Garden Earth Explorers: Bird Beak Activity

Essential Question(s):
What are adaptations?
How have birds adapted to their environments over time?

Background Information:
Adaptations are mutations in a species that have allowed them to evolve over time to be better suited to their environments or habitats. Charles Darwin was a researcher that visited the Galapagos Islands and discovered many interesting things about the finches there and the adaptations they had to help them get food. Over the course of his research he began to develop the theory of natural selection and his ideas about species’ evolution. He studied how these different finches looked very similar but had a variety of beaks and concluded that these beaks fulfilled different niches on the island and allowed the different finches to eat different things in order to find enough food to survive.

Preparation:
Gather all supplies needed for the activity and crafts

Procedure:
A. Background
1. Play “Bird Migration” song by David Burba and have children walk around flapping arms pretending they are migrating. Then you can explain how Darwin’s Finches did not have to migrate because they were able to adapt.

B. Main Activity
1. Lay out various stations with different utensils for the kids to use to try to pick up different items. Let them decide which tools work best for which “foods” and how they represent different beaks.
2. Match Bird Beaks to their Food

C. Craft
1. Cut out two small yellow circles and two larger brown circles out of construction paper.
2. Glue a yellow circle on top of a brown circle and then repeat so that you have two separate circle stacks.
3. Cut out two wings from brown construction paper and draw feathers on them with the markers.
4. Cut out a small orange triangle for the beak.
5. Glue the “circle stacks” on the pine cone as eyes and add two googly eyes on top of them.
6. Add the wings to the side of the pine cone with glue.

Objectives: Learners will...
- Learn about adaptations
- Learn about how adaptations are needed in different environments

Supplies:
- Clothes pins
- Toothpicks
- Strained spoons
- Straws
- Tweezers
- Chopsticks
- Rice
- Trix Cereal
- Water
- Pecans
- Dried Beans
- Pine Cones
- Google eyes
- Construction paper
- Tacky Craft Glue
- Markers

Standards:
- S3L1.

<table>
<thead>
<tr>
<th>Beak</th>
<th>Bird</th>
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<tbody>
<tr>
<td>Clothes Pins</td>
<td>Thick Beak Birds</td>
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<tr>
<td>Toothpicks</td>
<td>Woodpeckers</td>
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<td>Strained Spoons</td>
<td>Duck/ Pelican</td>
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<td>Straw</td>
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<td>Tweezers</td>
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<td>Chopsticks</td>
<td>Gull Birds</td>
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7. Glue the orange triangle on as a beak.

Discussion/Assessment:

- Ask kids to share what they learned.