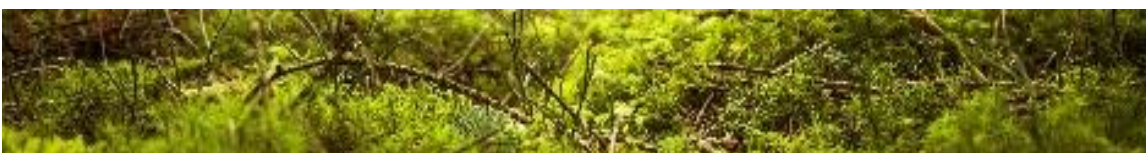


WI 4-H CLOVERBUDS

ACTIVITY PLANS & FAMILY LETTERS



PART 2



An EEO/AA employer, University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title VI, Title IX, and the Americans with Disabilities Act (ADA) requirements.

La Universidad de Wisconsin-Extensión, un empleador con igualdad de oportunidades y acción afirmativa (EEO/AA), proporciona igualdad de oportunidades en empleo y programas, incluyendo los requisitos del Título VI, Título IX, y de la Ley Federal para Personas con Discapacidades en los Estados Unidos (ADA). *Spanish language materials inside.*

BE AN EGG-SPLORER!



4-H PROJECT AREAS:

Animals, Science & Technology

LIFE SKILLS:

Critical Thinking, Communication, Keeping Records

TIME:

30 minutes (5-10 minute per experiment, 3 experiments)

MATERIALS:

- Egg Size Data Sheet (attached)
- Question Eggs (attached) - 1 copy per group
- Paper
- Markers, colored pencils or crayons
- 1-2 dozen eggs, depending on number of participants (3 eggs per group)
- Bowls (2 per group)
- Rulers (1 per group)
- 6 inch pieces of string (1 per group)
- 1 clear glass or jar per group
- Hot water (hot pot, thermos, etc.)
- Magnifying glasses (optional)
- Scale (optional)

MAKE AHEAD OF TIME:

Number the eggs 1-12. Give three eggs to each small group of 3-4 youth.

We all know a little bit about eggs. Some people eat them for breakfast. They come from birds. But what else can we learn?

Did you know?

Eggs can be brown, white, speckled, or other colors like green or blue. They can be big or small, depending on the bird they come from. Eggs have three main parts - yolk, albumen (pronounced *alb-you-men*), and shell. The yellow center is the yolk, which contains protein, vitamins, minerals and fat. The “egg white” is called the albumen.

The shell protects the egg and has tiny holes in it, which allow air to move into and out of a small air pocket inside.

Investigate

*For this activity, we'll be using chicken eggs. If you have access to eggs from a variety of birds (or pictures of them), it's a great way to show differences in size and color. Small groups of 4-6 youth led by an adult or older youth work best. Each group has three eggs to compare. In the small group, **Ask, Are all 3 of my egg friends the same size? How do you know? How could you measure them?***

After listening to some ideas, tell them we will use string.

Ask

What do you think of when you hear the word, “egg?”

How do people use eggs?

What ways do people use them, besides for eating?



Demonstrate:

- Wrap a piece of string around the middle of the egg. Mark the string where it meets the beginning of it. Hold the string along the ruler to see how long it is. Write this measurement on the data sheet
- Repeat this process for the vertical measure of the egg.
- If you're weighing the eggs (optional), use a kitchen scale and record the weight on the data sheet.
- Repeat this process for all 3 eggs and discuss the results.

Ask: Do the shells have any holes?

How might they find the answer to this question?

Encourage the youth to look closely at the eggs. Do they see any holes? Then demonstrate:

- Place the egg carefully inside a glass or jar. Carefully pour hot water into the glass/jar until it is nearly full.
- With the glass/jar on the table, watch the egg closely for a few minutes (Be careful of the hot glass.).
- Ask the youth what they notice about the egg in the hot water. They should see bubbles forming on the shell and floating to the surface.
- Explain that there's an air pocket inside the egg and tiny holes in the shell that allow air to pass back and forth through it.
- Encourage the youth to use magnifying glasses to look at the other two eggs. Can they see the small holes in the shell?

Ask: What's inside of the eggs? How might you find out what's inside?

Guide them toward the suggestion of cracking one open. Then demonstrate:

- Crack the two eggs that were not in the hot water, each into its own bowl and encourage them to observe what is inside
- Ask youth to identify the yolk and the albumen. Have them describe what they see to a partner.
- Ask them what is the same and what is different between the two eggs.

Create

Give the youth paper and coloring supplies. Ask them to draw a picture showing what they learned about eggs during the activities.

Share/Reflect

Ask, What was the same about your group's eggs?

Ask, What was different about them?

Ask, What do you know about eggs that you didn't know before?

Relationship to 4-H...

A sense of Mastery is one of the four essential elements of 4-H. Mastery, in this case, means youth learn more and more about their project every year. 4-H builds on what youth know to help them grow in their skills and understanding with each year of participation. After several years in a project, they gain Mastery and share what they have learned with younger youth, starting the cycle of learning all over again.

More to explore...

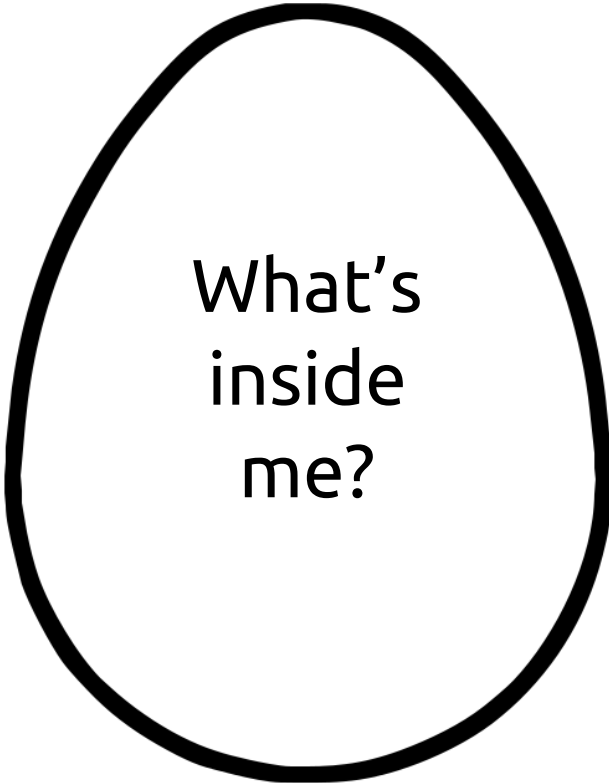
If time allows, help the children compare different groups' eggs - by size and color.

Explore answers to more questions about eggs: Does the weight of a raw egg change when it's hard boiled? Will an egg roll at different speeds on different surfaces? Will eggs roll in a straight line? Your local public library has lots of fun books about eggs. Go check some out.

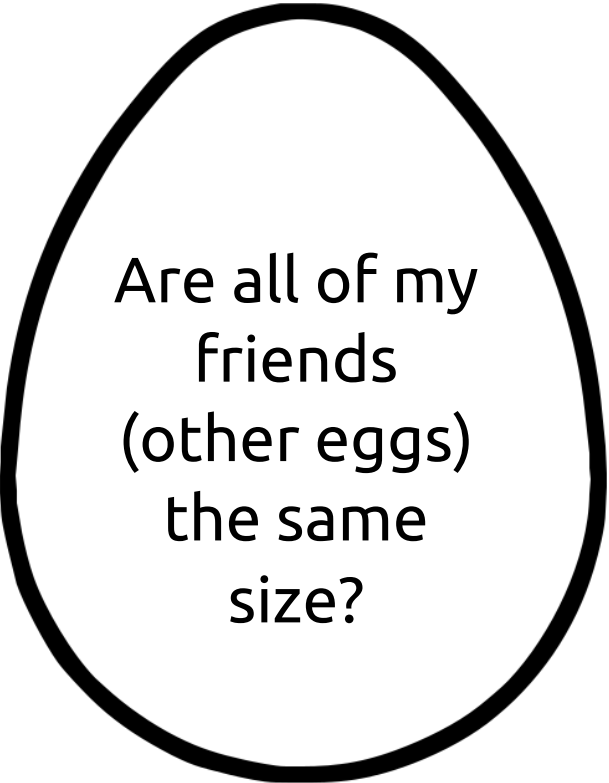
Egg Size Data Sheet

Egg #	Horizontal Measurement	Vertical Measurement	Weight (optional)

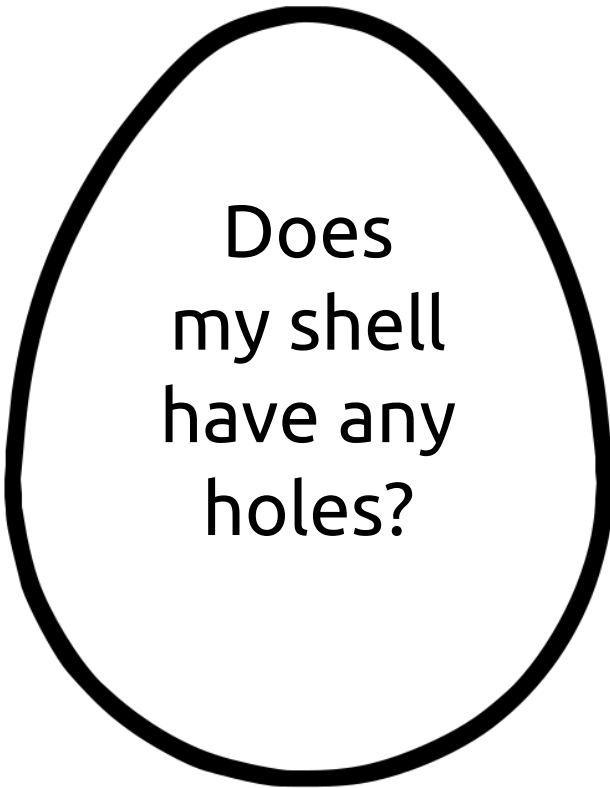
Question Eggs



What's
inside
me?



Are all of my
friends
(other eggs)
the same
size?



Does
my shell
have any
holes?

THE GIANT'S BREAKFAST



Reading and listening to stories can be really creative times for youth. Today, we will use our imaginations while dramatizing part of the classic “Jack and the Beanstalk” tale.

4-H PROJECT AREAS:

Theatre Arts

LIFE SKILLS:

Social Skills, Communication, Learning to Learn

TIME:

25 minutes

MATERIALS:

- A picture book version of the *Jack and the Beanstalk* tale. Here are a few suggested options that are readily available through most public library systems:
 - *Jack and the Beanstalk* retold and illustrated by Stephen Kellogg
 - *Jack and the Beanstalk* retold by Richard Walker and illustrated by Niamh Sharkey
 - Or do a web search for “free jack and the beanstalk” to find online versions
- Blank pieces of paper
- Washable markers/crayons/colored pencils

BEFORE YOU BEGIN:

Clear some space so that the youth participants can safely move around during the activity. Read through “The Giant’s Breakfast” narrative pantomime script so that you feel comfortable reading it expressively during the activity.

Ask

Have you ever heard the story of Jack and the Beanstalk?

What do you know about that story?

There is a giant in the story. What do you imagine that giant looks like?

Did you know?

Pantomime is a theatrical technique used to communicate without words. When you use pantomime to tell a story, it works well to use larger-than-life movements and facial expressions. Your movements can give clues to an audience about the characters, the setting, or the situations in a story. Since everyone’s imaginations come up with different ideas, each person’s pantomimed movements show their special creativity.

Investigate

Invite the youth to listen to the story of “Jack and the Beanstalk.” Then they will explore the story with their minds, voices, and bodies. Read aloud the picture book of “Jack and the Beanstalk.”

Ask, Now that you have heard the story, how have your ideas about the giant changed? What do you imagine about the giant now?

*(For tips about how to keep a group of children engaged while reading, check out these hints for how to read aloud to a group:

<http://www.readingrockets.org/article/hints-how-read-aloud-group>)

Create

Hand out the paper and markers. Explain to the youth that they are going to imagine that they are Jack, and they are planning a way into the giant's home. Tell them to use the markers to draw a map of the giant's house on the paper.

Ask: *What are the different ways that we can get into the giant's house? Remember, we have to find a sneaky way in, because we don't want the giant to catch us!* After the youth draw maps, invite them to share their drawings with the group and share the way that they plan to get into the giant's house.

Move the group to a space where everyone has some space to move around easily and safely. Tell the youth to bend their arms at the elbows and make "chicken wings." Flap the chicken wings. If they bump someone with their chicken wings, they need to move so that everyone has enough space.

Tell the youth, "We are going to pretend to be Jack in the giant's house. As we listen to the description of the giant's house, let's imagine the space, and move around and explore it. Pretending to do an action without talking is called 'pantomime.' In this activity, we will pantomime all of the things that are being described. So let's close our eyes." Begin reading the script. Remember, the more enthusiastic the reading is, the more fun it will be for the youth to imagine and explore.

Resources Sources: Improvisation with Favorite Tales by Ruth Beall Heinig. Heinemann, 1992.
Arizona State University Theatre for Youth Program
Adapted by: Brianna Stapleton-Welch, UW-Extension 4-H Youth Development Educator, Dane County

Share/Reflect

Ask, *What did it feel like when you pretended to be Jack exploring the giant's breakfast table?*

Ask, *What were the easiest parts of the story to imagine? What was the most difficult?*

Ask, *What was the most fun for you to pantomime?*

Ask, *What other parts of the giant's house would you like to imagine?*



Relationship to 4-H...

4-H is a program where young people make choices about their own learning and explore the topics that interest them. There are many short term opportunities (like events and day camps) and long-term opportunities (like enrolling in a 4-H project) that youth can try. Help new members and families discover what there is to learn as they grow with 4-H. Invite older members to talk about their favorite projects or activities with younger members. Take time to explain to parents the opportunities offered through the club and county.

More to explore

If there is time, narrate more rooms of the giant's house so that the youth can pantomime more of Jack's adventures. Allow some of the youth to say their own descriptions of rooms for their friends to pantomime.

THE GIANT'S BREAKFAST

Open your eyes. Congratulations, you made it inside the giant's house without getting caught! There is a little door in front of you. Turn the knob and walk through. It is just tall enough for you – watch out so that you don't bump your head. You see that you are in the kitchen of the giant's house! It's very bright here. Allow your eyes a moment to adjust. The ground at your feet is red and white in large squares. You're standing on a giant tablecloth. And there before you is a large plate. Walk over to it. Stop. Smell that. Fresh coffee. Must be coming from that cup and saucer over that way. Step up onto the plate. See the bright yellow scrambled eggs at your feet. Hop up on them. Bounce around. Play. Now step over here to the peanut butter toast. Climb up and try to walk on the toast. Sticky...it's hard work to get across. Smell the peanut butter? You can taste some if you like. Oh, and over here is a tall stack of pancakes. Climb them as if you were climbing up a mountain. Whew...you made it to the top. With all the butter up here, it's pretty slippery. You can slip and slide on the top of this pancake mountain like an ice skater. Come on down. Look, there is something else on the plate. I can't quite see it, but it's a food you like. Go ahead and explore it. Play with it, on it, or in it. Can you smell it? Do you want to eat some? Explore with all your senses.

Oh no. Listen. Do you hear the sound of a cat meowing. This cat must be huge. Hide someplace on the plate. Quickly...hide, hide. The cat's up on the table now. Sniffing around. Getting closer to you and closer and closer and...Listen – the sound of giant footsteps. The giant is coming! Listen as he picks up the cat off the table and puts her outside. His footsteps are moving away from the table. Each step makes the floor tremble. This is your chance to escape. Come out from your hiding place and run for that little door. It's locked again. Pull on the doorknob. It comes off in your hand. Here comes the Giant again and he sees you. There's a key on the floor. Pick it up. Put it in the lock. It works. The door opens. Jump through and land on the floor. Just rest now. You are safe. Close your eyes. Just breathe easily. Open your eyes. Hey, you're back in our room! Wasn't that an exciting adventure?

I'M A THUMB-BODY, YOU'RE A THUMB-BODY



4-H PROJECT AREAS:

Healthy Living

LIFE SKILLS:

Accepting Differences, Communication, Goal Setting

TIME:

20 - 30 minutes

MATERIALS:

- Ink pad
- Hand wipes or paper towel
- Paints or crayons in a variety of flesh tones
- White paper plates
- Various craft supplies – buttons, yarn, sequin, pasta, rice, beans, pipe cleaners, etc.
- Glue or glue sticks
- Magnifying glasses (optional)
- Mirrors (optional)

PREPARE AHEAD OF TIME:

Create a sample Thumb-body. Set up a supply table.

We will create two self-portraits, or pictures of ourselves. One will be how we see ourselves now, and the other how we think we might look later. When we share them, we will learn about ourselves and others.

Did you know?

Diversity simply means differences. Some ways we might be different are in what we like or don't like, the shape of our body, what we want to do when we get older, the color of our skin, hair and eyes, or how we dress. Accepting each other's differences means we see and celebrate what is special about each of us, even if we don't always agree.



Ask

What is one thing you have in common with someone else? (ex: similar interests, where you live)

What is unique or different about you?

What are some other ways people are diverse, or different, from each other?

Investigate

Pass out magnifying glasses to share (optional). Encourage the youth to look closely at their thumbprints, then look at a neighbor's thumb.

Ask, Is your thumbprint the same or different than your neighbor's?

Tell the youth that each of us has different fingerprints from everyone else. Fingerprints are just one way we are each special and unique.

Other ways might be the things we like or don't like, the shape of our body, what we want to be when we get older, the color of our skin, hair and eyes, or how we dress.



Create

Help youth place a thumbprint at the bottom of each of two paper plates. They can draw stick arms on the thumbprints to make the body of their self-portraits.

The youth should label one self portrait plate “Now” and the other plate “Later.” Start by drawing on the NOW plate what they look like now using the colors and other materials provided. Then, invite them to draw on the LATER plate what they think they might look like as an adult.

Encourage the youth to include pictures or features in or around both portraits that represent things they care about, what they enjoy doing, and how they see themselves.

Resources Sources: “All Our Colors,” Annie Lisowski, Buffalo County UW-Extension, 4-H Youth Development Agent; “Mirror Mirror Now and Later” from *A Palette of Fun with Arts & Crafts* by Metzger, et. al. **Adapted by:** Monica Lobenstein, UW – Extension 4-H Youth Development Educator, Jackson County

Share/Reflect

After youth have created their self-portraits, invite each one to show their pictures of themselves - now and later. Encourage them to share why they added the details they did in each portrait.

Ask, What parts of your portrait show how you are unique or diverse?

Be sure that each youth can identify at least one unique interest or characteristic.

Ask, Why is diversity, or differences in people, important in a community?

Ask, How does it feel to know that no one else is exactly like you?

Relationship to 4-H...

As Wisconsin 4-H Youth Development programs continue to explore the needs of all youth, an important job for everyone is to think about how we create a welcoming environment that is safe for all young people. Regardless of differences, our job as adults and youth in the 4-H Youth Development program is to be sure that everyone is invited and can fully participate in programs. One way to take that a step further is to learn about ourselves and each other.

More to explore...

Create fingerprint cards for the whole family. Are some things about the prints the same? Are others different?

Find out more at:

<http://pbskids.org/zoom/activities/sci/fingerprints.html>

Encourage the youth to set goals and explore the activities or career(s) they included in their portraits. Use the Internet to learn more or visit places where people with similar interests work.

RELAXATION GARDENS



4-H PROJECT AREAS:

Cultural Arts, Healthy Living

LIFE SKILLS:

Stress Management, Healthy Lifestyle Choices, Managing Feelings

TIME:

20 - 25 minutes

MATERIALS:

- 1 shallow tray per person (i.e. clean frozen dinner tray, pie pan)
- Fine sand, small rocks, polished stones, smooth glass pieces, shells, or small pieces of tree bark
- 2 or 3 pronged twig to serve as a rake (other options include craft sticks, pipe cleaners, or small plastic forks)
- Zippered plastic bags (for safe transportation home)

PREPARE AHEAD OF TIME:

Create a sample relaxation rock garden (optional)

Nature can help us to feel calm inside. We will use our senses to explore objects from nature. Then we will each create our own relaxation garden from the objects we like best.

Did you know?

Relaxation gardens are also known as Japanese or rock gardens. Relaxation gardens are made with sand that is raked to look like waves or ripples in water.

These simple gardens, like water or waves, can be used to help us feel less stressed or to calm ourselves.

Investigate

Stress is often thought of as a grown-up thing, but we can all experience stress at any age.

Ask, What are some things that might cause stress?

Stress might be caused by something at school, with friends, or at home with family. Even happy things can feel stressful sometimes. Stress comes from many situations.

Ask

What does it mean to feel “stressed?”

What are some of the signs your body gives you when you feel stress?

What are some things you do to feel calm or to relax?

Create

Have each youth create their own relaxation garden:

Relaxation Garden:

1. Pour sand about half full in a shallow tray.
2. Use a craft stick or your hand to smooth the sand.
3. Arrange stones, bark, shells or other natural elements in patterns. Experiment with different designs and arrangements. Pay attention to the different textures and colors as you arrange them.



4. Use a pronged twig or simple stick to make ripple lines or “waves” around and between the stones, shells or bark.

Relationship to 4-H...

Two important ways young people learn about stress and strong emotions are through experience and by watching the adults around them. 4-H Youth Development programs encourage youth to take healthy risks by trying new things, so they may experience and learn to manage stress in a safe, supportive and caring environment. In that environment, young people spend time with adult role models who show them healthy ways of dealing with stress.

Share/Reflect

We can use a relaxation garden when we feel stressed or want to relax. Drawing patterns around the stones or other items takes our minds off things that may be bothering us and focuses our positive energy to the garden.

Ask, What was it like to create a Zen garden?

Ask, How do you feel after creating your Zen garden?

*(*Note: it is okay if they do not feel relaxed after making it. Encourage them just to notice whatever they are feeling without judging it.)*

Ask, What kinds of textures did you put in your garden?

Ask, How do you plan to use your garden?

Playing with a relaxation garden is just one way to calm ourselves down.

Ask, What are some other ways you relax?

More to explore

Guide participants through a simple meditation exercise, yoga stretch or breathing exercise.

Guide participants through a Zentangle drawing exercise. Have them share how they can use Zentangle to help them relax.

Provide participants a coloring page. Have them share how they can use this to help them relax.

Resources:

Developed by: Lisa Devine-Barribeau and Lynn Feldman, UW –Extension 4-H Youth Development Educators, Marinette & Oneida Counties

SOGGY SCIENCE



Plants need water to survive and grow. Experiment with two gardening products to find out how they work to keep water close to plant roots. Which one would you use in your garden?

4-H PROJECT AREAS:

Science & Technology, Plant & Soil Science

LIFE SKILLS:

Critical Thinking, Decision Making, Learning to Learn

TIME:

30 minutes

MATERIALS:

- 9-oz. plastic cups (4 per participant or pair of participants)
- Plastic spoons (1 per participant or pair)
- Water storing crystals or gel crystals *
- Long-fibered sphagnum moss *
- Water
- ½ teaspoon measuring spoon
- 1 cup dry measuring cup
- Liquid measuring cup
- Cheesecloth (or scrap fabric works too)
- Rubber bands

** Find these in the gardening section of local department stores*

PREPARE AHEAD OF TIME:

Cut cheesecloth or scrap fabric into 5 inch squares - enough for 2 per experiment.

Try the experiment yourself, so you know what to expect from the materials and the process.

Did you know?

Gardeners use a variety of products to keep water close to the roots of their plants.

One product, long-fibered sphagnum (pronounced *sf-ag-num*) moss, is a special agricultural product. It comes back year after year, and has grown in marshes in western Wisconsin since prehistoric times, back when dinosaurs roamed the earth.

Today, it is used in gardening and farming, because it holds a lot of water - up to 20 times its weight - and kills bacteria that can make plants sick

Investigate

Show the photos of the microscopic views of two different products - long-fibered sphagnum moss and gel crystals - that gardeners use to absorb water and keep it close to plants' roots. Explain that microscopes look at things so tiny that we can't see them with our eyes.

Ask

What does it mean for something to “absorb” water?

What kinds of things in your home absorb water?

What happens when something absorbs too much water?

Show youth the real products, and ask them to guess which picture goes with each product. Then ask for guesses – or hypotheses – about which one will absorb the most water.

Explain that the cells of the moss are shaped like tiny boots and water molecules can stick to the inside and outside of the cell. The gel crystals are scientifically designed to make water molecules stick to them, making them especially absorbent. Ask if this new information changes their hypothesis.



Create

Next, it is time to do a scientific experiment to test their hypothesis. Help the participants add a ½ teaspoon (flat) of gel crystals to one 9-oz. cup. Then add 1 cup (loosely-packed) moss to a second 9-oz. cup. Add ½ cup of water to each cup, stir and then let the cups sit for 5-10 minutes.

This is a great time to play an icebreaker game or have a snack, giving the children time to check on their experiments here and there.

Return to the experiment. Cover the tops of the two filled cups with the pre-cut fabric. Secure the fabric on top with a rubber band. Pour the remaining unabsorbed liquid into the extra two cups. The fabric filters the water and keeps the solid material in the cups.

Share/Reflect

Ask the participants:

Ask, What did you notice about the water you poured off?

Ask, Which product absorbed more water and held it?

Ask, Why do you think that happened?

Ask, Why might a gardener still want to use the product that absorbed less water?

After the experiment, you will probably have some dry materials left over. Consider sending a couple of scoops of each gardening product home with the children in zippered bags so they can experiment more at home.

More to Explore

Explore the neighborhood. Can you find any moss living nearby? Where does it grow?

Try mixing moss or gel crystals into the soil of a potted plant at home. Check how often the plants need to be watered, compared to other plants.

Try making Moss Graffiti. (Note: Use live moss, not the dried moss we used today.)

Relationship to 4-H...

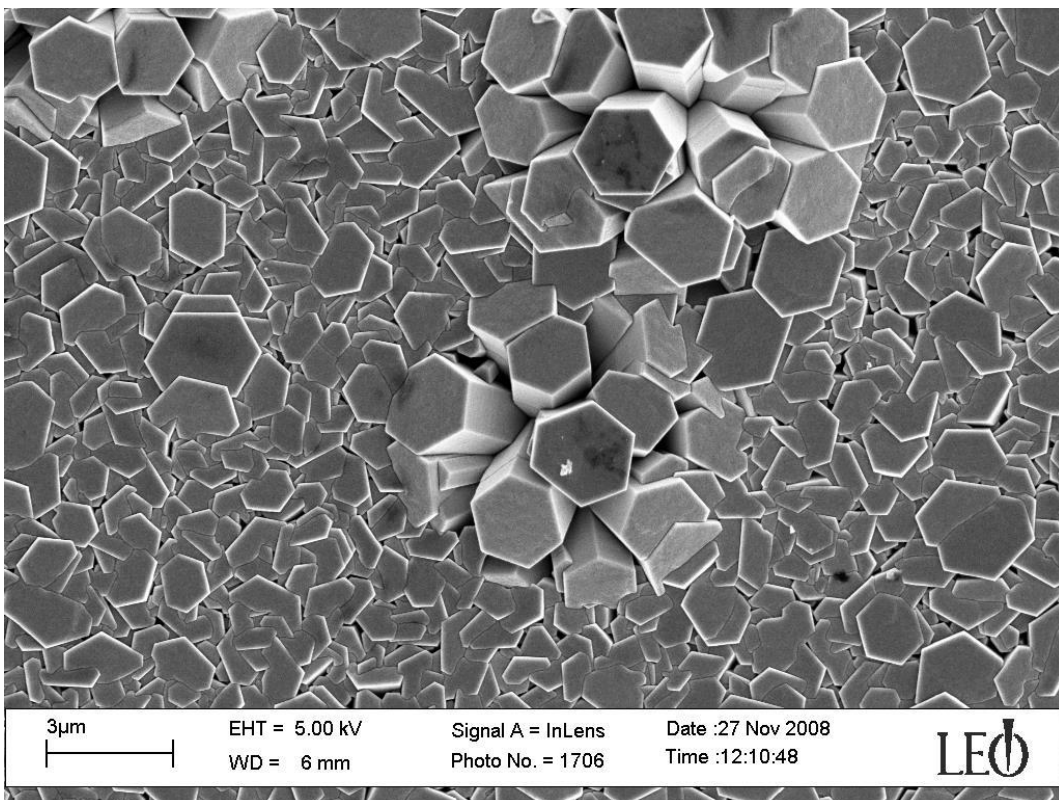
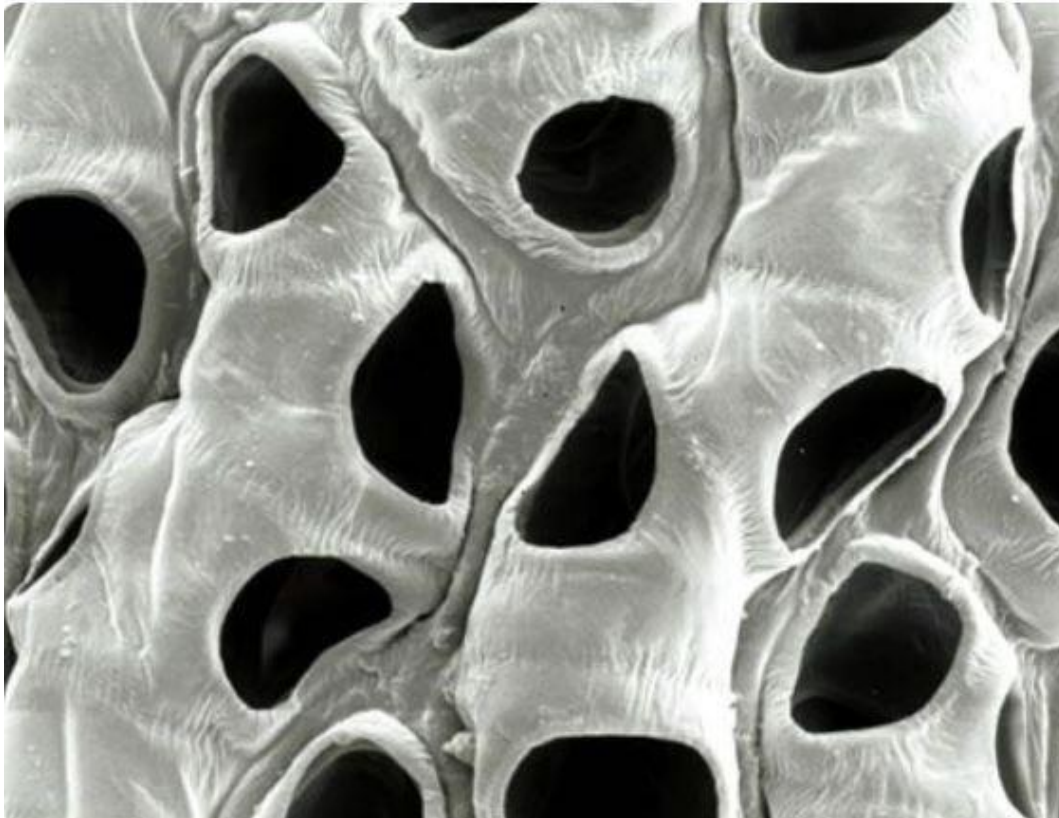
4-H creates a safe space where youth can take what they know, develop an idea (or hypothesis) and test it out. It doesn't matter if their idea does or doesn't work. It doesn't matter if their hypothesis was or wasn't right. What *does* matter is the exploration of their ideas, trying something new, and knowing it is okay to fail sometimes. That's when the learning happens.

Resources:

Developed by: Monica Lobenstein, UW-Extension 4-H Youth Development Agent, Jackson County

Moss or Gel Crystals?

The two pictures below are microscopic views of either long-fibered sphagnum moss or gel crystals. Microscopes look at things up close, things we can't even see with our eyes. Which one of these pictures do you think is the moss? Which is a picture of gel crystals? Why do you think so?"



THE SUPERHERO IN YOU



4-H PROJECT AREAS:

Visual Arts, Community Service, Communication Arts

LIFE SKILLS:

Self-esteem, Responsible Citizenship

TIME:

30 minutes (15 minutes per activity)

MATERIALS:

- Markers
- Toilet paper rolls (two per child)
- Glue or glue sticks
- Cling wrap
- Paper
- Rubber bands
- Scissors
- Flashlight

PREPARE AHEAD OF TIME:

Create a sample superhero symbol and wrist cuffs.

Preparations for Superhero Symbol:

Trace and cut out paper circles the size of one end of the toilet paper roll (1 per child)

Cut small squares of cling wrap (approx. 4 inches x 4 inches)

Preparations for Wrist Cuffs:

Cut toilet paper rolls (1 per child) along one side. Then cut the roll in half to make two small cylinders.

Cut construction paper rectangles – large enough to cover a half toilet paper tube.

Superheroes use what they're good at – their special talents – to help other people. Let's each make a symbol for ourselves and create wrist cuffs that show what we are good at.

Did you know?

Most superheroes started out as average, everyday people. Then, they found out there was something special about them, and they wanted to use their talents to help others.

Superheroes create secret identities and costumes to hide who they really are. Their costumes usually include masks, gloves and boots, maybe even a whole special outfit. Wonder Woman, Falcon, Superman, Totally Awesome Hulk, Miss America (AKA America Chavez), and Ms. Marvel are just a few examples. Some work alone, while many others work together in teams, like *The Incredibles*, *Teenage Mutant Ninja Turtles*, and *Big Hero 6*.*

Today's activity is about celebrating our talents and how we can use them to help other people.

* Note: Printing pictures of these individual superheroes and superhero teams can help youth imagine them. All it takes is a quick web search.

Ask

What/who do you think of when I say "superhero?"

What makes superheroes special?

What do they do with their special talents?

Investigate

Each one of us has a chance to be a superhero to someone else. We just need to know what makes us special. We need to think about how we want to use that special talent to help other people.

Ask, What is something you are good at?

It might be a talent we have, something we do to help people, or just something about who we are that makes other people feel good.

Tell a partner about your special talent and listen to them tell you about their special talent.

Create

Have youth create their own superhero symbol and wrist cuffs.

Superhero Symbol

Tell youth to draw a symbol for themselves on one of the small pre-cut paper circles. Cut the symbol out.

Have them glue the symbol to a square of cling wrap.

**Note: Glue it backward if the child is using a letter for their symbol.*

They can cover it with a second piece of cling wrap and wrap the edges around the paper tube with a rubber band.

Superhero Wrist Cuffs

Encourage youth to decorate 2 strips of construction paper with pictures about special talent(s) they use to help other people.

When they are finished, they can glue the decorated construction paper to the half toilet paper rolls.

Share/Reflect

Encourage the children to wear their wrist cuffs.

Ask, What is your talent?

Ask, How do you use it to help other people?

Dim the lights if possible. Then, as each child shares about their talents, shine the flashlight through the tube to see their superhero symbol on the wall.



Relationship to 4-H...

The third "H" in 4-H – hands – refers to how every single person, from the youngest Cloverbuds to the most experienced adult volunteers, has something to give back to our communities. Everyone is valued because everyone can contribute. 4-H groups do lots of different service projects, from canned food drives to service learning trips in other countries.

More to Explore

Talk with an adult about how you can use your special talent to do a service project or help someone in your community.

Take a picture of yourself using your special talent. Share it at a public event (like the county fair, cultural festival, or community gathering) with your Superhero Symbol and Wrist Cuffs.

Resources: **Source:** Make a Superhero Symbol: www.kidspot.com.au.

Adapted by: Monica Lobenstein, UW-Extension 4-H Youth Development Agent, Jackson County

TASTY GROUNDWATER



4-H PROJECT AREAS:

Natural Resources, Environmental Education

LIFE SKILLS:

Critical Thinking, Learning to Learn, Planning

TIME:

15 - 30 minutes

MATERIALS:

- 9 oz. clear plastic cups (1 per participant)
- Straws (1 per participant)
- ½ Measuring cups
- Spoon (1 per participant)
- Medium size M&Ms (1 tablespoon per participant)
- Cookies (1 per participant)
- Softened vanilla ice cream (½ cup per participant)
- Clear (white) soda (½ cup per participant)
- Chocolate chips (1 tablespoon per participant)
- Pictures of groundwater aquifer, pollution, and well

**Note: See the Family Guide for alternative ingredients to include*

BEFORE YOU BEGIN:

Clean and sanitize all surfaces where food will be prepared or eaten.

Check with families about any food allergies or reactions. Be sure parents or caregivers are aware that the youth will make an edible ice cream treat during the activity.

Use safe food handling practices. Have everyone wash hands. Be sure the adult distributing ingredients is wearing food safe gloves.

Pollution on the ground can sink in, all the way down to our water. Today, we are going to create a tasty ice cream treat while learning how pollution affects water in the ground.

Did you know?

Groundwater comes from rain or melted snow that goes into the ground. Water sinks down further and further - through the soil and through cracks in rocks until it can't go any further. When it's way down deep, it is called groundwater, and the only way to get to it is to dig a well. A well has a special pump that pulls groundwater back up for us to drink.

Ask

How do you use water? What does it normally look like?

Do you think all water is clean, all the time? Why or why not?

How do you think pollution affects this water? Why or why not?

Investigate

Show pictures of a groundwater aquifer (*ak-wuh-fer*), pollution and a well. Explain that we get water we use from the ground - for bathing and drinking. Today, we will be creating a sample of a slice of earth that has a water aquifer and a well. We can then drink the "water" from the earth sample.

Create

1. Measure 1 Tablespoon of chocolate chips and place in the bottom of an empty cup. The chocolate chips represent the gravel, rocks or sand that make up the lowest part of our ground, which is saturated with water.
2. Measure $\frac{1}{2}$ cup of vanilla ice cream and put on top of the chocolate chips in the cup - making sure there are some gaps between the chocolate chips and ice cream. The ice cream represents the layer of ground made up of rocks or clay that water has a hard time passing through.
3. Crush the cookie and place on top of ice cream. The cookie represents gravel and soil. See the spaces between the pieces of cookie? Water can easily pass through this layer because of the spaces between the materials. That is different than the ice cream, where there are fewer spaces - water has to work harder to get through!
4. Measure 1 Tablespoon of M&Ms and place on top of the cookie crumbles. This layer represents pollution on earth.
Ask: What is pollution? What are some examples of pollution?
5. Measure $\frac{1}{4}$ cup of clear soda, and slowly pour into the cup like it is raining. After it has settled, pour one more $\frac{1}{4}$ cup on top of the M&Ms. The soda represents water as it moves over pollution into earth. We can see how pollution gets pulled through the layers and into water we use.
6. Carefully put the straw into the cup until it reaches the bottom around the chocolate chips.

The straw represents a well that pulls water up for us to use.

7. Take a drink from the straw. Your mouth is acting as a well pump that pulls water up.

Share/Reflect

Ask, Where do we find something like this in real life?

Ask, What happened when it rained on top of the pollution (M&Ms)?

Ask, How can we help to make our water cleaner?

Relationship to 4-H...

One of the essential elements of 4-H is generosity. 4-H youth and their families participate in community service projects to improve the places where they live, work, and play. 4-H Youth Development believes that young people at all ages can learn about the world around them and use their heads, hearts, hands and health to do actions (big and small) that make their communities better.



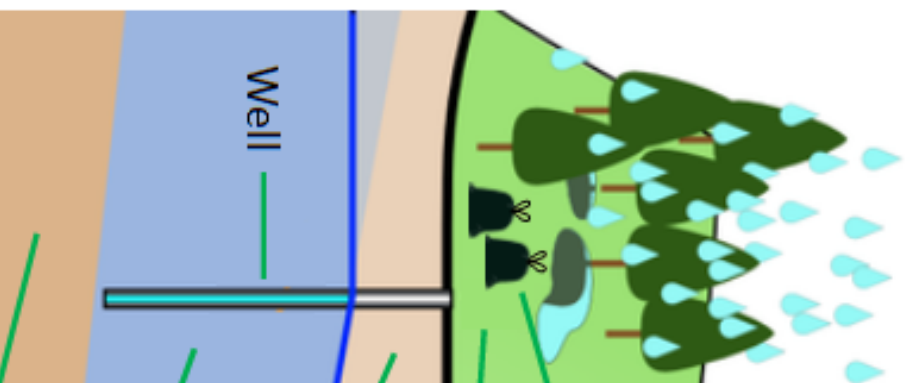
More to Explore

Ask youth to pay attention to pollution (dirt, waste, garbage, harmful things) in the environment around them. Encourage them to think about what they could do to clean up their environment and lessen pollution.

Resources Sources: DEQ in the Classroom: The Incredible, Edible Aquifer, Idaho Department of Environmental Quality - Groundwater and Aquifer, Well Water Program, Oregon State University

Adapted by: Kayla Viste, Interim UW - Extension 4-H Youth Development Educator, Outagamie County

Groundwater



Pollution

Unconfined Aquifer Layer

Made of gravel and soil

Confining Aquifer Layer

Made of rocks or clay that water has a hard time passing through

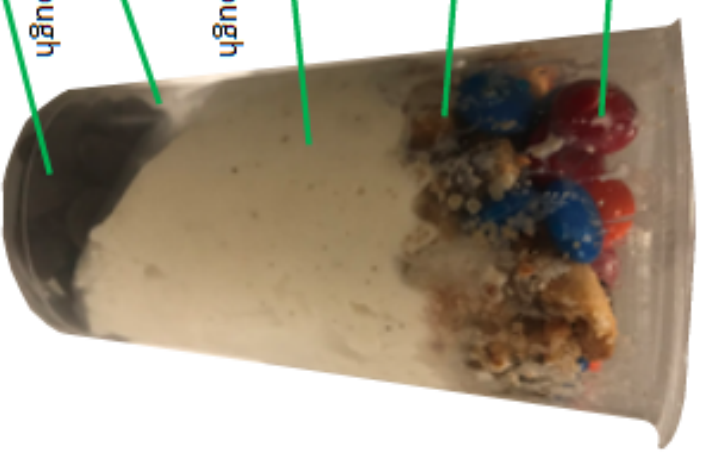
Confined Aquifer Layer

May have gravel, rocks, or sand that water cannot pass through

Water is caught in this layer

Bedrock

Water cannot pass through



Created by: Kayla Viste,
Interim 4-H Youth Development Educator
Outagamie County UW-Extension



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Commons \ [https://commons.wikimedia.org/wiki/File:Groundwater_\(aquifer,_aquitard,_3_type_wells\).PNG](https://commons.wikimedia.org/wiki/File:Groundwater_(aquifer,_aquitard,_3_type_wells).PNG)

USING YOUR SUPER SENSES



4-H PROJECT AREAS

Foods & Nutrition

LIFE SKILLS:

Healthy Lifestyle Choices, Learning to Learn, Critical Thinking

TIME:

20 - 30 minutes

MATERIALS:

- Crayons or colored pencils
- Poster markers
- A large piece of paper or poster board
- White medium-sized paper plate
- A banana or pineapple slices (1 for the group)
 - Put this fruit in a small paper bag
- An orange or a kiwi (1 for the group)
- Baby carrots or a carrot stick (1 per youth)
- Blueberries in a clear container (1 container for the group)
- Red bell pepper (1 for the group)
- Extra samples of fruits and vegetables as desired for tasting

BEFORE YOU BEGIN:

Prepare the food samples for the “Investigate” sensory exploration activity by washing them thoroughly. Check with parents/caregivers ahead of time about food allergies. Everyone doing the activity should wash their hands using soap and warm water for 20 seconds beforehand.

Resources: Sources: “Eat Your Colors” From USDA’s Discover MyPlate, “Color Your Plate! Eat More Vegetables and Fruits from Cornell Cooperative Extension’s CHFF, cookingmatters.org.

Adapted by: Brianna Stapleton-Welch and Melinda Pollen, UW – Extension 4-H Youth Development Educators Dane and Brown Counties

We use our senses every time we eat. Colors, crunches, smells, textures, and taste all matter when we choose fruits and vegetables to eat.

Did you know?

Most Americans do not eat the recommended amount of vegetables and fruit. According to myplate.gov, children should eat 2 ½ cups of vegetables each day and 1 ½ cups of fruit per day. If we are not familiar with a vegetable or fruit, it can be tough to try a new taste. Sometimes we need to see and learn about a fruit or vegetable a few times before we learn to like it. Vegetables and fruits are packed with vitamins, minerals and fiber that keep us healthy. They help us grow strong, have healthy skin and hair, and do our best when we play and learn.

Ask

What fruits and vegetables can you name that are orange?

Write ideas down on a large piece of paper or poster board. Continue by asking for fruits and vegetables of other colors: green, purple, etc.

Ask, Have you tasted any of these fruits and vegetables before? What do they taste like? Where did you eat them?

Ask, Why do you think it is good to eat fruits and vegetables of different colors?

Follow up by explaining to the youth that eating different colors helps your body & brain.

Red, blue, and purple fruits and vegetables can boost your memory. Green ones give you strong bones and teeth. Orange and yellow ones keep your eyes sharp and help you fight off colds.

Investigate

Tell the youth that they will get to explore fruits and vegetables with their senses.

Gather everyone in a circle. Do not let the youth see the food items you have prepared.

Smell: Ask youth to close their eyes and stay quiet as you walk in front of them and allow them to smell the banana or pineapple slices in a paper bag. See how many participants are able to guess the correct fruit, after everyone has had the opportunity to smell it.

Touch: Pass around an orange or a kiwi and ask youth to describe how the outside feels.

Hearing: Have youth close their eyes and listen closely as you take a bite of a carrot. Can they guess which food made that sound? If you have enough samples, allow each participant to bite their own carrot.

Sight: Pass around some blueberries in a clear container and a red bell pepper. Ask youth to describe the colors and how the foods look.

Taste: Distribute samples of fruits and vegetables. Invite participants to taste the food and describe each one using all of their senses.

More to Explore

Make a recipe that uses different colors of fruits and vegetables, such as the Crunchy Rainbow Wrap or Fruitacious Breakfast Cup (fns-prod.azureedge.net)

Create

Give each youth a paper plate and some crayons. Ask them to choose 2 vegetables or fruits that they already like to eat, and 1 that they have not eaten that they want to try. Encourage them to draw these three choices on their plate, trying to get three different colors of fruits and vegetables in their choices! (If the youth have trouble thinking of ideas, look back at the list you made during the “ask” portion of the activity).

Share/Reflect

Ask, What did you discover when you used your five senses to explore fruits and vegetables?

Ask, How did you choose the three fruits and vegetables you drew on your plate? Where and when do you think you will try a new fruit or vegetable?

Ask, What are your favorite ways to eat fruits and vegetables?

Relationship to 4-H...

The second of the four H's is “health,” which includes things like good sleep habits, choosing nutritious foods, getting exercise, and making other choices that support our well-being. In 4-H, youth can explore a wide range of projects where they can learn about health, including: child development; fun and fitness; foods and nutrition - from growing or raising their own food to cooking; safety; lots of different outdoor activities like hiking, canoeing, camping; and more. Over time, they may become a youth leader in health projects they love.

WINTER SURVIVAL FOR BIRDS



4-H PROJECT AREAS:

Birds

LIFE SKILLS:

Critical Thinking, Cooperation

TIME:

20 – 30 minutes

Ask

Who has seen flocks of geese flying?

Where do you think the geese go when they fly in the fall?

What is the word we use to describe birds moving far away when the seasons change?

Do all birds migrate? Why and why not?



Should we stay or should we go? Find out what it is like for birds to migrate as a group.

Did you know?

Migrating birds often follow wind currents, which are like rivers in the air flowing in the direction the birds are flying. Currents help the birds save energy by speeding up their journey and giving them time to soar instead of flapping their wings. Scientists call these routes "flyways."

Investigate

Ask, Why do birds fly in groups? One reason is to save energy; the birds in the back of the group have less wind resistance, so it is easier to fly. The birds take turns being in front. Another reason birds flock together is protection.

Tell the youth, "Let's pretend most of you are Indigo Buntings, a small blue bird that is common in North America. The only time of the year these birds flock together in large groups is when they migrate. Let's find out why!"

Create

In the room, make a long, narrow path for youth to run down. It should be wide enough for 4-5 youth to run at the same time. Explain that this is the flyway. **Ask, What kind of animal would hunt birds?** Common answers are bigger birds, coyotes, jaguars and cougars. The #1 predator of birds: House cats!

Ask all youth to go to one end of the flyway. Invite a volunteer to be the predator in the middle of the flyway – this person wants to eat as many birds as possible! The predator's job is to tag birds as they go through the flyway. Invite the rest of the youth to run the length of the flyway, one at a time. It is not unusual to have zero survivors!



Tell the youth they are now going to migrate and we're going to keep track of how many birds survive when we work together. Ask the group to get into

partners, and repeat the activity. Then, ask the youth to get into groups of 4-5 and repeat the activity. Finally, ask the youth to be one large group, and repeat the activity. It is okay to change who plays the predator each time, if desired.

Resources:

Developed by: Sharon Krause, UW-Extension 4-H Youth Development Educator, Douglas County

Share/Reflect

Ask the "birds," What was the safest way for you to migrate? Why?

Ask the "predator," When was it easiest for you to catch your prey? What size group made it the hardest to catch somebody?

More to explore...

Not all birds migrate in winter. Explore more about birds by learning about birds that stay where it is cold during winter. What do they do to survive? How do they stay warm? Try this demonstration, which works best outdoors in the wind: Have everyone stand by themselves apart from each other for 1 minute. Then have them huddle up in large groups of 4-10 people for 1 minute. Ask, How much of a difference was there between being alone vs. in a group? Chickadees are usually very independent and territorial, but in the winter they work together to stay warm. Ask, Have you ever thought you could do something by yourself but then asked for help?

Relationship to 4-H...

In 4-H, we work together to accomplish our goals. Some of our goals are individual, and some goals are made as a group. Our group could be small (a few youth working on a similar project), medium-sized (a club working on a service activity), or large (4-H youth nation-wide doing a science experiment all on the same day). Although there are thousands of youth involved in 4-H, it all starts with one – you!



Be an EGG-splorer!

As we did that we learned...

That eggs have a yolk, albumen (*alb-you-men*), and a shell. The shell has tiny holes in it that let air pass through. Eggs come in all different sizes and colors, and now we know how to measure them.

Today we...

were EGG-splorers!
We did three science experiments to learn about the sizes, colors, and parts of eggs.

Ask your child...

- What did you learn about eggs that you didn't know before?
- What was your favorite experiment? Why?
- How did you work with a partner to do the science experiments on eggs?

Explore more...

Do some more egg science experiments together.

- Explore the answers to these egg questions:
- Does the weight of a raw egg change when it's hard boiled?
- Will an egg roll at different speeds on different surfaces?
- Will eggs roll in a straight line?

The local public library has lots of fun books for youth about egg. Go check some out.



Connect to 4-H...

A sense of Mastery is one of the four essential elements of 4-H. Mastery, in this case, means youth learn more and more about their project every year. 4-H builds on the skills and understanding with each year of participation. After several years in a project, they gain Mastery and share what they have learned.



¡Cómo ser un “Egg-splorador”!

Al hacer esto aprendimos...

que los huevos tienen yema, albúmina y cáscara. La cáscara tiene pequeños orificios que dejan pasar el aire. Los huevos se presentan en diferentes tamaños y colores, y ahora sabemos cómo medirlos.

Hoy nosotros...

¡fuimos “EGG-sploradores”!
Hicimos tres experimentos científicos para conocer los tamaños, colores y partes de los huevos.



Pregúntele a su hija(o)...

- ¿Qué aprendiste sobre los huevos que no sabías antes?
- ¿Cuál fue tu experimento favorito? ¿Por qué?
- ¿Cómo colaboraste con tu compañero para hacer experimentos científicos con huevos?

Explore más...

Hagan juntos algunos experimentos adicionales de ciencia con huevos.

Explore las respuestas a estas preguntas sobre los huevos:

- ¿Cambia el peso de un huevo crudo al hervirse?
- ¿Rodará un huevo a diferentes velocidades sobre diferentes superficies?
- ¿Ruedan los huevos en línea recta?

La biblioteca pública de su área tiene muchos libros divertidos para jóvenes sobre los huevos. Les invitamos a investigar la disponibilidad de libros en la biblioteca de su área.

Conéctese con 4-H ...

Una idea de “dominar un tema” representa uno de los cuatro elementos esenciales de 4-H. Dominar un tema, en este caso, significa que los jóvenes aprenden más y más sobre su proyecto cada año. 4-H se basa en las habilidades y el conocimiento con cada año de participación. Después de varios años trabajando en un proyecto, los jóvenes llegan a dominar su tema y comparten lo que han aprendido.



The Giant's Breakfast

As we did that we learned...

How to be creative using our brains and our bodies to explore a pretend world. This is called "pantomime."

Today we...

used our imaginations to act out the story of Jack and the Beanstalk. We snuck into the giant's house and explored the giant-sized food on the breakfast table.

Ask your child...

- What were some of the foods that you explored on the giant's breakfast table?
- What did it feel like to pretend you were in a different place?
- What other things would you like to imagine and act out?

Explore more...

Play a game as a family where each person pantomimes (acts out without making any sounds) different activities that are done around the house everyday. Can the other family members guess what the person is acting out?



Connect to 4-H...

4-H is a program where youth make choices about their own learning and explore the topics that interest them. There are many short term opportunities (like events and day camps) and long-term opportunities (like enrolling in a 4-H project) that youth can try. Help new members and families discover what there is to learn as they grow with 4-H. Invite older members to talk about their favorite projects or activities with younger members. Take time to explain to parents the opportunities offered through the club and county.



El desayuno del gigante

Al hacer esto aprendimos...

Cómo ser creativos, utilizando nuestros cerebros y nuestros cuerpos para explorar un mundo ficticio. Esto se llama "la pantomima."

Pregúntele a su hija(o)...

What were some of the foods that you explored on the giant's breakfast table?

- ¿ Cuáles alimentos exploraste en la mesa del desayuno del gigante?
- ¿ Qué sentiste al imaginar que estabas en un lugar diferente?
- ¿ Cuáles otras cosas te gustaría imaginar y actuar?

Explore más...

Crean un juego en familia donde cada persona hace la pantomima (actúa sin hacer ningún sonido), haciendo diferentes actividades que se hace en la casa todos los días. ¿Pueden adivinar los miembros de su familia la actividad qué está interpretando cada persona?

Hoy nosotros...

usamos nuestra imaginación para representar la historia de *Jack y los frijoles mágicos*. Entramos discretamente a la casa del gigante y exploramos la comida de tamaño gigante en su mesa de desayuno.



Conéctese con 4-H ...

4-H es un programa donde los jóvenes toman decisiones sobre su propio aprendizaje y exploran los temas que les interesen. Hay muchas oportunidades a corto plazo (como eventos y campamentos diurnos) y oportunidades a largo plazo (como inscribirse en un proyecto 4-H) que los jóvenes pueden probar. Ayude a los nuevos miembros y a las familias a descubrir lo mucho que hay que aprender a medida que se desarrollan con 4-H. Invite a miembros de 4H del pasado a hablar con miembros más jóvenes sobre sus proyectos o actividades favoritas. Tómese el tiempo para explicar a los padres las oportunidades que se ofrecen a través del club y el condado.



I'M A THUMB-BODY, YOU'RE A THUMB-BODY

As we did that we learned...

that diversity simply means differences. Some ways we might be different are in what we like or don't like, the shape of our body, what we want to do when we get older, the color of our skin, hair and eyes, or how we dress. Accepting each other's differences means we see and celebrate what is special about each of us, even if we don't always agree.

Ask your child...

- Tell me about what you included in your NOW picture.
- What did you include in your LATER picture?
- What did you learn about other youth in the group?
- What did you have in common with others?
- How were you different from others?

Explore more...

Create fingerprint cards for the whole family. Are some things about the prints the same? Are others different? Find out more at

<http://pbskids.org/zoom/activities/sci/fingerprints.html>

Encourage the youth to set goals and explore the activities or career(s) they included in their portraits. Use the Internet to learn more or visit places where people with similar interests work.

Connect to 4-H...

As Wisconsin 4-H Youth Development programs continue to explore the needs of all youth, an important job for everyone is to think about how we create a welcoming environment that is safe for all young people. Regardless of differences, our job as adults and youth in the 4-H Youth Development program is to be sure that everyone is invited and can fully participate in programs. One way to take that a step further is to learn about ourselves and each other.





Yo soy una personita única, tú eres una personita única

Al hacer esto, nosotros aprendimos:

que la diversidad significa simplemente tener diferencias. Algunas diferencias entre nosotros pueden ser lo que nos gusta o no nos gusta, la figura de nuestro cuerpo, lo que queremos hacer cuando seamos mayores, el color de nuestra piel, ojos y cabello o cómo nos vestimos. Aceptar las diferencias significa que debemos ver y celebrar lo especial en cada uno de nosotros, incluso si no siempre estamos de acuerdo.

Pregúntele a su niña(o):

Háblame de lo que incluiste en tu retrato del PRESENTE.

- ¿Qué incluiste en tu retrato del FUTURO?
- ¿Qué aprendiste acerca de los otros jóvenes en el grupo?
- ¿Qué tenías en común con los demás?
- ¿En qué te diferenciaste de los demás?

Explore más:

Cree tarjetas de huellas digitales para toda la familia. ¿Qué cosas en común tienen las huellas? ¿Qué cosas son diferentes? Encuentre más información en: http://pbskids.org/zoom/activities/sci/fingerprint_s.html

Aliente a los jóvenes a establecer metas y a explorar las actividades o carrera(s) que incluyeron en sus retratos. Utilice el Internet para aprender más o visite lugares donde trabajan las personas con intereses similares.



Conéctese a 4-H... Mientras los Programas de desarrollo juvenil de 4-H de Wisconsin continúan explorando las necesidades de todos los jóvenes, un trabajo importante para todos es pensar en cómo crear un ambiente acogedor que sea seguro para todos los jóvenes. No importan las diferencias; nuestro trabajo como adultos y jóvenes en el Programa de desarrollo juvenil de 4-H es asegurarnos de que todos estén invitados y que puedan participar sin barreras en nuestros programas. Una manera de dar un paso en esa dirección es aprender sobre nosotros mismos y aprender más de otras personas.



Relaxation Gardens

As we did that we learned...

We learned that everybody gets stressed at times. Playing with the type of garden that we made can help calm us.

Ask your child...

- What did you feel when you made your garden?
- How did you choose which materials to use?
How did you decide where to put them?
- How do you think you will use your garden?

Explore more...

A relaxation garden can be made with a variety of materials. Explore outside in nature or in hobby stores with your youth for different items that could be added or changed in the relaxation garden that was made.

Do an online search for other ideas on how to make relaxation gardens. Experiment with different size gardens including a large garden that is made as a group project. This could be an activity that a group of your youth's friends do when it is a rainy day or there is playtime together.



Connect to 4-H...

Two important ways young people learn about stress and strong emotions are through experience and by watching the adults around them. 4-H Youth Development programs encourage youth to take healthy risks by trying new things, so they may experience and learn to manage stress in a safe, supportive and caring environment. In that environment, young people spend time with adult role models who show them healthy ways of dealing with stress.



Jardines de relajación

Al hacer esto aprendimos...

Que todos nos estresamos a veces. Jugar con el tipo de jardín que creamos nos puede ayudar a calmarnos.

Pregúntele a su hija(o)...

- ¿Qué sentiste cuando construiste tu jardín?
- ¿Cómo elegiste los materiales que usaste? ¿Cómo decidiste dónde ponerlos?
- ¿Cómo crees que usarás tu jardín?

Explore más...

Un jardín de relajación se puede hacer con una variedad de materiales. Salga y explore con su hija(o) en la naturaleza o en las tiendas de pasatiempos los diferentes materiales que podrían agregarse o cambiarse en el jardín de relajación que se construyó. Haga una búsqueda en línea de otras ideas sobre cómo hacer jardines de relajación. Experimente con jardines de diferentes tamaños incluso un jardín amplio que se puede construir en grupo. Este tipo de proyecto podría ser una actividad que un grupo de amigos de su hija(o) hacen en un día lluvioso o cuando vayan a jugar juntos.

Hoy nosotros...

hicimos un relajante jardín con arena, piedras, ramitas y otros elementos interesantes. Después, creamos un rastillo para crear el aspecto de olas en nuestros jardines.



Conéctese con 4-H ...

Los jóvenes aprenden sobre el estrés y las emociones fuertes de dos formas importantes. Una es a través de la experiencia y la otra es por observar las acciones de los adultos en su entorno.

Los programas de Desarrollo Juvenil 4-H motivan a los jóvenes a probar cosas nuevas y a tomar “riesgos sanos” los que no tienen consecuencias negativas. Esto les sirve a experimentar y aprender a manejar el estrés en un ambiente seguro y de apoyo y confianza. En este ambiente, los jóvenes pasan tiempo con modelos adultos que les muestran formas saludables de lidiar con el estrés.



Soggy Science

As we did that we learned...

That water absorption happens when water molecules stick to the cells of other products like gel crystals or moss (or our towels at home). We learned how to make a guess – or hypothesis – and use science to see what happens. And we learned about long-fibered sphagnum moss, a little-known Wisconsin agricultural product that comes from prehistoric times.

Today we...

performed a scientific experiment using gel crystals and long-fibered sphagnum (*sf-ag-num*) moss. Both are gardening products that absorb water and keep moisture close to plants' roots.

Ask your child...

- What things in our home absorb water?
- Which product – gel crystals or long-fibered sphagnum moss – absorbed more water? Why?
- Which product would you rather use in the soil of a potted plant? Why?

Explore more...

Help your youth plant a green plant in your home, mixing either product into the soil to help keep water close to the roots. Encourage them to help take care of the plant.

Try making Moss Graffiti. Watch the video here (Note: use live moss, not the dried moss we used today.) - <https://www.stevespanglerscience.com/lab/experiments/moss-graffiti-sick-science/>.



Connect to 4-H...

4-H creates a safe space where youth can take what they know, develop an idea (or hypothesis) and test it out. It does not matter if their idea does or does not work. It does not matter if their hypothesis was or was not right. What does matter is the exploration of their ideas, trying something new, and knowing it is okay to fail sometimes. That is when the learning happens.



Empapándonos de ciencia

Al hacer eso aprendimos...

Que la absorción del agua ocurre cuando las moléculas del agua se adhieren a las células de otros productos como cristales de gel o musgo (o como nuestras toallas en casa). Aprendimos cómo hacer una conjetura (o hipótesis) y usamos la ciencia para ver qué sucede. Y aprendimos sobre el esfagno de fibras largas, un tipo de musgo y producto agrícola de Wisconsin poco conocido que se remonta a los tiempos prehistóricos.

Pregúntele a su hija(o)...

- ¿Cuáles cosas en nuestro hogar absorben el agua?
- ¿Qué producto absorbió más agua? ¿Los cristales de gel o el musgo de fibras largas? ¿Por qué?
- ¿Qué producto preferirías usar en la tierra de una planta en una maceta? ¿Por qué?

Explore más...

Ayude a sus hijos a sembrar una planta verde en su hogar, mezclando ambos productos en la tierra para ayudar a mantener el agua cerca de las raíces. Motíuelos a ayudar a cuidar la planta.

Intente hacer el grafiti con el musgo. Mire el video aquí (Nota: use musgo vivo, no el musgo seco que usamos hoy).

<https://www.stevespanglerscience.com/lab/experiments/moss-graffiti-sick-science/>

Conéctese a 4-H...

4-H crea un espacio seguro donde los jóvenes pueden utilizar lo que saben para desarrollar una idea (o hipótesis) y comprobarla. No importa si la idea funciona o no. No importa si su idea era correcta o no. Lo que importa es la exploración de sus ideas, probar algo nuevo y saber que a veces es normal equivocarse. Son estos momentos cuando ocurre el aprendizaje..

Hoy nosotros...

realizamos un experimento científico usando cristales de gel y musgo de fibras largas. Ambos son productos de jardinería que absorben el agua y mantienen la humedad cerca de las raíces de las plantas.





The Superhero in You

As we did that we learned...

That both superheroes and youth have talents that we can use to help other people. Unlike superheroes, we do not have to hide what we are good at. We can share our talents with others through community service projects.

Today we ...

made superhero symbols and wrist cuffs that show something we are good at. Then we shared how we could use our talents to help other people.

Ask your child...

- What are you good at?
- Tell me about your superhero symbol and wrist cuffs.
- Why did you choose the symbol you did?
- How would you like to use your talents to help other people?

Explore more...

Support your youth in completing a community service project that uses their talents.

Check out stories about superheroes at your local library. Then, help your youth write a story where they are the hero.



Connect to 4-H...

The third “H” in 4-H – hands – refers to how every single person, from the youngest Cloverbuds to the most experienced adult volunteers, has something to give back to our communities. Everyone is valued because everyone can contribute. 4-H groups do lots of different service projects, from canned food drives to service learning trips in other countries.



El superhéroe en ti

Hoy nosotros...

hicimos símbolos de superhéroes y muñequeras que muestran algunas de las cosas que representan nuestros talentos. Luego compartimos cómo podríamos usar nuestros talentos para ayudar a otras personas.



Al hacer esto aprendimos...

Tanto los superhéroes como los jóvenes tienen talentos que se pueden utilizar para ayudar a otras personas. A diferencia de los superhéroes, no tenemos que esconder nuestros talentos. Podemos compartir nuestros talentos con otros a través de proyectos de servicio comunitario.

Ask your child...

- ¿Qué tipo de talentos tienes?
- Cuéntame sobre tu símbolo de superhéroe y tus muñequeras.
- ¿Por qué elegiste el símbolo que hiciste?
- ¿Cómo te gustaría usar tus talentos para ayudar a otras personas?

Explore más...

Apoye a su hija(o) para realizar un proyecto de servicio comunitario donde use sus talentos. Mire historias sobre superhéroes en la biblioteca de su área. Luego, ayude a su hija(o) a escribir una historia en la que él/ella salgan como el héroe

Connect to 4-H...

La tercera "H" en 4-H representa la palabra hands, es decir "manos." Esto se refiere a cómo cada persona, desde los Cloverbuds más jóvenes hasta los voluntarios adultos con más experiencia, tienen algo que devolver a nuestras comunidades. Todos somos valorados porque todos podemos contribuir. Los grupos 4-H hacen diferentes proyectos de servicio comunitario, desde la recolección de alimentos enlatados hasta viajes de servicio a otros países.



Tasty Groundwater

As we did that we learned...

How to critically think about our environment while paying attention to the effects of pollution on groundwater.

Ask your child...

- What did you learn about groundwater?
- Where do we get water from?
- What happens when there is pollution on earth?
- What can we do about the pollution?

Explore more...

Make a Healthier Version of Tasty Groundwater

1. Add 1 Tablespoon raisins to the bottom of a cup.
2. Measure $\frac{1}{2}$ cup frozen yogurt and pour on top of the raisins. Do not tightly pack the frozen yogurt.
3. Cut an apple into $\frac{1}{4}$ inch pieces (adult). Add 1 Tablespoon apples on top of frozen yogurt.
4. Put 1 Tablespoon of Dark Chocolate M&Ms on top of the apples.
5. Pour $\frac{1}{4}$ cup apple juice over the M&Ms. After the apple juice is settled add one more $\frac{1}{4}$ cup apple juice. Pay attention to the color that comes off of the M&Ms.
6. Place a straw through the frozen yogurt in the cup down to the apple juice at the bottom of the cup.
7. Enjoy!



Connect to 4-H...

One of the essential elements of 4-H is generosity. 4-H youth and their families participate in community service projects to improve the places where they live, work, and play. 4-H Youth Development believes that young people at all ages can learn about the world around them and use their heads, hearts, hands and health to do actions (big and small) that make their communities better.



La sabrosa agua subterránea

Al hacer esto aprendimos...

Cómo pensar críticamente sobre nuestro medio ambiente mientras prestamos atención a los efectos de la contaminación en las aguas subterráneas.

Pregúntele a su hija(o)...

- ¿Qué aprendiste sobre el agua subterránea?
- ¿De dónde sacamos el agua?
- ¿Qué sucede cuando hay contaminación en la tierra?
- ¿Qué podemos hacer sobre la contaminación?

Hoy nosotros...

exploramos cómo las diferentes capas de tierra filtran el agua o retienen nuestra agua potable mediante la creación de un modelo de agua subterránea.

Explore más... Haga una versión más saludable de “La sabrosa agua subterránea”

1. Agregue 1 cucharada de pasas al fondo de una taza.
2. Mida 0.5 taza de yogurt congelado y viértalo encima de las pasas. No presione tanto el yogurt congelado.
3. Corte una manzana en pedazos de $\frac{1}{4}$ (0.25) de pulgada (adulto). Agregue 1 cucharada de manzana encima del yogurt congelado.
4. Ponga 1 cucharada de M&Ms de chocolate negro encima de las manzanas.
5. Vierta $\frac{1}{4}$ (0.25) de taza de jugo de manzana sobre los M&Ms. Después de que el jugo de manzana se haya asentado, agregue otro $\frac{1}{4}$ (0.25) de taza de jugo de manzana. Preste atención al color que sale de los M&Ms.
6. Pase un popote a través del yogurt congelado en la taza hasta llegar al jugo de manzana en el fondo de la taza.
7. ¡Disfrute!



Conéctese con 4-H ...

Uno de los elementos esenciales de 4-H es la generosidad. Los jóvenes de 4-H y sus familias participan en proyectos de servicio comunitario para mejorar los lugares donde viven, trabajan y juegan. El Desarrollo Juvenil de 4-H cree que los jóvenes de todas las edades pueden aprender sobre el mundo que les rodea y usar sus cabezas, corazones, manos y salud para realizar acciones (grandes y pequeñas) que mejoren sus comunidades.



Using Your Super Senses

As we did that we learned...

Children should eat 2 ½ cups of vegetables each day and 1 ½ cups of fruit per day. It is important to eat fruits and vegetables that are many different colors. Sometimes we need to see and learn about a fruit or vegetable a few times before we learn to like it

Today we...

used our five senses to explore the sights, sounds, smells, textures, and tastes of fruits and vegetables.

Ask your child...

- Did you try any new fruits or vegetables during the activity today?
- What was your favorite sense to use when exploring fruits and vegetables?
- Tell me about the fruits and vegetables that you chose to draw on your plate.

Explore more...

Take a tour of your family refrigerator or pantry. How many colors of fruits and vegetables can you find? (Include fresh, frozen, and canned fruits and vegetables in your search.)

Go grocery shopping with your child. Ask them to point out all the different colors of fruits and vegetables that they can find. Choose a new fruit or vegetable to try together as a family.



Connect to 4-H...

The second of the four H's is "health," which includes things like good sleep habits, choosing nutritious foods, getting exercise, and making other choices that support our well-being. In 4-H, youth can explore a wide range of projects where they can learn about health, including: child development; fun and fitness; foods and nutrition - from growing or raising their own food to cooking; safety; lots of different outdoor activities like hiking, canoeing, camping; and more. Over time, they may become a youth leader in health projects they really love.



Utilizando tus súper sentidos

Al hacer esto aprendimos que...

Los niños deben comer 2.5 tazas de verduras al día y 1.5 tazas de fruta por día. Es importante comer frutas y verduras de diferentes colores. A veces, necesitamos ver y conocer una fruta o verdura varias veces antes de que nos empiece a gustar.

Hoy, nosotros...

usamos nuestros cinco sentidos para explorar las vistas, los sonidos, los olores, las texturas y los sabores de frutas y verduras.

Pregúntele a su hija(o)...

- ¿Probaste alguna nueva fruta o verdura durante la actividad de hoy?
- ¿Cuál de tus sentidos fue tu favorito para explorar las frutas y verduras?
- Cuéntame sobre las frutas y verduras que elegiste dibujar en tu plato.

Explore más...

Haga un recorrido por la nevera o la alacena de su casa. ¿Cuántos colores de frutas y verduras puede encontrar? (Incluya frutas y verduras frescas, congeladas y enlatadas como parte de su búsqueda).

Vaya de compras al supermercado con su hija(o). Pídale a que señale todos los diferentes colores de frutas y verduras que puede encontrar. Elija una nueva fruta o verdura para probar juntos en familia.



Conéctese con 4-H ...

La segunda de las cuatro "H" representa la palabra health, es decir "salud." Esto incluye cosas como los buenos hábitos de sueño, elegir alimentos nutritivos, hacer ejercicio y tomar otras decisiones que apoyen nuestro bienestar. En 4-H, los jóvenes pueden explorar una amplia gama de proyectos en los que pueden aprender sobre la salud, incluso: el desarrollo infantil; diversión y aptitud física; alimentos y nutrición: desde plantar o cultivar sus propios alimentos hasta cocinar; seguridad; muchas actividades diferentes al aire libre como caminatas, canotaje, campamentos, y más. Con el tiempo, pueden convertirse en líderes juveniles que guíen a otros a hacer proyectos de salud que les encanten.



Winter Survival for Birds

As we did that we learned...

How different birds cope with the cold of winter. One way is to leave, which is called migration. Birds follow wind currents called flyways, and we found out it is much safer to travel with a flock. Birds who stay for the winter have to make good nests and sometimes huddle together to stay warm.

Today we...

pretended to be birds. We played a migration game and also tried to stay warm the same way birds do in the winter.

Ask your child...

- Why do birds use flyways when they migrate?
- Can you name some birds that leave for the winter?
- Why is it best to travel with a flock?
- What predator kills more birds than any other?
- Can you name a bird that stays during the winter?

Explore more...

You can help birds migrate and stay warm by supplying them with food. One fun way to do this is to make a pine cone bird feeder.

Supplies:

- Pinecones
- Peanut Butter
- Mixed bird seed
- Plate
- Butter knife
- String
- Scissors
- Binoculars (Optional)

Directions: Tie a long piece of string to each pine cone, and cover the cone with peanut butter. Then, roll it in the mixed seeds on the plate. Find a branch outside to hang up the cone and see who comes to eat!



Connect to 4-H...

In 4-H, we work together to accomplish our goals. Some of our goals are individual, and some goals are made as a group. Our group could be small (a few youth working on a similar project), medium-sized (a club working on a service activity), or large (4-H youth nation-wide doing a science experiment all on the same day). Although there are thousands of youth involved in 4-H, it all starts with one – you!



Supervivencia de invierno para los pájaros

Cuando hicimos eso aprendimos...

Cómo los diferentes pájaros hacen frente al frío del invierno. Una forma es irse, lo que se llama “la migración.” Los pájaros siguen las corrientes de viento llamadas rutas migratorias, y descubrimos que es mucho más seguro viajar con una bandada. Los pájaros que se quedan durante el invierno tienen que hacer buenos nidos y a veces se amontonan para mantenerse calientes..

Pregúntele a su hija(o)...

- ¿Por qué los pájaros usan rutas migratorias?
- ¿Puedes nombrar algunos pájaros que se van en el invierno?
- ¿Por qué es mejor viajar con una bandada?
- ¿Qué depredador mata más pájaros que cualquier otro?
- ¿Puedes nombrar algunos pájaros que se quedan durante el invierno?

Explore más...

Puede ayudar a los pájaros a migrar y mantenerse calientes suministrándoles alimentos. Una manera divertida de hacer esto es hacer un comedero para pájaros con las piñas de los árboles coníferas.

Supplies:

- Piñas de un pino
- Mezcla de semillas para pájaros
- Cuchillo para mantequilla
- Tijeras
- Crema de cacahuete (maní)
- Plato
- Cuerda
- Binoculares (opcional)

Instrucciones: Ate un pedazo largo de cuerda a cada piña de pino y cubra el cono con mantequilla de maní. Luego, hágalo rodar sobre la mezcla de semillas en el plato. ¡Cuélguela afuera en una rama y esperen a ver quién llega a comer!

Hoy nosotros...

nos imaginamos como pájaros. Jugamos un juego de migración y también tratamos de mantener el calor de la misma manera que lo hacen las aves en el invierno.



Conéctese con 4-H ...

En 4-H, trabajamos juntos para lograr nuestros objetivos. Algunos de nuestros objetivos son individuales y algunos objetivos se hacen en grupo. Nuestro grupo puede ser pequeño (unos pocos jóvenes trabajando en un proyecto similar), mediano (un club trabajando en una actividad de servicio) o grande (Jóvenes de 4-H en todo el país haciendo un experimento de ciencia todos en el mismo día). Aunque hay miles de jóvenes involucrados en 4-H, ¡todo comienza contigo!