O'Neill Public Library Program:

Storytime link: https://youtu.be/Sm8OXP4l0SY

How to do the Experiments at home:

Feather Experiment:

Materials:

- feathers, at least two
- vegetable or olive oil
- water
- two basins to put the liquids into

Instructions:

1. Pick up one feather and fully submerge it in the water. After bringing the feather out of the water, notice how much water is still on the feather and how much heavier it has become. *Do you think a duck could fly with so much extra water weight?*
2. Dip at least two fingers in the oil. Now pick up a new feather and run it between these fingers a few times. *You are replicating a duck preening itself, as seen in the story.*
3. Submerge the oiled feather in the water. After bringing the oiled feather out of the water, notice how much water is on the feather. *Is this more, less, or about the same as the non-oiled feather from before?*

Paper Bag Experiment:

Materials:

- two paper bags
- vegetable or olive oil
- water

Instructions

1. Open both paper bags and place them upright. Choose one bag to be the oiled bag, replicating the duck, and another to be the non-oiled bag.
2. Rub oil on the side of one of the paper bags, then rub water on both paper bags. *Which bag absorbs more water? Which has more water run off it? You just showed how ducks don't get wet, as seen in the story.*

Adapted from *Ducks Don't Get Wet* by Augusta Goldin. HarperCollins, 1989.

Duck Habitat Craft

Materials:

- paper plate
- coloring supplies (artist's preference)
- construction or plain paper
- safety scissors
- glue

Instructions

1. Think of a wild duck. As seen in the story, ducks need several elements in their habitat to survive and thrive. Animals' habitats consist of four main elements: food, water, shelter, and space. By following these instructions you can create a duck and pond craft that has all of these elements for your duck. *Research native wild ducks by checking out books from the O'Neill Public Library or by searching the internet, with parental/guardian's permission and guidance, before starting the craft.*

2. Color the paper plate to represent the water that the duck will inhabit. *Will your duck live in a wetland? stream? pond? lake? Use your creativity and imagination to decide.*

3. Draw the outline of a duck on the construction paper. Be sure to leave at least a half of an inch line of space at the bottom of its body so that when cut out you can fold this extra flap to make the duck sit upright in your habitat. Cut out the duck from the construction paper, use safety scissors or ask for help. Color the duck. *What color will your duck be? Use your research from earlier to inspire your imagination to run "wild."*

4. Glue one side of the extra flap on the duck to the paper plate. Fold the rest of the duck upwards so that it "sits" on the body of water you have created. You may need to bend the

fold multiple times to get the duck to sit up on the plate.

Duck Habitat Craft (continued)

5. While the glue dries, think of the other elements that a duck needs in its habitat. Create plants and trees for the duck to hide in and food such as grass, fish, or invertebrates for the duck to eat - from the remaining paper. If adding trees, reeds, or other elements that you want to stand up on the plate - be sure that you create an extra flap on the bottom of each element so that when cut out you can fold this extra flap just like you did with your duck. *Be sure to base these elements on your research. What does your wild duck species need to survive?*

6. Glue these last elements to your plate. Now you have created a complete habitat with everything your feathered friend needs to survive: water (the paper plate), food (grass, fish, or invertebrates), shelter (trees or reeds), and space.

Why learn about wild ducks?

With the Niobrara River to the north and the Elkhorn River to the south, O'Neill has a great many local, natural waterways that provide important habitat to ducks and other species of waterbirds in the Central Flyway. In 1991, a 76 mile section of the Niobrara River was deemed a National Scenic River. Less than one fourth of one percent of rivers in the United States have this special protection and distinction under the National Wild & Scenic Rivers System.

Where can I learn more about wild ducks native to Nebraska?

Besides looking online, there are many guide and nature books that cover the great wealth of native species that call Nebraska home. Check one of these out through the O'Neill Public Library!

Why do wild ducks need trees?

Some species of native waterfowl use hollow trees to nest in during their breeding season, called cavity nesting; these include wood ducks, hooded mergansers, buffleheads, and goldeneyes. Trees also help create healthy habitats for ducks, and their leaves can provide excellent nesting material.

Want to learn more about Nature this summer?

The Nebraska Forest Service is the state coordinating agency for Project Learning Tree and Project WET national environmental education curriculums. Through these excellent curriculums, we have links to engaging resources to continue learning and exploring throughout the summer.

From Project Learning Tree:
https://www.plt.org/activities-for-families/
Try these easy to follow activities to connect the children in your life to the outdoors and nature. PLT's Nature Activities for Families collection is made specifically for families with children ages 3 – 15. Get ideas on how to create meaningful memories with your family in your backyard, neighborhood park, or even indoors. They are a great resource to keep learning going during the summer, while also having fun with the whole family!

From Project WET:
https://www.projectwet.org/distancelearning
Project WET wants to ensure that water education continues for people of all ages, resulting in a suite of free and discounted resources that educators, parents and children can use to learn about water while meeting standards in math, language arts, science and even fine arts. Project WET hopes this helps educators and students continue learning and exploring during this pandemic. Check back weekly to view new Project WET resources!

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