DISCOVER

4-H URBAN GARDENING

EXTENSION
UtahStateUniversity

DISCOVER

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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).

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Utah 4-H

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

The 4-H Motto

"To Make the Best Better!"

The 4-H Pledge

I pledge: My HEAD to clearer thinking, my HEART to greater loyalty, my HANDS to larger service and my HEALTH to better living, for my club, my community, my country, and my world.

4-H Clubs

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

Club Enrollment

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

Elect Club Officers

Elect club officers during one of your first club meetings. Depending on how many youth 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 both 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 club member to lead)
- ☐ Roll call–secretary (may use an icebreaker or get acquainted type of roll call to get the meeting started)
- ☐ Minutes of the last meeting–secretary
- ☐ Business/Announcements–vice president
- ☐ Club Activity–arranged by activity facilitator and includes project, lesson, service, etc. These are outlined by project area in the following pages.
- ☐ Refreshments–arranged by refreshment coordinator
- ☐ Clean Up–led by clean-up supervisor

Essential Elements of 4-H Youth Development

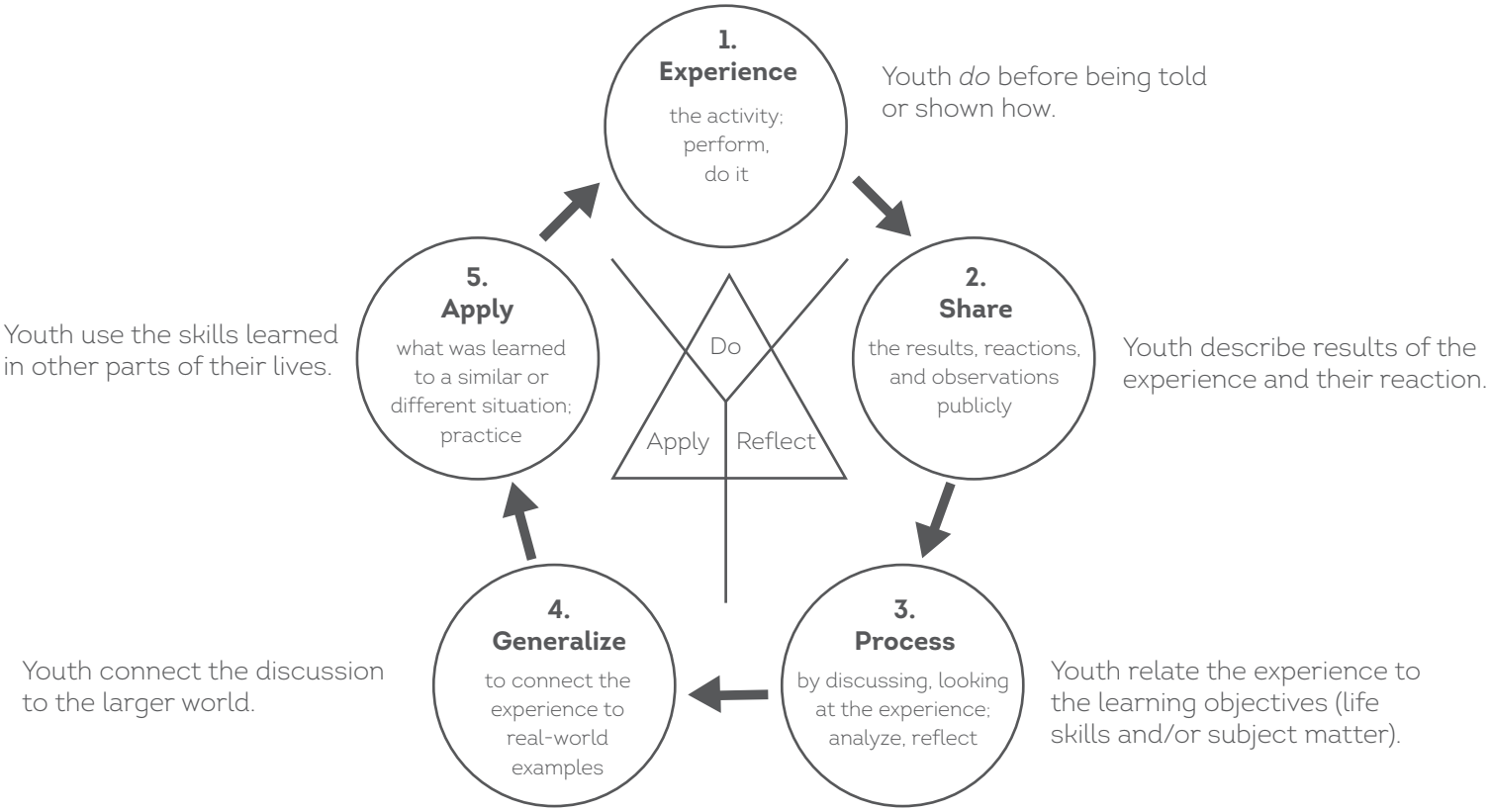
The essential elements are about healthy environments. Regardless of the project area, youth need to be in environments where the following elements are present in order to foster youth development.

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

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

4-H "Learning by Doing" Learning Approach

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



4-H Mission Mandates

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

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

Getting Started

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

Other Resources

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

References

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

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

We would love feedback or suggestions on this guide; please go to the following link to take a short survey:
Go to https://goo.gl/WH8Rqk or Click here to give your feedback

4-H URBAN GARDENING CLUB *Meetings*

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Supplies

- Paper
- Colored pencils, markers, or crayons
- 2 flowers per group of 2-3 members. (one flower white, one flower any other color)
- 1 sharp paring knife per group
- food coloring (4 colors)
- Water
- 4 small cups per group

INTRODUCTION

This lesson will give club members a basic understanding of plants, specifically the anatomy of a plant and function of the different parts. They will also be introduced to art and creativity with plants. Optional: carry out experiment 2 a day or two before the club so you can show club members the results.

PRIOR TO MEETING

Familiarize yourself with the parts of a plant and their functions, and purchase supplies. Put flowers in a vase with water when they are not being used to keep them fresh, and cut 4 inches off each white flower stem.

Activity #1
Plant Anatomy

PLANT ANATOMY

TIME: 20 MINUTES

Have club members discuss what they know about plants, specifically the plant parts they already know.

1. Handout one piece of paper to each participant and evenly disperse coloring supplies.
2. Have club members draw a flower or another plant. Have them include roots, leaves, a stem, seeds, and a flower of some sort. As they are coloring, ask students what each part of the plant does. For example, roots collect nutrients from the soil, and the leaves use photosynthesis to turn sunlight into energy to grow.
3. Next hand out one colored flower to each group and one more piece of paper. Have students write large labels on their paper for stem, seeds, leaves, and flower. Explain that two other important parts of a plant are the roots and fruit, but they aren't included on this plant. The roots were cut off when they cut off the flower branch, and a fruit is what is formed when the flower is fertilized by pollination.

4. Have club members carefully remove the seeds from the plant, and place them on their label. Have them draw the seeds on the backside of the paper they drew the plant on. Discuss the process of germination. (A seed is released by the plant and travels. The seed must remain dormant for a period of time, or some seeds have specific environmental conditions, then the dormant seed receives water and nutrition, triggering germination, and it will begin to sprout.)
5. Next, have club members remove the leaves and place them on their label. Repeat step 4, but about leaves and their functionality (draw them, discuss photosynthesis.)
6. Repeat step 4 with the flower of the plant. Discuss that the purpose of a flower is for reproduction, allowing pollination, etc. Discuss why pollinators are important in our communities. Allow club members to take the petals off and cut what is left in half, and discuss what they think the now visible parts are for.
7. Have club members carefully slice the stem in half. Explain that the stem is like the body of the flower, carrying nutrients to other parts of the plant. Have them draw this part of the plant.
8. Ask why it is important as a club member to know the anatomy and needs of a plant.
9. Clean up.

RAINBOW ROSES

TIME: 30 MINUTES

1. Clear tables and give each group one white flower, four small cups, and a paring knife.
2. Have club members predict what they think is going to happen.
3. Have club members fill their cups with ¼ to ½ a cup of water each.
4. Add a couple drops of food coloring to the cups, using a different color for each cup.
5. Cut stem in half with the paring knife from the bottom to about 5 inches up.
6. Repeat step 5 perpendicular to the current cut. If you hold the stem together it should look like a plus sign or an x.
7. Separate the four bottom pieces of the stem while still keeping the rest of the stem in tact.
8. Place one of the four pieces into each cup.
9. Let flowers soak. They may have to be taken home overnight and results reported and discussed at the next club meeting.

Reflect

- What gardening skills did you learn in this activity?
- What part of the plant is most important and why?
- What different needs do plants have?
- Why did the white flowers turn rainbow colors? Why didn't the leaves? How did the colored water get to the petals?

Apply

- Where do we use the different parts of plants in our lives? Talk about how the produce they eat are different parts of plants. For example, potatoes and carrots are roots, celery is a stem, spinach is a leaf, apples and oranges are fruits.
- What needs do humans have that are similar to the needs of plants?

4-H MISSION MANDATES

Identify from citizenship, healthy living and/or science and explain why.

Citizenship

Learning about plants needs and the importance of pollinators encourages environmental responsibility, improving communities.

Science

Basic biology is taught through learning the anatomy and function of plants.

ESSENTIAL ELEMENTS

Identify tips to include during the lesson and how it applies.

Belonging

Working in groups with other club members to predict and explore develops a cooperative club culture.

Independence

Members are asked to try solving their own problems before asking for help and are asked for their input in discussions.

Mastery

Learning is based on previous knowledge, and activities progress in complexity.

References:

Spangler (2015). Steve Spangler Science. Retrieved from https://www.stevespanglerscience.com/lab/experiments/colorful-carnations/

Supplies

- Small bin or compost box
- Compost supplies (egg shells, dead leaves, grass clippings, shredded newspaper, vegetable scraps, etc.)
- Stuff to decorate planters with, hole punch, push pins, stickers, scissors, box cutters,
- Legos
- Playdough
- Technology with internet access for research (optional)

INTRODUCTION

This week we will learn about creating a positive plant environment. We will learn how to create the best environment for different kinds of plants, try composting and upcycle to improve our community's environment.

PRIOR TO THE MEETING

Ask club members to bring in recyclables that can be used as planters (for example milk jugs or soda bottles, the more surface area for growth, the better) and bring some extras in case some club members forget to bring one. Also ask members to bring in compost materials (listed above).

Activity #1
Creating an Environment

CREATING AN ENVIRONMENT

TIME: 20 Minutes

1. Begin by discussing with club members that there are many different kinds of plants, and they all have different needs. Make plant categories by suggestion of club members (for example, succulents/desert plants, grasses, ground cover, flowering plants, etc.). Have members discuss the needs each category of plants have. Encourage them to go further by adding the amount needed of each essential element (i.e. desert plants need a little water and a lot of sun, tropical plants need a lot of water, including humidity, and indirect sunlight).
2. Have club members in teams of 2-3 pick a plant and create it using Play-Dough or Legos. Have members research (if you don't have internet access, consider bringing in experts or books for them to consult) and brainstorm the needs of their plants and recreate them using Play-Dough or Legos.
3. Have club members present their environments to the rest of the club and allow other club members to ask questions about their environments.

UPCYCLING

TIME: 20 Minutes

1. Ask club members if they know what upcycling is and have a member that does explain it to the rest of the club. If no one does, explain that it is reusing something to make it into something even better. Today we'll be reusing some recyclables to make something better-planters!
2. Make sure to use something that will last a long time (hard plastic, not waxy cardboard). Cut a hole that will be the top of the planter, leaving enough of the planter for roots to develop but also maximizing surface area so you can include more plants.
3. Pin poke or hole punch holes in the bottom of your container for water to escape to prevent root rot and drowning your plant. (Apply to discussion about plant environments and how some plants need less water.)
4. Decorate planters with markers, stickers, etc. Make sure to write names on the planters so that they don't get mixed up!

COMPOST

TIME: 10 Minutes

1. Go on a walk to collect plant material to add to your compost in addition to what your club members brought from home. This can include grass clippings, rotted wood, dead leaves, etc.
2. Add all material to the compost bin or box and let sit until your club meeting the next week.
3. Discuss with club members that some materials don't need to break down before you can use them. You can add eggshells or grass clippings directly to soil.

Reflect

- What gardening skills did you learn in this activity?
- What can you put in compost and what does each material you put in do for plants?
- What is important when making a planter?

Apply

- Why is it important to create a plant-specific environment?
- What type of plants are you interested in gardening? What needs do they have?
- How does composting contribute to plant environment?
- How does upcycling help the environment?

4-H MISSION MANDATES

Citizenship

Club members learn about community responsibility while they explore upcycling and plant environments, and are also connected to their communities by talking to experts. Science: kids learn about biology when learning about plant needs and the effects compost has on soil.

ESSENTIAL ELEMENTS

Belonging

Club members contribute to the activity by participating in discussions, answering other club member's questions, bringing supplies and searching for their own compost material.

Independence

Youth make predictions based on what they have learned and conduct their own experiments. They are also given the opportunity to expand on it at home, and participate in self-led learning.

Generosity

Members learn how to give back to their communities through recycling and creating a better environment.

Mastery

This week's lesson builds on last week's lesson on plant needs by addressing how to fill those needs and promotes mastery by giving club members a chance to apply their knowledge.

Supplies

- Seeds
- Ziploc bags
- Paper towels
- Markers
- Water
- Stapler
- Ruler
- Cookie sheet

Soil

Easy to propagate succulents (https://www.succulentsandsunshine.com/prolific-propagating-succulents/)

PRIOR TO THE MEETING

Bring in the compost and planters from the previous week.

INTRODUCTION

This week, club members will learn about three different ways to plant: through germination, propagation, and direct replanting. They will have a chance to try each themselves, and design a plan for direct replanting.

Activity #1
Germination

GERMINATION

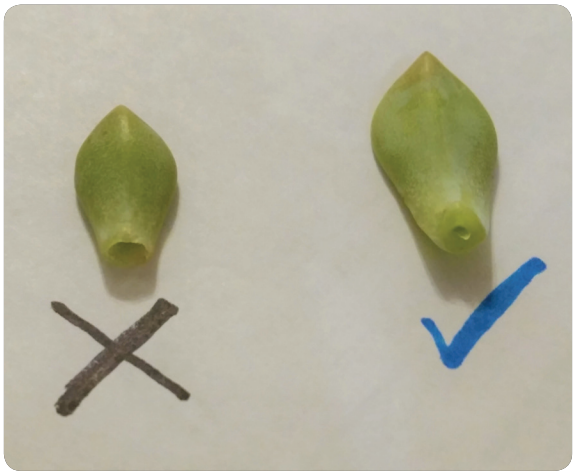
Time: 20 Minutes

1. Have members label a Ziploc bag with their name, date, and seed type.
2. Fold a paper towel so it fits inside the Ziploc bag and place it in the bag.
3. Measure 7 cm up from the top of the Ziploc and staple a row of staples through both the bag and the paper towel to create a plant "pocket."
4. Pour enough water in to the bag to soak the paper towel, and leave a little water at the bottom of the bag.
5. Place seeds in the bag on top of the staples in the plant "pocket."
6. Seal the bag and tape it to a window or have club members take it home.
7. As students are preparing their bags, discuss how germination works. (A seed is dormant for a period of time, and is then exposed to the conditions required to sprout, in this case sunlight and water.)

PROPAGATION

Time: 10 Minutes

1. Explain that plant propagation happens when you create new plants from a parent plant using leaves or cuttings instead of seeds.Take out the cookie sheet and cover with soil (about ¾'' deep.)
2. Pass out the succulents, and carefully remove two to three healthy leaves from the bottom of each plant. To remove them, carefully wiggle the leaf and pull until it pops off. It should look natural and not be ripped.
3. Place succulent leaves on top of dry soil, laying flat about 1 inch apart.
4. Leave for 1 week or until the edge that connected to the stem is calloused.
5. Water every time the soil is dry and watch them sprout! Set them where they will get plenty of sun.
6. Do not remove the original leaf, it should eventually fall off on its own.
7. Over the course of your club, have students check and record the progress of your succulent leaves.



DIRECT

Time: 15 Minutes

1. Discuss the third type of planting, directly planting a full grown plant. Have club members brainstorm how to replant, or directly plant the succulents used for propagation. What should they be careful of? How do they meet the plant's needs?
2. Mix compost with the soil and add to the upcycled planters, leaving an inch at the top of the planter free of soil to prevent spilling when it is moved.
3. Have club members make a plan to replant the succulents in their containers while keeping in mind the roots, stem support, sunlight, and water exposure. Make sure to handle plants carefully.

Reflect

- What gardening skills did you learn in this activity?
- What are the three kinds of planting?
- How do you do leaf propagation?
- What was fun about this club meeting? What was hard?

Apply

- Which plants work best for each type of planting? For instance, why wouldn't direct planting work for a tree?
- What kind of planting do you think you will use in the future and why?
- What could you plant and use at home with the different planting methods?

4-H MISSION MANDATES

Citizenship

Learning how to plant encourages youth to be future gardeners, improving their community and environment. Creating planting plans also develops efficacy and responsibility.

Science

Science: Biology concepts such as germination are taught with each type of planting.

ESSENTIAL ELEMENTS

Belonging

Taking care of surroundings and allowing others to enjoy the same experiences in nature can inspire a sense of belonging to youth.

Independence

Students create their own plans to directly plant succulents, and hold each other responsible.

Mastery

Members start off with a basic type of planting and work up to more complicated and independent projects.

References:
SAPS (2017). Science and Plants for Schools. Retrieved from
http://www.saps.org.uk/primary/teaching-resources/639-growing-seeds-in-a-plastic-bag

Supplies

- Glitter in a variety of colors
- 1 toothbrush per club member
- Bee Stickers
- Butcher paper or poster board
- Colored pencils, markers, or crayons
- 1 coin cell battery and vibration motor per club member
- Double sided foam tape
- Wire cutters or strippers
- Tape, cups, straws
- Planters with soil in them from previous week
- Mixture of seeds and full-grown plants that are polli-
- nator friendly (blue mist spirea, fernbush, hyssop, lavender, russian sage, penstemon, mint, thyme, rosemary, or strawberries suggested)

PRIOR TO THE MEETING

Cut toothbrushes so there is only the head with the bristles.

INTRODUCTION

Pollinators are extremely important to plants, especially in urban communities where different plants come in smaller quantities and are spaced farther away from each other. This week, 4-Hers will learn how pollination works, and will get to contribute to their communities by planting their own pollinator-friendly gardens.

Activity #1
Bee Bots

BEE BOTS
Time: 30 minutes

1. Have each club member draw their house or a park they like to go to and some plants they have in their yard on different parts of the poster board. Set aside.
2. Hand out toothbrush heads and have club members put a piece of double-sided foam tape on the non-bristle side.
3. Strip the plastic off the end quarter inch of the black and red wires connected to the vibration motor, and stick the vibration motor onto foam tape with the wires on the top side of the toothbrush.
4. Connect the red wire to the positive side of the coin cell battery and the blue or black wire to the negative. The head should start vibrating. For step-by-step pictures visit https://www.sciencebuddies.org/science-fair-projects/project_ideas/Robotics_p010/robotics/racing-bristlebots.shtml?from=Blog#procedure.
5. Place a bee sticker on top of the battery and motor, and a piece of tape hanging off the back of the bee bot.
6. Lay the poster board from earlier flat on a table or the floor and put a different color of loose glitter on each member's drawing.

7. Have students guide their vibrating bee bots in teams of two to three between each house/park using cups, straws and tape.
8. Discuss how each color of glitter represents a different plant's pollen, and why it's important for plants to get a variety of pollen.

POLLINATOR-FRIENDLY GARDEN

Time: 20 minutes

1. Now that club members know how pollinators work, they get to add pollinator-friendly plants to their gardens. Try to avoid strawberries in this activity because they will be used in next week's food gardens activity. Also try to either have some planters with the succulents and others with the pollinator plants, or pick pollinators that need the same level of sun and water as the succulents do (both rosemary and thyme will work if you can't separate).
2. Have students follow seed or direct re-planting instructions to add pollinator-friendly plants to their upcycled planters.

Reflect

- What gardening skills did you learn in this activity?
- How do pollinators work with plants?
- Why do we need pollinators?
- How did the poster board look at the end of the project? Was the glitter all the same color at the different houses?

Apply

- What pollinators live in your community? Why is it important that we take care of them, especially in urban environments?
- What plants are around your neighborhood that could help pollinators?
- What actions can you take to help pollinators?

4-H MISSION MANDATES

Healthy Living

Club members show community involvement by including pollinator-friendly plants in their small gardens, creating a better environment

Science

Students participate in a basic engineering/circuitry activity when they build the bee bots, and also learn basic biology when they learn about pollination.

ESSENTIAL ELEMENTS

Belonging

Club members work in teams to develop working relationships and a role in their club.

Independence

4-H'ers learn independence when creating their own routes for their bee bots and designing and planting in their upcycled planters.

Mastery

4-Hers are given the opportunity to apply the previous week's knowledge of different kinds of planting as well as the chance to share their pollinator expertise to set them on the road to mastery.

References:

Science Buddies Staff. (2016, October 28). Racing Bristlebots: On Your Mark. Get Set. Go!. Retrieved June 19th, 2017 from https://www.sciencebuddies.org/science-fair-projects/project_ideas/Robotics_p010/robotics/racing-bristlebots.shtml?from=Blog

Supplies

- Lettuce varities
- Chives
- Strawberries
- Spinach
- Herb seeds/small plants
- MyPlate worksheet
- Colored pencils, markers or crayons
- Soil
- Water
- Planters from previous weeks
- Fruit, grain, vegetable, protien, dairy snacks
- Internet access
- 5 poster boards
- Planters
- Popsicle sticks

PRIOR TO THE MEETING

Print out MyPlate worksheets (https://docs.google.com/file/d/0B8EFSpYDSzssZDc3ODMxMjEtYTJmZS00Y2I5L-WE0ODctNGFlNmU1MGU1NTEw/edit?hl=en_US) *Optional, have students bring in their favorite food to share.

INTRODUCTION

Gaining access to quality produce can be especially difficult in an urban environment. The 4-Hers will take the challenge into their own hands by creating food gardens in this week's lesson plan.

Activity #1
MyPlate Activity

MYPLATE ACTIVITY

Time: 20 Minutes

1. Ask kids to share what their favorite foods are, and split them into categories (grain, protein, fruit, vegetable, and dairy). Feel free to pair smaller groups and let club members pick which group they want to be a part of if their favorite food falls into more than one group.
2. Have club members research their group's category, including serving size, nutritional value, and some of the foods that fall into that category. Make an art poster for it.
3. Have 4-Hers present what they learned and their artwork, while other club members snack on that type of food and draw their favorite foods in that category on their MyPlant handout.
4. Challenge 4-Hers to share what they learned with their families.

KITCHEN GARDENS

Time: 30 Minutes

1. Have students get in teams of two to three and pick two to three kitchen plants from the seeds and small plant supplies that they want to grow.
2. Have 4-Hers research their plants, including nutritional value, needs, and care.
3. After they have presented their findings and seem to have a good grasp on their plant, they are ready to begin.
4. Start off by preparing the soil for the type of vegetable or herb you are gardening. Lettuce and spinach need very moist soil, strawberries need medium, and most herbs need pretty dry soil.
5. Carefully plant the seeds at the needed depth, and label with a popsicle stick.
6. Have 4-Hers plant any direct plants and place where they will get the needed amount of sunlight.
7. Have club members research or write their own recipe using their food plants.

Reflect

- What gardening skills did you learn in this activity?
- What are the different food categories?
- What was fun about this project?
- What was challenging?

Apply

- Why is it important to include produce in our diets?
- What fruits/vegetables/herbs are you going to grow?
- Did you plant your food plants differently or the same? Why?

4-H MISSION MANDATES

Citizenship

4-Hers improve their communities through sharing what they learn about eating healthy with their families and communities.

Healthy Living

Club members learn about nutrition, portion size, the importance of fresh produce in their diets, and how to plant their own produce.

ESSENTIAL ELEMENTS

Belonging

Working in a team to research and present develops roles and understanding among team members.

Independence

Club members are empowered to do their own research, pick which plant projects they want to do, and are held accountable for the results.

Generosity

4-Hers learn to share by bringing in some of their favorite foods and learn to give and take while working as a team.

Mastery

Students are given the opportunity to progress as they become experts on their chosen plants and put their knowledge to the test while caring for them.

References:

Ultimate Scouts (2014). Ultimate Scouts. Retrieved from http://www.ultimatescouts.com/2014/05/03/5-my-plate-worksheets/

Supplies

- Plants you have grown through the club
- Groundcover (moss, irish moss)
- Large and small pebbles
- Floral wire
- Popsicle sticks
- Hot glue gun and sticks
- Soil
- Several baking sheets

  Paper and writing utensils
- Art supplies

PRIOR TO THE MEETING

If the upcycled planters look too full or worn to use, ask each club member to bring another planter for their fairy garden.

INTRODUCTION

This last week, 4-Hers will use the knowledge and plants they have grown to create a fair-worthy project: a fairy garden.

Activity #1
Planter Prep

PLANTER PREP

Time: 10 Minutes

1. Loosen the plants 4-Hers have grown throughout the club and place them on baking sheets labelled with the club member's name. Be careful not to disturb any small sprouts.
2. Have 4-Hers plan out the setup of their plants on a piece of paper, and replant them. Make sure to take into account water and sunlight needs.
3. Add in ground cover plants. (They with expand over time, so don't plant them too densely.)

FAIRY GARDEN PROPS

Time: 40 Minutes

1. Go on a nature walk and collect stones, pinecones, bark strips, etc., to use as fairy garden props.
2. Have 4-Hers add prop plans to their garden blueprints.
3. Let club members explore and be creative with their resources. If club members are younger, have an adult volunteer help with the glue gun.
4. If a club member gets stuck, here are some suggestions:
5. Cut popsicle sticks in half and wrap with floral wire to make a fence
6. Use pebbles to create a cobblestone path
7. Make a fairy hut out of bark and pine cones
8. Create a bench out of two bark strips and popsicle sticks

Reflect

- What gardening skills did you learn in this activity?
- What are you proud of?
- How did you organize your garden?
- What do you like about other's gardens?

Apply

- Did the plan for your garden stay the same the whole time?
- What does a fairy need in its garden that you also need in your garden?
- How did you collaborate with others when building your garden?

4-H MISSION MANDATES

Identify from citizenship, healthy living and/or science and explain why.

Citizenship

Community needs are explored through the needs a fairy would have in its garden, and appreciation explored when club members are encouraged to admire other club member's gardens.

ESSENTIAL ELEMENTS

Identify tips to include during the lesson and how it applies.

Belonging

Encourage club members to collaborate with each other and learn from other's ideas.

Independence

Club members get to make this project entirely on their own using the knowledge and skills they have gained throughout this club

Generosity

Encourage 4-Hers to share supplies and ideas to foster generosity.

Mastery

This project has club members use their mastery of urban gardening to create a final project using the skills they have learned. Encourage club members to leave a space in their garden for propagating plants

Continue Discovering

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. www.discover4h.org
2. http://www.4-h.org/resource-library/curriculum/
3. http://utah4h.org/curriculum/

Become a 4-H Member or Volunteer

To **register** your Utah club or individuals in your club visit and contact your County Extension Office

http://utah4h.org/about/

http://utah4h.org/join/index

For help registering in 4-H online visit:

http://utah4h.org/staffresources/4honlinehelp

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

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

Stay Connected

Visit Your County Extension Office

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

https://extension.usu.edu/locations

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/events/index

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

For Utah state events and programs visit:

http://utah4h.org/events/index

http://utah4h.org/projects/

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

https://extension.usu.edu/locations

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/join/becomevolunteer

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: Click here to give your feedback
Or go to: https://goo.gl/iTfiJV