DISCOVER

4-H ART AROUND THE WORLD

University of Idaho Extension

EXTENSION
UtahStateUniversity

DISCOVER

Rebecca Mills
University of Idaho Extension

Bergen Holt | 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 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 (Lerner et al., 2005).

Updated January 2019

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. It 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).

Club Officers

Elect club officers during one of your first club meetings. Depending on how many youth are in your club, you can decide how many officers you would like. This will typically 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 all ages. Your club may decide the duration of officers (6 months, 1 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 other club member to lead)
- ☐ Roll call – Secretary (may use an icebreaker or a "get acquainted" type of roll call to get the meeting started)
- ☐ Minutes of the last meeting – Secretary
- ☐ Business/Announcements – Vice President
- ☐ Club Activity – Activity Facilitator arranges this. It includes a project, lesson, service, etc. These are outlined by project area in the following pages.
- ☐ Refreshments – Refreshment coordinator
- ☐ Clean Up – Clean-up supervisor leads others in cleaning up

Essential Elements of 4-H Youth Development

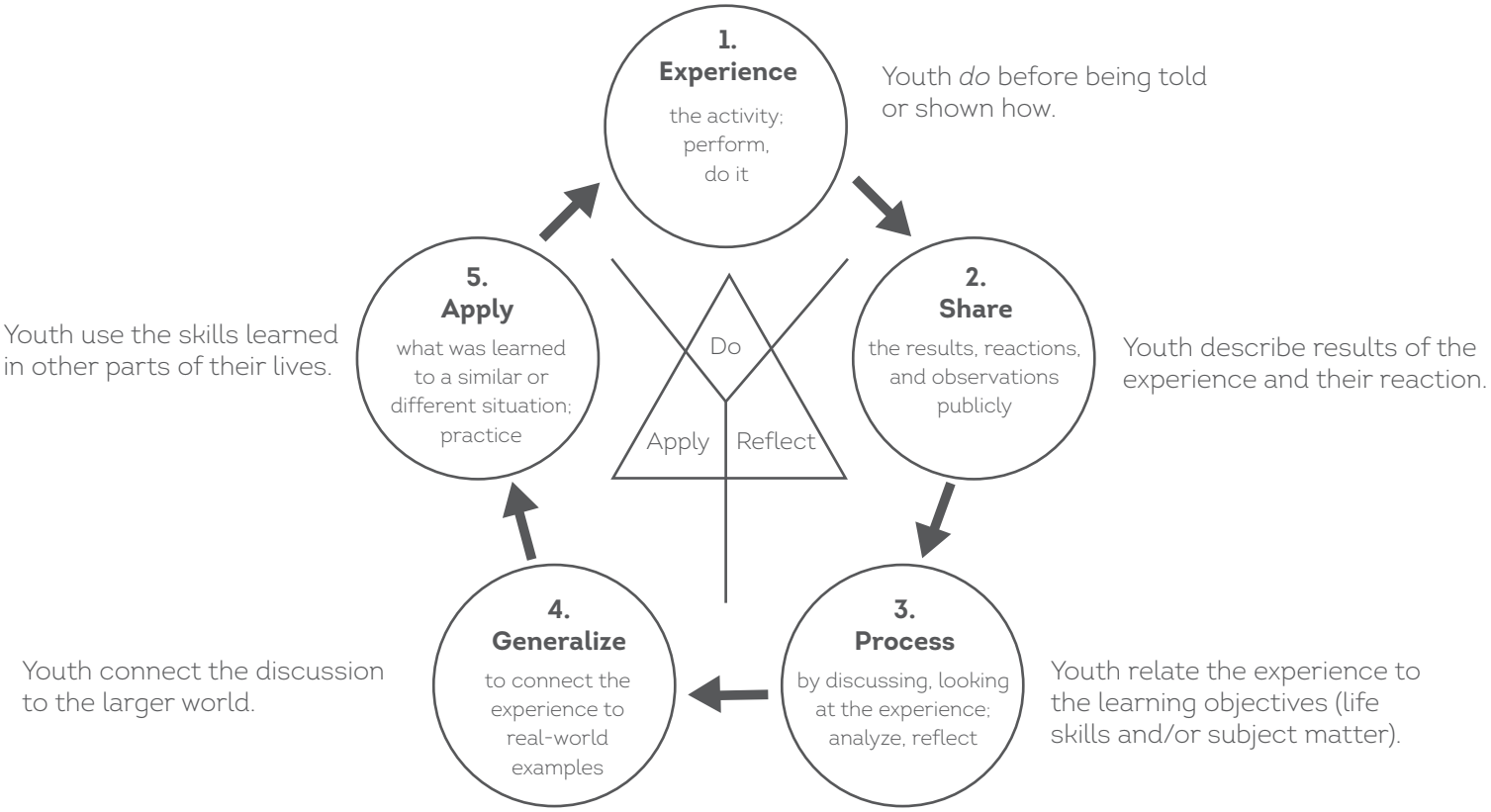
The essential elements are about healthy environments. Regardless of the project area, youth need to be in environments where the following elements are present in order to foster youth development.

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/volunteers/training/

To start modules: (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:
Go to https://goo.gl/iTfiJV or Click here to give your feedback

4-H ART AROUND THE WORLD CLUB *Meetings*

Rebecca Mills
University of Idaho Extension

Bergen Holt | Stacey MacArthur
Utah State University Extension

DISCOVER
4-H ART AROUND THE WORLD

Supplies

- Red, yellow, and blue watercolor paint
- Watercolor paper
- Water cups
- Paint brushes
- Scratch paper
- Oil pastels
- Watercolor pans
- Watercolor pencils
- Color wheel worksheet
- Colored paper (all colors of color wheel)

INTRODUCTION TO ENTIRE CLUB

In this club, members will combine science and art to learn about the world around them. The members will learn different techniques and styles of art. Members should learn about several ecosystems and multiple characteristics of each. The six ecosystems they will be learning about are: rainforests, taiga, deserts, tundra, grasslands, and oceans.

OBJECTIVES

- Learn facts about jungles
- Learn about oil pastel and water color painting techniques
- Discuss the color wheel
- Create an artistic representation of a rainforest jungle

Activity #1

LEARNING ABOUT JUNGLES

TIME: 10 MINUTES

1. Before beginning the art portion of this lesson, it is important we learn more about jungles. Jungles are part of the Rainforest Ecosystem. Something that sets rainforests apart from other ecosystems is the amount of rainfall they receive. Rainforests can receive up to 260 inches of rain a year (Fun Jungle, 2016). That is equal to over four feet of water! This rain helps create an environment that is prime for plants, which is why rainforests are so green and have dense vegetation.

2. There are two types of rainforests: temperate and tropical (Fun Rainforests, 2016). Today we are focusing on tropical rainforests. Tropical rainforests can be found in Brazil, Southeast Asia, the Pacific Islands, and West Africa. Jungles fall into the category of tropical rainforests, and that is the type of scene we will be creating today.

3. We will first work with oil pastels and then watercolors to create a jungle scene. Henri Rousseau is an artist who created jungle scenes that we can base our paintings off of.

4. Note: The leader may show the members these pictures so that they have a visual representation of what Henri Rousseau's art looks like. This may help them better understand what is expected of them.

(Henri Rousseau, 2017)

(Henri Rousseau)

Activity #2

OIL PASTELS

TIME: 15 MINUTES

Now that they understand what a jungle looks like, they can start their project. The members will follow a series of steps to create a colorful and full jungle scene. The leader can demonstrate how to do this first. Have the members follow you to a specific table to watch your demonstration.

1. You will first draw some green leafy designs on the paper in oil pastels. All different colors of green will look good. Color only the outline of the leaf, do not color in the whole leaf.

2. Next, add in some pops of color. These make a point in the paper where your eye is drawn. This is called the focus.

3. Fill up the paper with drawings of leaves and flowers. Remember to just draw the outline of the leaves and flowers; do not fill them in. The interior of the flowers and leaves will be filled in with water colors.

4. Now, have the members do the same thing on their sheet of paper.

5. Have each member set their paper aside until after they have learned about the watercolors in the following lesson.

6. To end, ask the club members the following discussion questions:

    a. Where do you notice your eye goes once I drew a bright flower?

    b. Why do you think I put leaves and flowers over the entire sheet of paper?

Activity #3

THE COLOR WHEEL

TIME: 10 MINUTES

1. Members will need to understand the basics of color theory.

2. For more information on the color wheel, visit: https://www.colormatters.com/color-and-design/basic-color-theory

3. This short activity will help the club members remember how a color wheel is organized.

4. Display nine colored circles (primary, secondary and tertiary). Ask the members to first pick out the three primary colors and set them apart from the rest.

5. Have the next set of members pick out the secondary colors and place them in their respective spots next to the appropriate primary color.

6. Finally, have the members place the remaining tertiary colors in their correct spot.

7. Explain to the club members that the colors on the color wheel are always in the same order because this is the way colors are mixed together.

8. Next, demonstrate to the members how to mix watercolor paint to create a color wheel.

9. Using the paint palettes., demonstrate painting the three primary colors first.

10. Next, mix the secondary colors on the pallete to show how to create the tertiary colors..

11. Put those colors onto the color wheel.

12. Finally, the members will do the same thing the leader just demonstrated. After, they should have all of their colors on their color wheel, and now understand how a color wheel should be organized.

13. Observations: Check that the members are able to mix colors correctly. Make sure that their color wheel is going together in the right order. Be sure to take time and help any members who may be struggling.

Activity #4

OIL AND WATER

TIME: 15 MINUTES

1. Now that the youth understand the basics of both oil pastels and watercolors, they can bring them together to create a jungle scene. As they may already know, oil and water do not mix. If they do not remember or know this, the leader can mix together water and oil to demonstrate how they do not mix.

2. We are using oil pastels and water color for that reason. The oil pastel leaves and flowers will create a border that the watercolor cannot pass through.

3. The goal for the club members is to make it so there is no white on their paper. They will fill in their shapes with the appropriate color, and then fill in the rest of the paper with other shades of green they mixed in their color palette.

4. Encourage the members to mix all different shades of green so that the paper is not just one color. They can use their knowledge of primary colors to create the different shades of green.

Reflect

- What do these activities teach you about mixing colors?
- What makes oil pastels and water colors different?
- Why do water and oil not mix?
- Why do you think jungles are so rich in vegetation?

Apply

- How will learning about mixing colors help you in your future art projects?
- Does knowing about the basics of water and oil help you understand why some other substances won't mix?

4-H MISSION MANDATES

Citizenship

Encourage the youth to take leadership roles during in the meeting. They can do this by leading the pledge, being an example, and helping keep the meeting on track.

Science

This lesson teaches the concept of oil and water and their inability to mix. It also teaches the club members about one of Earth's ecosystems, and facts that are specific to the rainforest ecosystem.

ESSENTIAL ELEMENTS

Belonging

The adult or teacher can make all the difference to create a positive environment for 4-H members. This will be the first club meeting, so there needs to be rules set for the members to have respectful attitudes towards each other and their leader. Be sure to have the members encourage and compliment one another on the art pieces that they created. After the members have finished their pieces, have each member go around and say one positive thing about their jungle painting and one positive thing about another member's jungle painting.

Mastery

This lesson teaches members about color mixing. This is something that they see every day but may not have known how it works. They should now understand how colors are mixed to create all different shades of colors using the three primary colors. This lesson also teaches the members about a particular ecosystem. It shows them that there are different types of ecosystems besides the one they live in.

Supplies

- Oil paints (blue, green, brown, black, yellow, white)
- Paintbrushes (variety of kinds)
- Canvas panels
- Computer and projector
- Paint tray (to mix colors)
- Paint Brush Strokes handout

INTRODUCTION

In this club meeting, club members will discuss the taiga ecosystem. They will learn facts about forests and also learn painting techniques and different strokes. They will also learn by doing as they paint a taiga scene on canvas.

OBJECTIVES

- Learn facts about forests and the taiga ecosystem
- Learn about basic strokes and techniques in painting
- Learn how to paint a taiga scene on canvas

Activity #1

LEARNING ABOUT FORESTS

TIME: 10 MINUTES

1. Before beginning the art portion of this lesson, it is important for the members to understand the taiga ecosystem and what makes it special. In the taiga climate, there is an average annual rainfall of 12-33 inches. Be sure to help the members realize how little rain that is compared to the rainforest.

2. In this ecosystem, there are freezing cold temperatures, even as low as -65 degrees F. For half of the year, the average temperature is below freezing. This classifies the taiga ecosystem as a moist subarctic forest. Many of the plants and trees that are in this environment have to be resistant to the cold, harsh winters. This is why coniferous evergreens thrive in this environment.

3. Observations: Be sure that the members can pinpoint differences between the two different ecosystems that we have now talked about. They could talk about how rainforests and taiga differ in their rainfall, temperature, and plants.

Activity #2

STROKES AND TECHNIQUES

TIME: 10 MINUTES

1. For this activity, the club members will be learning different strokes and techniques for painting.

2. There are many videos out there that can help teach these concepts. An example of one of these is found in Activity 3. That is why there is a computer and projector on the supply list.

3. Show the club members that there are many different strokes they can do.

4. A handout is provided to show all of the different strokes that can be done with different types of brushes. Hand it out to the club members. It can be found in the appendix of the curriculum on page 25.

Activity #3

TAIGA SCENE

TIME: 15 MINUTES

1. For this activity, the members will all need a canvas panel on which to paint their scene and a computer with Internet.

2. Now that the members have an idea of what a taiga forest would look like, and know how to do some basic brush strokes, they can begin their project.

3. There are many videos available online to teach the youth how to paint a mountain scene. A good video is "Bob Ross - Winter Evergreens" (Season 9 Episode 1) Link: https://www.youtube.com/watch?v=O6L5YPt9CeU

4. In this video, Bob Ross will give the members ideas of how to paint their taiga scene, as well, and pointers on how to use different brushstrokes and techniques (Ross, 2016).

5. After this lesson has finished and the youth have all painted their scenes, have each member go around and say what they like best about their painting and what is one way it could be improved the next time.

6. Observations: Watch to make sure that all of the members are following along and are staying on track. If some of the members are falling behind, pause the video and make sure they are getting the help they need.

Reflect

- Why do we use different strokes in painting?
- What is one plant that thrives in the taiga ecosystem?
- What is one difference between the jungle and taiga ecosystem?

Apply

- How will following the steps that were taught to you help you with directions in the future?
- How do the brushstrokes that are used create different feelings in the art?
- Do you live in the taiga ecosystem? If not, in what ecosystem do you live?

ESSENTIAL ELEMENTS

Belonging

While the club members are working on their art pieces, be sure that they are keeping up with the video. Having the members follow along with the same video will help them feel as if they are all creating an art piece together. Once the members have completed their art piece, have them point out the positive aspects of their paintings.

Optional: Give each member a sticky note or piece of paper and have them leave it next to their art. The members will go around and write one positive thing about another person's art piece. Once they are all done, the members will all have a list of positive things that other members noticed about their artwork.

Independence

Some youth may not think they are "good" at art. Helping the youth understand what they are learning and don't need to be perfect will help them gain self-confidence. As you create an encouraging learning environment, you set the stage for youth to be confident while practicing their new abilities.

Mastery

Encourage the members to think of more ways they could integrate their learning into future activities. The members could create more art of other ecosystems by using the same techniques they used in this activity.

Supplies

- Ceramic cups (preferably white and unfinished, can be found at a craft store)
- Bake on ceramic or porcelain paint
- Acrylic paint (if desired instead of ceramic paint)
- Ceramic paint pen (optional)
- Paint brushes (thin and thick)
- Cactus or succulent for each cup
- Painter's tape
- Clear coat paint (for decorative dishes)
- Oven
- Oven mitt
- Scratch paper
- Pencil

INTRODUCTION

In this club meeting, club members will discuss the desert ecosystem. They will learn about deserts as they participate in activities together. They will learn skills of painting a pot and also learn about the plants that grow in the desert, such as the cactus. They will plant their own cactus in the pot they have painted.

OBJECTIVES

- Learn facts about the desert ecosystem
- Learn how to paint a mug
- Learn how to care for a desert plant

Activity #1

LEARNING ABOUT DESERTS

TIME: 10 MINUTES

1. Before the members begin the art portion of their activities, they will need to understand some things about the desert ecosystem. When thinking about deserts we often think about them as being dry and hot, but they can be cold as well. Even though there is very little rain fall, there are still many plants that grow there. They have simply adapted to those living conditions.

2. Deserts receive less than 10 inches of rain annually. The air in the ecosystem is very dry, which causes harsh living conditions for both the plants and animals that live there. There are deserts all over the world, both hot and cold (Desert Ecosystem, 2016).

3. Today we will be focusing on and creating art that involves the desert. Ask the members to think of some plants that remind them of the desert. Cacti will likely be one of their answers.

PAINTING A MUG

TIME: 1 HOUR

1. For this project, club members will need a mug or cup and paint.
2. Be sure to remind the youth how this relates to deserts. There are all kinds of cacti in deserts.
3. Have the members first pick out what designs they would like to do on their cup. They can draw them on a paper to try out their designs.
4. Once they know what they want to paint onto their cup, club members can pick out the paint that they want to use.
5. Once they pick out which paint they would like to use, they can begin painting.
6. If they are applying more than one layer of paint to the mug, have them be sure that the first layer is dry before applying another layer.
7. When they are done painting, have the club members coat the mug in a clear coat of acrylic paint if they are using acrylic paint. This will give the mug a glossy look. This is not necessary if they are using ceramic paint.
8. Next, have the club members bake the mug. This is what makes the paint stay on the mug.
9. When baking the mugs, follow whatever directions are on the paint container. The directions are made for that particular paint so it is important that they are followed directly. Most paints require baking for at least 30 minutes.
10. When the mugs are finished baking, pull them out of the oven using an oven mitt.
11. Allow the mugs to cool off before the members pick them up.

PLANTING DESERT PLANTS

TIME: 25 MINUTES

1. For this activity, club members will be learning more about desert plants and how they survive.
2. Desert plants receive very little rainfall, which means they have adapted to harsh living conditions. How do cacti survive in desert heat with so little water?
3. Cacti have many adaptations that allow them to live in their conditions. One thing that cacti have is a shallow root system.
4. Show members this when they are planting their cacti. Their shallow root system allow cacti to soak up any rainfall that comes their way. An example of this would be a full grown Saguaro cactus. It can soak up and store up to 200 gallons of water during a downpour.

5. The cactus that the club members plant will obviously not have that big of a root system because it will be in a pot. This realization can help club members understand why their cactus doesn't have big roots.

6. Have club members plant their cacti or succulents in their pot.

7. They now need to know how much water is required for their plants survive.

8. Cacti should not be watered as much as other plants. They require water only once a week. This can vary or change depending on what type of cactus it is.

9. Be sure to follow the directions that are on that particular type of plant.

10. Observation: Follow up with the club members to be sure they are following the directions on their particular plant, and that they understand they need to follow those directions for their plant to survive.

Reflect

- On average, how much rain does the desert receive in a year?
- Will you need to water your cactus/succulent every day like other plants?
- Name one characteristic of the desert ecosystem.
- What is a difference between the desert and the taiga ecosystems?

Apply

- What knowledge have you gained here that can help you with desert plants in the future?
- In what ways could you save money by knowing you can create your own designs on dishes?

4-H MISSION MANDATES

Healthy Living

An idea of how to integrate healthy living into this activity would be to talk about what ecosystem the members live in. They can take a walk outside to get some exercise, and discuss why their environment can be classified as one of the ecosystems they have learned about.

ESSENTIAL ELEMENTS

Belonging

While the members are painting their mugs, make sure that they are all sitting together and that nobody is left out. Ask them questions about their work to encourage them to engage with other members.

Independence

While the members are working on painting their mugs, encourage them to try new designs different from other members. Allow them to be creative and gain confidence in their ability to be creative.

Generosity

Consider using this project as an opportunity to teach about donations and service. Give the members the opportunity to create multiple mugs (if the supplies permit) so that they would be able to donate them to someone in need.

Mastery

Be sure that the members understand what it is that they are doing, so they can replicate the activity in the future. Ask engaging questions to be sure that they are paying attention. Encourage them to ask questions as well.

Supplies

- Construction paper (all colors) 12 x 18"
- Scissors
- Glue
- Pencils

INTRODUCTION

In this club meeting, club members will discuss the ecosystem, tundra. They will discuss what types of animals live there. They will also learn how the food cycle works and will create a food cycle of their own. They will do this by using arts and crafts to create different-sized animals.

OBJECTIVES

- Learn facts about the tundra ecosystem
- Learn how the food cycle works
- Learn how to create a food cycle of their own using animals that live in the tundra ecosystem

Activity #1

LEARNING ABOUT TUNDRA

TIME: 10 MINUTES

1. Before the members begin the art portion of the tundra activities, they need to know a little about the ecosystem.
2. Tundra is the coldest of all the biomes. Tundra is most known for its cold temperatures, low levels of rainfall, and its short growing seasons. Tundra is mostly located in the northern hemisphere, around the North Pole (Hands-on Lessons). It goes south until it hits the taiga biome, which we learned about earlier.
3. Tundra is also known for its desert-like conditions that we also learned about earlier. It is characterized as desert like because of how little rainfall there is. Including the snowmelt, the tundra receives only 6-10 inches of water per year.

4. The average winter temperature in the tundra is -30 degrees F, but the average summer temperature ranges from 37-54 degrees F (Hands-on). This allows the tundra biome to sustain life, but due to the frozen ground in the tundra, roots are not able to grow deep into the ground. This makes it so trees and other large plants can't grow. Some plants that can grow, are low shrubs, liverworts, grasses and mosses. These plants are also able to be adapted to the strong winds that happen in the tundra (Hands-on, nd).

Activity *#2*

FOOD CYCLE IN THE TUNDRA

TIME: 15 MINUTES

1. While the members are learning about some of the characteristics of the tundra biome, they can also learn about different animals that live in this biome.

2. Ask the members what animals they picture when they think about this particular biome. Then they can ask, "What does that animal eat?", or "Where does that animal sleep?"

3. Have the youth think of four animals and one plant to use in their food chain for tundra animals. Then, explain the following activity to them.

4. Using 12 x 18 inch construction paper pick a color for the background that all of their animals will sit on.

5. Next, start with the largest animal (or top predator):

    a. Using a new piece of paper, fold your construction paper in half vertically.

    b. Draw half of the animal and then cut it out. This will ensure that your animal is symmetrical.

    c. After the animal is cut out, add on features such as eyes, nose, and teeth.

6. Repeat the same steps with all of the other animals. Be sure that each animals gets smaller as you go down.

7. Once all of their animals are cut out, glue them onto their 12 x 18" sheet of construction paper.

8. Start by gluing down the plant in the middle, and then go up from there. For example; you could start with a plant, then a fish, to a larger fish, to a seal, then to a polar bear.

9. Show the pictures on the next page to the club members as a reference.

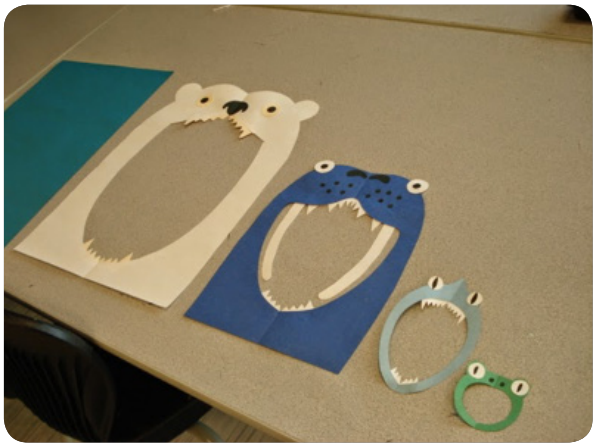
10. Discussion Question: Why could all of your food chains contain different animals?

11. Observations: Watch the members to be sure they are following the instructions, and that they understand what the instructions say. It may be difficult for the members to get the animals to fit perfectly inside the next animal's mouth space. Give the members the idea of cutting down their piece of paper into a smaller size before cutting it into the shape of the animal. This could make it easier for them to get their animals to fit.

1. Step One

2. Step Two

3. Step Three



4. Step Four

Reflect

- Can you name a food chain different than the one you created?
- What is one characteristic that stood out to you about the tundra ecosystem?
- What are some differences between the desert and the tundra ecosystem?

Apply

- How will learning about the food chain help you understand the animals around you?
- What does this teach you about food chains?

ESSENTIAL ELEMENTS

Belonging

As the youth are creating their food chain and cutting out their animals, take opportunities to give positive feedback. This will create an encouraging environment and help the members build confidence in their abilities,

Independence

During this activity, club members will learn about the food chain, which will help them better understand the world around them, and how animals interact with one another. This can also help them understand the animal relationships in other ecosystems as well.

Mastery

Encourage the youth to be precise in their cutting so that none of the animals are over lapping each other. Have an example of the project laid out so they can see what a neat and precise project looks like.

Supplies

- Shoebox or similar-sized box
- Construction paper or card stock
- Crepe paper
- Acrylic paint
- Crayons or colored pencils
- Scissors
- White glue
- Paint brush
- Craft sticks
- Hot glue gun

INTRODUCTION

In this club meeting, club members will learn about the grassland ecosystem. They will first learn about the type of weather there and other facts about the ecosystem. They will then learn by doing. They will do this by making a habitat diorama, which they will fill with miniature animals they will color and cut out.

OBJECTIVES

- Learn facts about grasslands
- Learn about different animals that live in grasslands
- Learn how to create a diorama
- Learn ways to make sure the diorama is sturdy

Activity #1

LEARNING ABOUT GRASSLANDS

TIME: 10 MINUTES

1. Before the members begin the art portion of this activity, they need to understand some of the basics of the grassland ecosystem.

2. The grassland biome includes large, rolling terrain covered in grasses, flowers, and herbs. Very few trees can survive there because the precipitation is so erratic. This means that there is often drought and this causes fires, which prevents forests from growing. There are two different types of grasslands: tall grasslands, which are humid and very wet; and short grasslands, which are dry with hot summers and cold winters (M., 2000).

3. Observation: The leader may want to check and see if the members understand what is being taught. They may not understand some of the vocabulary. For example, when they say that the precipitation is erratic, it means that it is not regular.

4. If the members have questions be sure to make their environment comfortable enough so they feel like they can ask their question

Activity #2

HABITAT DIORAMA

TIME: 15 MINUTES

For this art activity with grasslands, club members will create a diorama depicting all of the different animals that can be found in the grassland biome (African Savanna Habitat).

Diorama definition: A diorama is a scene, often in miniature, reproduced in three dimensions by placing objects, figures, etc., in front of a painted background.

1. Prepare the box -
    a. Find a shoe box; the larger the box, the more space the youth will have to work with.
    b. The lid will have to be kept permanently open. This can be done with craft sticks and hot glue.
2. Paint the box -
    a. Members can paint the box with poster paint or acrylic paint.
    b. They will need to paint the inside walls with whatever color they want the sky to be.
    c. They can paint the bottom green if they want their diorama to be tall-grass grassland or a yellow/brown color if they want it to be a short-grass grassland.
3. Draw or print out animals -
    a. Club members can draw their own animals, or they can print them out from the Internet. If the club members are younger, it may be easiest to have images printed out already.
    b. Print out the animals out on cardstock, so the paper will be strong enough to stand up.
4. Color and cut out the animals -
    a. Have the members color the animals before they cut them out. Be sure to remind the members to make them look nice and neat.

b. Remind them they are not in a hurry and to take their time on coloring and cutting.

5. Add background and ground details -

   a. Paint or glue on some background details like clouds, a sun, or trees.

   b. Glue on ground features such as a watering hole or rocks.

6. Create paper tabs -

   a. Adding tabs to the animals will help them stand up easier.

   b. In this diorama, the members will have several animals, so having them stand up will make it look clean.

   c. To create the paper tabs, cut strips of thick cardstock and bend them into an L shape.

   d. The members will glue one side of the "L" to the animal, and later they will glue them onto the box.

   e. If the animals have skinny legs, they can be difficult to make sturdy. One idea would be to cut out a piece of paper into the shape of a hill. The animals' legs can then be glued onto that to make them sturdy.

7. Position the animals -

   a. Once the animals are positioned in a way that all of them can be seen, have the club members glue the other side of their paper tab onto the box.

8. Create grass -

   a. Creating grass is an important step because we are focusing on grasslands.

   b. To create the grass, cut green or yellow paper into a rectangular piece. Then cut along the top of the rectangular piece to give the appearance of blades of grass.

   c. Have the members fill the diorama with lots of grass to turn it into an African grassland.

Reflect

- How did creating the diorama help you understand more about the grassland ecosystem?
- What are the two types of grasslands?
- What is one difference between the tundra and grassland ecosystems?

Apply

- How can you use the knowledge you now have about grasslands to understand how certain plants can survive in both dry and wet conditions?
- Does this help you understand why dioramas are used to help people visualize different structures/places?

4-H MISSION MANDATES

Science

This lesson uses science by teaching the club members how to use different shapes and folding paper to stabilize their animals, and other pieces in their diorama. When they are trying to get their animals and grass to stand up, they have to figure out the best way to stabilize them by using some engineering skills.

ESSENTIAL ELEMENTS

Belonging

By this time, the club members should be comfortable around the other members, and should have gotten to know each other. You could now play some games that help them get to know one another more. They may even want to know more about their leader. Take this opportunity to help them all gain self confidence and get to know one another better.

Independence

This activity will teach the members independence when they choose different animals from the member sitting next to them. The members will be required to use their creativity to put a unique spin on their art piece.

Supplies

- Flour
- Salt
- Water
- Food coloring or tempera paint
- Squeeze bottles
- Heavy cardstock or cardboard

INTRODUCTION

In this club meeting, club members will do two separate activities to help them learn about oceans. First, they will learn facts about oceans and marine life. After this, they will move onto the next activity and apply what they have learned by making their own salty paint and painting an ocean scene.

OBJECTIVES

- Learn facts about oceans
- Learn how much salt is in the ocean
- Learn how to create salt puffy paint
- Learn how to create an ocean picture using the paint they created

Activity #1

LEARNING ABOUT OCEANS

TIME: 10 MINUTES

1. Before the members begin the art portion of this lesson, they will need to understand a little bit about the ocean ecosystem.
2. This biome is very different from all of the others because it is underwater, and every other biome that has been discussed has been on land.
3. This biome covers approximately 70% of the earth.
4. There are five ocean biomes on the earth; the Pacific Ocean, Atlantic Ocean, Indian Ocean, Arctic Ocean, and the Southern Ocean. The average temperature in this biome is 39 degrees; however, that can change depending on

the depth of the water and whether the sun is shining or not (B. Ocean Biome).

5. The water in the ocean is very different from the drinking water we are used to. Unlike fresh water, ocean water is about 3.5% salt (Sea water, n.d.).

6. All of the plants and animals that live in the ocean biome are adapted to this salty environment.

Activity #2

SALTY PUFFY PAINT

TIME: 15 MINUTES

For this activity, the members will be making their own paint. It will be made with salt, water, and flour. The only difference is that unlike ocean water with 3.5% salt, this will have equal parts of salt and water. For example, if you use 1 cup of flour, you will also use 1 cup of salt, and 1 cup of water.

1. Whisk together equal parts flour, salt, and water. Then mix in the color.

2. For the color, you can either use food coloring or a tablespoon or two of tempera paint. The amount of paint or food coloring you add will depend on how bright you want your paint to be.

3. Once the ingredients are mixed together you will then pour the mixture into a squeeze bottle.

4. This is when the members may begin creating their art piece!

5. Give the members a prompt of what they should create with their paint.

6. Ask the members to paint a scene, an animal, or a plant they may see in the ocean.

7. Remind the members that they can layer their paint with different colors.

8. This paint won't mix like other paints because it is stiffer than regular paint. Once the paint is dry it will stand taller and will be hard and crystalline from all of the salt and flour.

9. When the club members are finished, have them share their paintings with the group.

10. Ask them to share at least one thing they enjoyed or learned during the six club meetings.

Reflect

- What percent of the ocean is salt? What percent of the paint is salt?
- What does your art piece have to do with the ocean?
- What are some main differences between the grassland and ocean ecosystems?

Apply

- How will creating this paint recipe help you understand other recipes?
- Does this knowledge about oceans help you better understand why only certain animals can live there?

4-H MISSION MANDATES

Healthy Living

One idea of how to integrate healthy living into this activity is to talk about recipes. The recipe used in this activity uses both salt and flour, which can be found in many recipes. You could give the members some healthy recipe ideas that they could use in the future to cook for themselves.

ESSENTIAL ELEMENTS

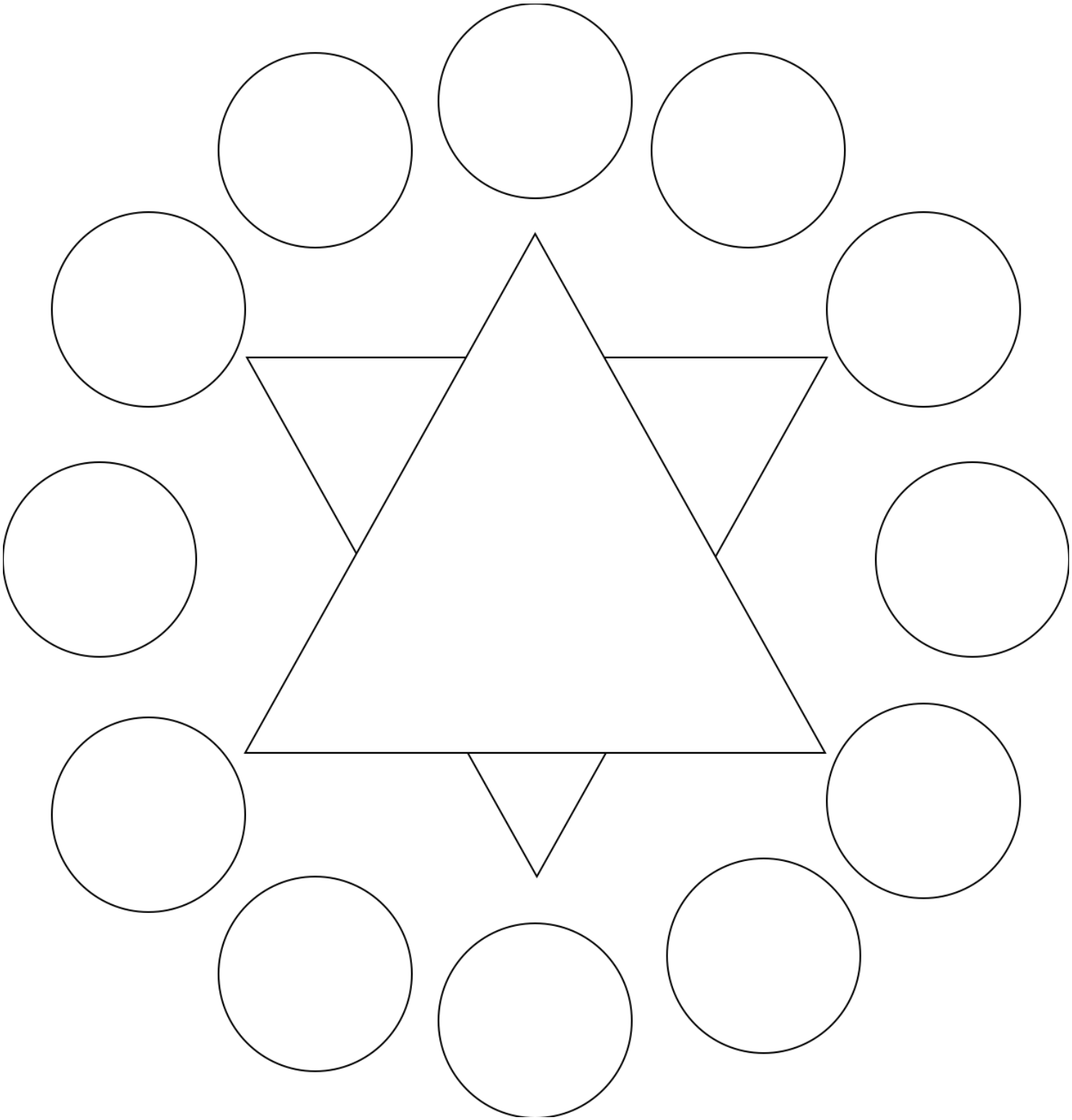
Belonging

With this being the last lesson, the members and leader should know each other well enough to be comfortable around one another and share their ideas of why they enjoy participating in 4-H. Now would be a great time to share those ideas, and to review things that they learned each day and the things they could take with them in the future.

Mastery

Encourage the youth to take some of the ideas they learned in this lesson and the other lessons and share them with other people, including friends and family. They can also take this opportunity to teach other youth about ecosystems, and create fun projects together to demonstrate their learning.


Series 620 Cats Tongue (Filbert)
-blending, natural petal shapes
-strokes with soft rounded edges
Series 621 Fan Brush
-blending, texturing, softening
-great for grass, foliage
Series 625 Angular Shader
-sharp edges, tight shading
-floating, curved strokes,
Series 630 Triangular Brush
-3-sided colour loading,
-continuous borders, multi
coloured petals and leaves
Series 640 Dagger Brush
-long varied strokes, ribbons
-borders, marbling effects
Series 650 & 660 Square Shaders
-decorative strokes, sharp edges
-blends and floats colour, blocks
Series 656 Natural Hair Deerfoot Stippler
-stippling, texture, foliage,
-fur on animals and clothing
Series 665 & 675 Filbert &Square Comb
-special texture effects, multiple
lines, hair, grass, wood graining
Series 670 Round Pointed Brush
-decorative stroke work, broad
lines, thick to thin lines
Series 680 Glaze Brush
-broad square strokes, float and
blend colour, basecoat, glaze
Series 690 Script Brush
-extra long stroke work, extra
long lines and scrolling
Series 695 Liner Brush
-extra thin lines,small strokes
-creating finest details, writing



REFERENCES AND OTHER RESOURCES

A faithful attempt. (2014, December 01). Retrieved July 06, 2017, from http://afaithfulattempt.blogspot.com/2014/12/food-chain-collage.html

Anatomy of Brushes. (2016, December 08). Retrieved July 06, 2017, from https://blog.hmstudio.com.ua/stati/anatomiya-kistochek/

B. (2012, April 3). Ocean Biome. Retrieved July 06, 2017, from http://www.bioexpedition.com/ocean-biome/
Desert Ecosystem. (2016, December 24). Retrieved July 06, 2017, from http://www.conserve-energy-future.com/desert-ecosystem.php

"Diorama." Dictionary.com. Dictionary.com, n.d. Web. 04 Aug. 2017.

F. (n.d.). African Savanna Habitat Diorama. Retrieved July 06, 2017, from http://www.firstpalette.com/Craft_themes/Animals/africansavannadiorama/africansavannadiorama.html

"Fun Rainforest Facts for Kids - Interesting Facts about Tropical & Temperate Rainforests." Science Kids - Fun Science & Technology for Kids! Science Kids, 18 July 2016. Web. 15 May 2017. Retrieved from http://www.sciencekids.co.nz/sciencefacts/earth/rainforests.html

"Fun Jungle Facts for Kids - Interesting Facts about Tropical & Temperate Rainforests." Science Kids - Fun Science & Technology for Kids! Science Kids, 18 July 2016. Web. 15 May 2017. Retrieved from http://www.sciencekids.co.nz/sciencefacts/earth/jungles.html

Hands-on Lessons and Activities about the Tundra and Ecosystems – Tundra: Life in the Polar Extremes – Beyond Penguins and Polar Bears. (n.d.). Retrieved July 06, 2017, from http://beyondpenguins.ehe.osu.edu/issue/tundra-life-in-the-polar-extremes/hands-on-lessons-and-activities-about-the-tundra-and-ecosystems

"Henri Rousseau." The Art Zone, Retrieved July 05, 2017, from https://www.nga.gov/kids/linkrousseau.htm

How Does a Cactus Live Without Water? (n.d.). Retrieved July 06, 2017, from http://wonderopolis.org/wonder/how-does-a-cactus-live-without-water

Hul, J. V. (2017, February 28). Salt Puffy Paint - A Tried-and-True Process Art Activity for Kids. Retrieved July 06, 2017, from https://artfulparent.com/2017/02/salt-puffy-paint.html

M, S. (2000). Grasslands. Retrieved July 06, 2017, from http://www.blueplanetbiomes.org/grasslands.htm

Ross, Bob. "Bob Ross - Winter Evergreens." YouTube. YouTube, 18 Mar. 2016. Web. 27 July 2017. <https://www.youtube.com/watch?v=O6L5YPt9CeU>.

Sea water. (n.d.). Retrieved July 06, 2017, from https://www.sciencedaily.com/terms/seawater.htm

"Tropical Rainforests." (2002, December). Retrieved July 06, 2017, from http://www.blueplanetbiomes.org/rainforest.htm

Taigan Climate. (n.d.). Retrieved July 6, 2017, from http://www.blueplanetbiomes.org/taiga_climate_page.htm

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. You can 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