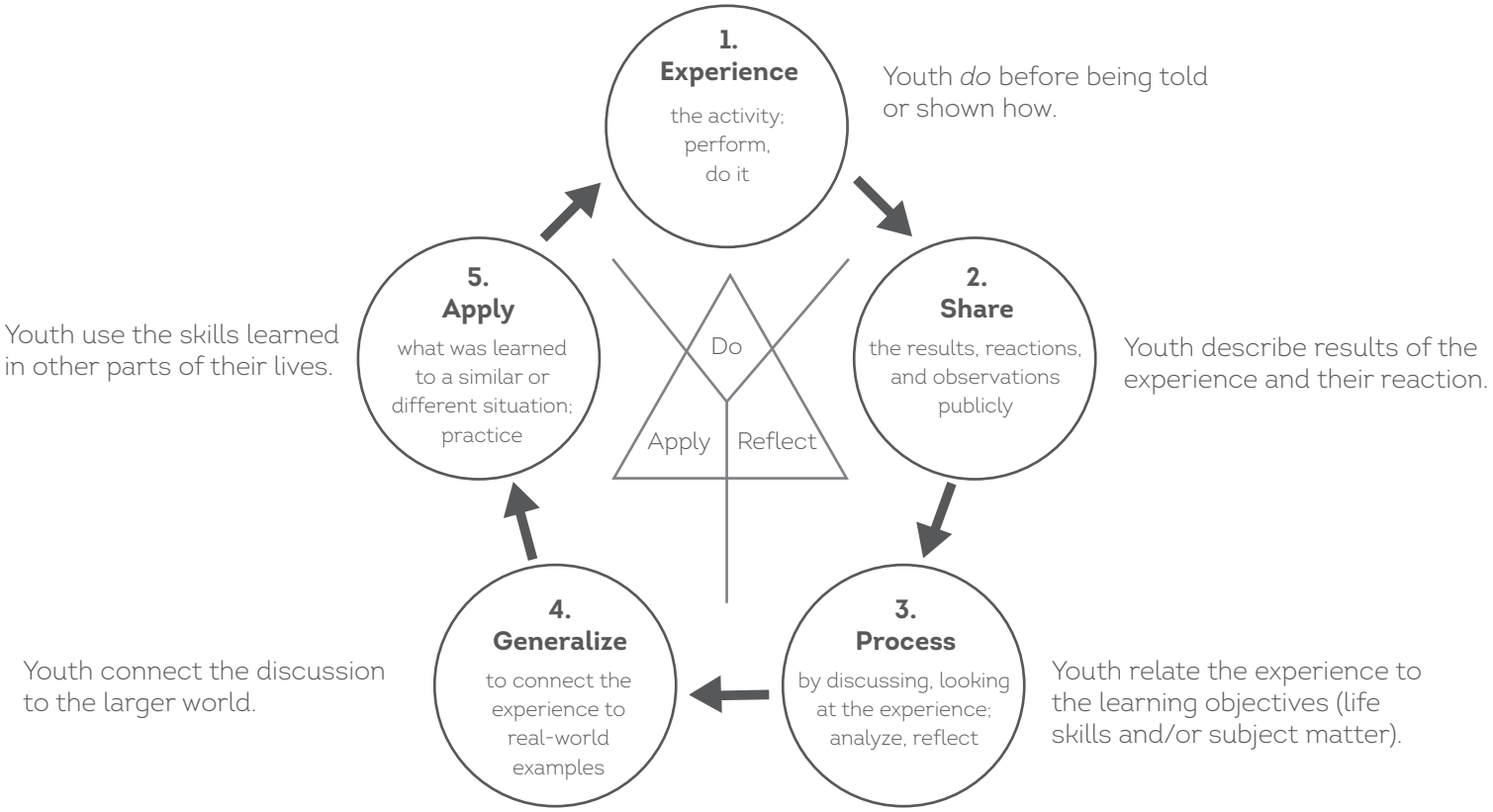
The essential elements are about healthy environments. Regardless of the project area, youth need to be in environments where the following elements are present in order to foster youth development.

1. **Belonging**: a positive relationship with a caring adult; an inclusive and safe environment.
2. **Mastery:** engagement in learning; opportunity for mastery.
3. **Independence:** opportunity to see oneself as an active participant in the future; opportunity to make choices.
4. **Generosity:** opportunity to value and practice service to others.

(Information retrieved from: http://www.4-h.org/resource-library/professional-development-learning/4-h-youth-development/youth-development/essential-elements/)

4-H "Learning by Doing" Learning Approach

The Do, Reflect, Apply learning approach allows youth to experience the learning process with minimal guidance from adults. This allows for discovery by youth that may not take place with exact instructions.



4-H Mission Mandates

The mission of 4-H is to provide meaningful opportunities for youth and adults to work together to create sustainable community change. This is accomplished within three primary content areas, or mission mandates, - citizenship, healthy living, and science. These mandates reiterate the founding purposes of Extension (e.g., community leadership, quality of life, and technology transfer) in the context of 21st century challenges and opportunities. (Information retrieved from: http://www.csrees.usda.gov/nea/family/res/pdfs/Mission_Mandates.pdf)

1. **Citizenship:** connecting youth to their community, community leaders, and their role in civic affairs. This may include: civic engagement, service, civic education, and leadership.
2. **Healthy Living:** promoting healthy living to youth and their families. This includes: nutrition, fitness, social-emotional health, injury prevention, and prevention of tobacco, alcohol, and other drug use.
3. **Science:** preparing youth for science, engineering, and technology education. The core areas include: animal science and agriculture, applied mathematics, consumer science, engineering, environmental science and natural resources, life science, and technology.

Getting Started

1. Recruit one to three other families to form a club with you.
    a. Send 4-H registration form and medical/photo release form to each family (available at utah4h.org)
    b. Distribute the Discover 4-H Clubs curriculum to each family
    c. Decide on a club name
    d. Choose how often your club will meet (e.g., monthly, bi-monthly, etc.)
2. Enroll as a 4-H volunteer at the local county Extension office (invite other parents to do the same)
3. Enroll your club at the local county Extension office
    a. Sign up to receive the county 4-H newsletter from your county Extension office to stay informed about 4-H-related opportunities.
4. Identify which family/adult leader will be in charge of the first club meeting.
    a. Set a date for your first club meeting and invite the other participants.
5. Hold the first club meeting (if this is a newly formed club).
    a. See *A Typical Club Meeting* section above for a general outline.
        i. Your activity for this first club meeting will be to elect club officers and to schedule the six project area club meetings outlined in the remainder of this guide. You may also complete a-d under #1 above.
    b. At the end of the first club meeting, make a calendar outlining the adult leader in charge (in partnership with the club president) of each club meeting along with the dates, locations, and times of the remaining club meetings.
6. Hold the six project-specific club meetings outlined in this guide.
7. Continue with the same project area with the 4-H curriculum of your choice (can be obtained from the County Extension Office) OR try another Discover 4-H Club project area.

Other Resources

Utah 4-H website: www.Utah4-h.org
National 4-H website: www.4-h.org
4-H volunteer training:
To set up login:
http://utah4h.org/htm/volunteers/get-involved/new-volunteer-training
To start modules: http://4h.wsu.edu/volunteertraining/course.html
(password = volunteer)

References

Information was taken from the Utah 4-H website (utah4h.org), the National 4-H Website (4h.org), the Utah Volunteer Handbook, or as otherwise noted.

Lerner, R., M. et al., (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. Journal of Early Adolescence, 25(1), 17-71.

We would love feedback or suggestions on this guide; please go to the following link to take a short survey:
http://tinyurl.com/lb9tnad

4-H GEOLOGY CLUB *Meetings*

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DISCOVER
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4-H Club Meeting 1
Rock Cycle

Supplies

- Aluminum foil
- Clothes pin
- Crayons
- Vegetable peeler
- Paper plates
- Hammer
- Waffle iron
- Cup of ice water
- Rock samples (optional)

INTRODUCTION

In this club we will explore geology through fun, hands-on activities that teach basic science principles. For this activity we will be melting crayons to discover the different processes of the rock cycle!

Rock Cycle

ACTIVITY 1

Time: 20 minutes

- Start by ripping the aluminum foil into 6 inch squares.
- Each person should get 3-4 different colored crayons. Unwrap the crayons and use the vegetable peeler to make crayon shavings. Make a pile of shavings on the piece of aluminum foil.
- Explain how this is a pile of sediment about to begin the rock cycle.
- Once you have a decent sized pile of colorful shavings, fold over the foil to wrap up the shaving pile. Press down on the pile as hard as you can. Use a hammer to gently tap.
- Gently unwrap it from the foil. The crayon rock will be fragile, but should hold together in a packed layer.
- Show everyone a sample of a sedimentary rock. Compare and contrast the rock sample with the crayon sample you just created.
- Wrap the crayon rock back up in the foil.
- Place a clothes pin on the outside of the rock sample and then place the sedimentary crayon sample into the warm waffle iron.
- Remove the foil when the wax is soft to the touch and the colors have swirled together. Make sure it is before the colors are indistinguishable. Let it cool. To aid in the cooling you can dip it into a cup of cold water.
- Show everyone a sample of a metamorphic rock. Compare and contrast the rock sample with your crayon sample.
- Discuss this process as it occurs in the real world with rocks being subjected to intense heat and pressure beneath the surface of the Earth.

- Put the metamorphic crayon rock back in the waffle iron. This time allow the wax to melt until a smooth pool of liquid wax forms and the colors blend together uniformly.
- Carefully remove the foil and let the igneous crayon rock cool.
- Show everyone a sample of an igneous rock. Compare and contrast the rock sample with the crayon sample you just created.
- The melting wax can be compared to magma.

Reflect

- How did each stage of the rock cycle compare to the crayon rocks you made?
- Do you think the igneous crayon rock could be turned back into sedimentary rock?
- Could a metamorphic rock be turned directly into a sedimentary rock? How?
- What do you think would happen if you left the crayon rock on the waffle iron for even longer?

Apply

- **Sedimentary:** This rock has visible grains of all different sizes. It has layers or streaks and if you rub it the grains will rub off. A common sedimentary rock today is sandstone, which consists of sand grains cemented together into solid stone.
- **Metamorphic:** This rock has crystals, contains many colors, is very hard, and has swirly patterns, but there are no grains. Marble is a metamorphic rock that comes from metamorphosed limestone or dolomite. There is a lot of variation in the color and texture of marble. The two main influences are the kind of limestone that makes up the parent rock and the degree of metamorphism. Marble is often used in sculptures and building materials. David is a marble masterpiece of Renaissance sculpture created by the Italian artist, Michelangelo.
- **Igneous:** This rock may have lots of holes, may contain some crystals, but has no grains. There is a uniform texture and pattern throughout the rock, with no layers or swirls. Pumice is an igneous rock that is light and porous. It forms during explosive eruptions. Pumice is full of holes caused by expanding volcanic gases.

Science

Youth will explore geology by simulating the different processes of the rock cycle. They will hypothesize, evaluate, and compare the crayon rocks to sedimentary, metamorphic, and igneous rocks.

Mastery

Discovering science principles is a process that involves experimenting, evaluating, and reconfiguring to develop the desired product. Youth will learn through trial and error.

References

IdahoPTV Teacher Training Institute (2001.) The 4 Rock Cycle Activities. Retrieved from http://www.idahoptv.org/ntti/nttilessons/lessons2001/rock4.html.

4-H Club Meeting 2
Nails for Breakfast

Supplies

- Total cereal
- Ziploc bags
- Neodymium magnet
- Paper plates
- Water

INTRODUCTION

In this club we will explore geology through fun, hands-on activities that teach basic science principles. For this activity we will discover that rocks and minerals are found all around us and are even in our food!

Nails for Breakfast

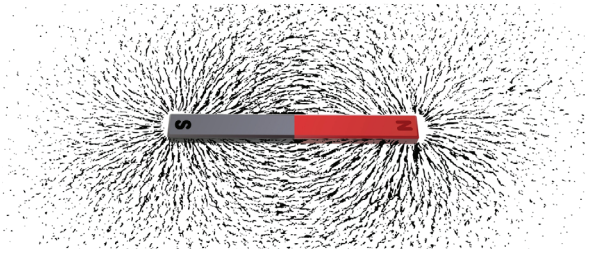
ACTIVITY 1

Time: 30 minutes

DISCLAIMER: THESE MAGNETS ARE VERY STRONG AND SHOULD BE USED WITH ADULT SUPERVISION. THEY ARE NOT TOYS!

- Open the box of Total cereal and pour a small pile of flakes onto a plate. Crush the flakes into tiny pieces with your fingers. Spread out the pile so it forms a single layer of crumbs on the plate. Bring the magnet close to the crumbs (don't let it touch them) and see if you can get the pieces to move. Take your time. If you get a piece to move without touching it, that piece may contain some metallic iron.
- Firmly press the magnet directly onto the crumbs, but do not move it. Lift it up and look underneath to see if anything is clinging to the magnet. Several little pieces may be stuck there. Throw away the small pile of cereal and clean off the magnet.
- Pour water onto the plate and float a few flakes on the surface. Hold the magnet close to (but not touching) a flake and see if you can get the flake to move. The movement may be very slight, so be patient.
- It is time to mix up a batch of cereal soup to further investigate the claim of iron in your breakfast cereal. Measure out 1 cup of cereal (that is the equivalent of one serving) and pour it into a Ziploc bag. Fill the bag half full with water. Carefully seal the bag leaving an air pocket inside.
- Mix the cereal and the water by squeezing the bag until the contents become a brown, soupy mixture. Allow the mixture to sit for at least 20 minutes.
- Make sure the bag is tightly sealed and position it on its side in the palm of your hand. Place the super-strong magnet on the top of the bag. Put your other hand on top of the magnet and flip the whole thing over so that the magnet is underneath the bag.

- Slowly slosh the contents of the bag in a circular motion for 15-20 seconds. The idea is to attract any free moving bits of metallic iron in the cereal to the magnet.
- Using both hands, flip the bag and the magnet over so that the magnet is on top. Gently squeeze the bag to lift the magnet a little above the cereal soup. Don't move the magnet just yet. Look closely at the edges of the magnet where it is touching the bag. You should be able to see tiny, black specks on the inside of the bag where it is touching the magnet. That's the iron!
- Keep one end of the magnet touching the bag and move it in little circles. As you do, the iron will gather into a bigger clump, making it easier to see.



Reflect

- Were you able to see the iron in the cereal?
- Were you surprised to find the iron in your cereal?
- With which method could you see the most iron?
- Why does this cereal contain iron?
- What other foods do you think this experiment might work with?

Apply

- Rocks and minerals are all around us! Many breakfast cereals are fortified with food-grade iron particles (metallic iron) as a mineral supplement. Total cereal is the only major brand of cereal that claims to contain 100 percent of your recommended daily allowance of iron. The chemical symbol for iron is Fe. Metallic iron is digested in the stomach and eventually absorbed in the small intestine. If all the iron from your body was extracted, you would only have enough iron to make two small nails.
- Iron is found in a very important component of your blood called hemoglobin. Hemoglobin is the compound in red blood cells that carries oxygen from your lungs so that it can be utilized by your body. It's the iron in hemoglobin that gives blood its red appearance.
- A diet deficient in iron can result in fatigue, reduced resistance to diseases, and increased heart and respiratory rates. Food scientists say that a healthy adult requires 18 mg of iron each day. So as you can see, iron is a very important part of what you need to stay healthy.
- In addition to iron fortified cereal, the foods that are also high in iron are: red meats, egg yolks, dark, leafy greens, dried fruit, mollusks, beans, and artichokes.

Science

Youth will discover that rocks and minerals can be found in unexpected places. They will use magnets to draw the iron out of iron-fortified cereal.

Mastery

Discovering science principles is a process that involves experimenting, evaluating, and reconfiguring to develop the desired product. Youth will learn through trial and error.

Healthy Living

Youth will learn about iron and its importance in a healthy diet. A diet deficient in iron can lead to many health issues.

References

Steve Spangler Science. Eating Nails- Iron For Breakfast. Retrieved from http://www.stevespanglerscience.com/experiment/nails-for-breakfast.

4-H Club Meeting 3
Rock Collection

Supplies

- Plaster of Paris
- Sand
- Water
- Rock and mineral samples
- Mixing bowl and spoon
- Small plastic containers
- Hammers
- Safety glasses
- Tarp/drop cloth
- Egg cartons
- Mineral identification guide

INTRODUCTION

In this club we will explore geology through fun, hands-on activities that teach basic science principles. For this activity we will be excavating a rock brick to create a rock collection!

PRIOR TO THE ACTIVITY

The rock bricks must be made 2-3 days before the activity to allow them enough time to harden. The bricks can be made by mixing equal parts water, sand, and plaster of Paris. Pour the mixture into several plastic containers. Tupperware containers work well for a mold. Once the mixture has been poured into the mold, add 4-6 rock/mineral samples to each and let harden. *Some sample collections contain crystals, which should NOT be added to the rock brick.

The rock and mineral samples may be purchased from a number of sources including:

- Nature Watch (www.nature-watch.com)
- Geo-Central (www.geocentral.com) *Must register as a vendor or find a local store that carries the product.

ACTIVITY 1

Time: 35 minutes

- Ask youth if they know the difference between a rock and a mineral.
- Lay out the tarp or drop cloth over the working area. This makes the clean up much easier.
- Provide everyone with a hammer and safety glasses.
- Use the hammer to gently break apart the rock brick to find the rock and mineral samples.
- Use the egg carton to hold your rock collection.
- Once you have found all of your rock samples, use the identification guide to identify each rock or mineral.
- If the identification is not obvious you may need to perform an ID test such as a streak test or a scratch test.

Reflect

- What is the difference between a rock and a mineral?
- What kinds of rocks did you discover in the rock brick?
- Which sample was your favorite? Why?
- What kinds of words are used to describe rocks and minerals?
- How can you tell if a rock is igneous, metamorphic, or sedimentary?
- What did you learn about rock excavation?

Apply

- A mineral is a solid formation that occurs naturally in the Earth, while a rock is a solid combination of more than one mineral and is also naturally occurring. A mineral has a unique chemical composition and is defined by its crystalline structure and shape. On the other hand, since a rock can be composed of several minerals, it is classified according to the process of its formation. A rock can also contain organic remains and mineraloids apart from regular mineral formations.
- Gold is a mineral. Granite is a rock made up of different minerals like quartz and feldspar.

Science

Youth will learn the difference between a rock and a mineral and how to classify them by examining their characteristics.

Mastery

If youth are struggling to classify rocks and minerals based on their characteristics, they can use a rock identification test to find out more information.

References

Difference Between.net. Difference Between Rocks and Minerals. Retrieved from http://www.differencebetween.net/science/difference-between-rocks-and-minerals/.

4-H Club Meeting 4
Rock Candy

Supplies

- Wooden skewers
- Clothespin
- Water
- Sugar
- Measuring cups
- Tall, narrow glass or jar
- Saucepan
- Food coloring (optional)

INTRODUCTION

In this club we will explore geology through fun, hands-on activities that teach basic science principles. For this activity we will be growing sugar crystals, which make for an exciting scientific treat!

Rock Candy

ACTIVITY 1

Time: 30 minutes

- Clip the skewer into the clothespin and lay the clothespin across the mouth of the glass so that the skewer hangs down inside the glass. Adjust the skewer so that it hangs about 1" from the bottom.
- Remove the skewer and clothespin and set them aside for now.
- Pour 1 cup of water into the pan and bring it to a boil.
- Measure 1/4 cup of sugar and add it to the boiling water. Stir until all the sugar is dissolved.
- Keep adding more sugar and stirring it until it dissolves. Do this until no more sugar will dissolve. It will end up being 2-3 cups sugar in total. This will take time and patience because the sugar will take longer to dissolve as you continually add more.
- Once no more sugar will dissolve, remove the pan from the heat and allow it to cool for 20 minutes.
- While the sugar solution is cooling, take your skewer and dip half of it into the solution and roll it around in some sugar. This will help to jump start crystal growth.
- Be sure to let the skewer cool completely so the sugar crystals do not fall off when you place it into the glass.
- When the sugar solution has cooled completely, carefully pour the solution into the jar, nearly to the top. If desired, add food coloring to the solution for colored rock crystals. For best results, add food coloring until the solution is dark in color.
- Submerge the skewer into the glass making sure that it hangs straight down the middle without touching the sides.
- Carefully place the jar somewhere that it will not be disturbed.
- Now just wait!! The sugar crystals will grow over the next 3 to 7 days.

Reflect

- How long did it take to see the first sign of crystal growth?
- What causes sugar crystals to form?
- Do you think this experiment would work with salt instead of sugar?
- What kinds of circumstances will slow down crystal growth?

Apply

- When you mixed the water and the sugar you had a supersaturated solution. This means that the water could only hold the sugar if they were both very hot. As the water cools, the sugar comes out of the solution and forms back into sugar crystals on your skewer. The skewer, and sometimes the glass itself, act as a seed for crystals to grow. With some luck and patience you will have a tasty, scientific treat!

Science

Youth will learn about super saturated solutions and how sugar crystals form.

References

Science Bob. Make Your Own Rock Candy. Retrieved from http://www.sciencebob.com/experiments/rockcandy.php.

4-H Club Meeting 5
Core Sampling

Supplies

- Cupcakes (one per person)
- Foil baking cups
- Frosting
- Plastic knives
- Food coloring
- Transparent straws

INTRODUCTION

In this club we will explore geology through fun, hands-on activities that teach basic science principles. For this activity we will simulate the way geologists discover what is beneath the Earth's surface by taking core samples from cupcakes!

PRIOR TO THE ACTIVITY

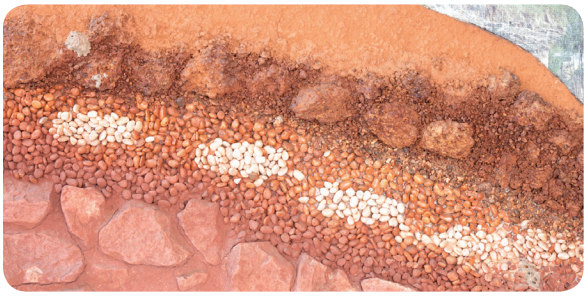
Make cupcakes with at least three layers of colored batter, and for fun add colored sprinkles to the different layers. Use foil baking cups and frosting to prevent the youth from seeing the interior of the cupcakes. If making cupcakes is not an option, purchased cupcakes with cream filling inside can be substituted.

Core Sampling

ACTIVITY 1

Time: 15 minutes

- Everyone should have a pencil, paper, and a cupcake. Fold the paper into four different sections. In the first section draw what you think the inside of the cupcake looks like without peeling back the foil or cutting the cupcake open with a knife.
- Have the youth brainstorm ways they could find out what the inside looks like.
- Someone may suggest using the straw to take a core sample. If not, show them how to push the straw into the cupcake and pull out a sample. (Fresh cupcakes do not work as well as cupcakes that are drier.)
- Make a second drawing of the cross section of the cupcake based on the information from three core samples. Each new drawing should be carefully labeled and placed in a new section of the drawing paper.
- Finally, use your knife to cut open the cupcake and compare the inside to your drawings.



Reflect

- Why do geologists use core sampling?
- Did you make a mess while coring your cupcake?
- Do you think that rock coring also produces material that has to be cleaned up?
- Are there any other ways that geologists can find out what is beneath the Earth's surface?

Apply

- Trying to see what is beneath the surface of the Earth is the job of a geologist. Rather than digging up vast tracks of land to expose an oil field or to find some coal bearing strata, core samples can be taken and analyzed to determine the likely composition of the Earth's interior. Geologists also take core samples to test for groundwater sources, or even to discover oil or gas below the surface.

Science

Youth will learn the process of core sampling and how it is used to extract samples from the Earth's interior.

Independence

Encourage youth to make hypotheses and learn about the different steps of the scientific method.

Mastery

Youth will learn about techniques that geologists use in their studies of the Earth.

References

Women in Mining Education Foundation. Cupcake Core Sampling. Retrieved from http://files.dnr.state.mn.us/education_safety/education/teachers/activities/soudan_mine/cupcake-core_sampling.pdf.

4-H Club Meeting 6
Break-Apart Geodes

Supplies

- Hammers
- Safety glasses
- Old tube socks
- Break-open geodes (can be purchased in bulk from nature-watch.com)

INTRODUCTION

In this club we will explore geology through fun, hands-on activities that teach basic science principles. For this activity we will learn about geodes and break them open to discover what makes them so unique!

Break-Apart Geodes

ACTIVITY 1

Time: 30 minutes

- Each person should have a break-apart geode.
- Remind everyone of proper safety rules.
    - Wear your safety glasses at all times.
    - Keep fingers and feet away from the geode.
    - Be aware of surroundings when using the hammer.
    - Break the geodes on concrete or cement.
- Put each geode into a sock.
- Encourage youth to make hypotheses about the inside of the geode.
- Hit the geode a few times until it breaks. Open up the sock to see the results.

Reflect

- What characteristics make a rock a geode?
- What did you predict to see inside of the geode?
- Were your predictions accurate?
- What factors may have influenced the size and color of the crystals inside of the geode?
- How do you think geodes are formed?

Apply

- Geodes are spherical bodies that may be filled with layers of minerals and/or lined with crystals such as quartz, calcite, pyrite, and dolomite. Geodes form as mineral-rich water is trapped inside an outer core of solid rock, including a layer of Chalcedony (a mineral). As the temperature and pressure changes, the mineral matter inside the geode turns from a liquid to a solid to form a crystal lining.

Science

Youth will learn about geodes and break them open to examine their unique properties. They will make hypotheses and use the scientific method to find answers.

Independence

Encourage youth to make hypotheses and learn about the different steps of the scientific method.

Mastery

Youth will learn to identify rocks and geodes by their distinguishing properties.

References

Nature Watch. Break Open Geodes. Retrieved from http://www.nature-watch.com/break-open-geodes-p-124.html?cPath=160_169.

More to Discover

Congratulations on completing your Discover 4-H club meetings! Continue with additional curriculum in your current project area, or discover other 4-H project areas. Check out the following links for additional 4-H curriculum.

1. http://utah4h.org/htm/discover4hclubs
2. http://www.4-h.org/resource-library/curriculum/
3. http://utah4h.org/htm/resource-library/view-all-curriculum

Become a 4-H Member or Volunteer

To **register** your Utah club or individuals in your club visit:

http://www.utah-4.org/htm/staff-resources/4-h-online-support

http://utah4h.org/htm/about-4-h/newto4h/

Non-Utah residents please contact your local 4-H office:

http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/

Stay Connected

Visit Your County Extension Office

Stay connected with 4-H activities and news through your county Extension office. Ask about volunteer opportunities and don't forget to register for your county newsletter. Find contact information for counties in Utah here:

http://extension.usu.edu/htm/counties

Enjoy the Fair!

Enter your project or create a new project for the county fair. Learn about your county fair and fair judging here:

http://utah4h.org/htm/events-registration/county-fairs

Participate in Local or State 4-H Activities, Programs, Contests or Camps

For Utah state events and programs visit:

http://utah4h.org/htm/events-registration

http://www.utah4h.org/htm/featured-programs

For local Utah 4-H events and programs, visit your county Extension office.

http://extension.usu.edu/htm/counties

Non-Utah residents, please contact your local 4-H office.

http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/

Discover *Service*

Become a 4-H Volunteer!

http://www.youtube.com/watch?v=UBemO5VSyK0

http://www.youtube.com/watch?v=U8n4o9gHvAA

To become a 4-H volunteer in Utah, visit us at:

http://utah4h.org/htm/about-4-h/newto4h/

Serve Together as a 4-H Club or as an Individual 4-H Member

Use your skills, passions, and 4-H to better your community and world. You are needed! Look for opportunities to help in your area or participate in service programs that reach places throughout the world (religious groups, Red Cross, etc.).

Hold a Club Service Project

USU Collegiate 4-H Club hosted "The Gift of Giving" as a club activity. Club members assembled Christmas stockings filled with needed items for CAPSA (Community Abuse Prevention Services Agency).

http://tinyurl.com/lu5n2nc

Donate 4-H Projects

Look for hospitals, nursing homes, or other nonprofit organizations that will benefit from 4-H projects. Such projects include making quilts for CAPSA or Primary Children's Hospital, or making beanies for newborns. During Utah 4-H State Contests, 40 "smile bags" were sewn and donated to Operation Smile.

Partner with Local Businesses

92,000 pounds of processed lamb, beef, and pork were donated to the Utah Food Bank in 2013 by multiple companies.

http://tinyurl.com/pu7lxyw

Donate Money

Clubs or individuals can donate money gained from a 4-H project to a worthy cause. A nine-year-old 4-H member from Davis County donated her project money to help a three-year-old battle cancer.

http://tinyurl.com/mqtfwxo

Give Us Your *Feedback*

Help us improve Discover 4-H curriculum. We would love feedback or suggestions on this guide; please go to the following link to take a short survey:

http://tinyurl.com/lb9tnad