HEAD HEART HANDS HEALTH

4-H Fridays

4-H is an opportunity to try new activities and learn new skills. If you're looking for an idea to pass the time and want to try something new, check out the projects below. 4-H Friday will be created weekly with a variety of projects and skill levels highlighted each week. Please remember the social distancing and safer at home guidelines while doing these projects.

Extension
UNIVERSITY OF WISCONSIN-MADISON
FOND DU LAC COUNTY

Food Science: Growing Sugar Crystals

Materials:

- Glass jar for each group or participant
- Pan or bowl for making solution
- 3 cups sugar
- String
- 1 cup water
- Small plates
- Pencil & spoon

Instructions:

1. Tie the string to a pencil. Set the pencil across the top of the glass jar and make sure the string will hang into the jar without touching the sides or bottom. However, you want the string to hang nearly to the bottom. Adjust the length of the string if necessary.
2. Boil the water. If you boil the water in the microwave, be very careful when removing it to avoid splashes.
3. Stir in the sugar a teaspoonful at a time. Keep adding sugar until it starts to accumulate at the bottom of the container and won't dissolve even with more stirring. This means your sugar solution is saturated. If you don't use a saturated solution, your crystals will not grow quickly. On the other hand, if you add too much sugar, new crystals will grow on the undissolved sugar and not on the string.
4. If you want colored crystals, stir in a few drops of food coloring.
5. Pour your solution into the clear glass jar. If you have undissolved sugar in the bottom of your container, avoid getting it into your jar.

Adapted from: 4-H EDIBLE SCIENCE CLUBS

Make a Mini-Greenhouse

4-H Project Area: Plant Science
Time: 25 minutes; Follow-up observations at home
Life Skills: Critical Thinking–Keeping records; Responsibility
Materials:

- 1 alfalfa or bean sprout per child
- 1 small paper plate per child
- 1 plastic CD case (one side clear) per child
- Permanent markers
- 4-5 radish seeds per child
- Scissors
- Paper towels or felt scraps
- 8-½ x 11-inch sheets of paper
- Pencils
- Large bowl or sink nearby

Advance Preparation:

- Soak radish seeds in water overnight
- Pre-cut pieces of felt or paper towels to fit inside CD cases
- Fill a large bowl with water

Make a mini-greenhouse:

1. Use marker to write names on CD cases.
2. Wet felt by dipping in a bowl or running water. Squeeze water out so felt is damp but not dripping. Put felt in the CD case.
3. Place 4-5 radish seeds on top of felt. Space them a few inches apart for room to grow.
4. Close the CD case to seal mini-greenhouse. Tell children to take the greenhouse home and put it in a spot where it will not be disturbed.

Make a Sprout Journal:

1. Fold a mini-journal from 8½ x 11-inch paper.
2. Label each page with Day 1, Day 2, etc.
3. Tell children to keep their journal near their greenhouse. Ask them to check it daily and draw or write about the changes in their radish seeds.

More to Explore: To give children a peek at what will happen in their greenhouses, show them the YouTube video Time-lapse of Radishes Growing, Center for Ecoliteracy.

https://www.youtube.com/watch?v=fyV5z5b19mk

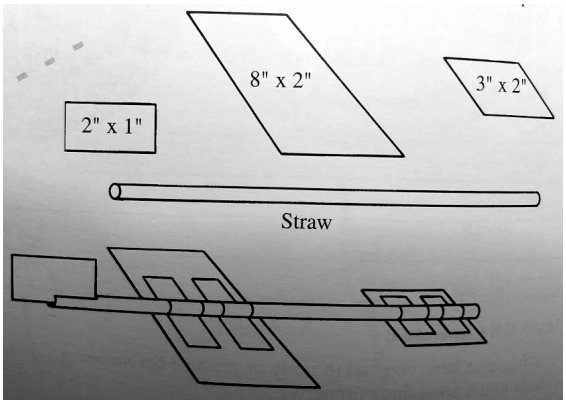
Adapted from: WI 4-H Cloverbuds Activity Plans Part1
https://fyi.extension.wisc.edu/wi4hcloverbuds/activity-plans/

Aerospace Adventures: Rudder Away

Materials: cardstock or other heavy paper, ruler, paper clips, large size drinking straw, scissors, tape

The Wright Brothers were the first to design a controllable airplane. The Brothers experimented and tested many designs. One design that was most successful had a front type wing the Brothers called a 'front rudder'. You will make your very own Wright Brothers Front Rudder airplane(s)!

Steps:



1. Begin by measuring and cutting the wings. Using the card-stock material, measure and cut: one wing 8-inches long and 2-inches wide. The front rudder wing should be measured and cut 3 inches long and 2 inches wide. The wing that is vertical (up and down on the tail) should be measured and cut 2 inches long and 1 inch wide.
2. Cut the drinking straw on one end to make a 1 inch slit. Slip the vertical wing into the cut.
3. Tape the longest wing that measures 8 inches just behind the vertical wing. Tape the other, shorter wing that measures 3 inches on the opposite end of the straw. (See the photo to the left for a visual.)
4. Test-fly your Front Rudder airplane with your family members. Practice bending and cutting the wings with different parts up or down. Record your results (i.e. 8 inch wing bent upward, bent down, ends only bent upward, bent down)

Reflect: Was this fun to do with your family? Which airplane design flew the longest? Fastest? Highest? Why do you think that is? Would you do anything different next time?

Source: Reaching New Heights, 4-H Aerospace Literature