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 **Findley Oaks STEM Connect**

 **3rd Grade Design Brief**

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| **Month****August** | **Challenge**Bird’s Nest | **Unit**Georgia Habitats |

**Standard:**

Students should follow the **Engineering Design Process.**

**Background/Problem:**  **Birds build their habitats out of natural resources that they find outdoors. They use mud, sticks, straw, twigs, leaves, feathers, and grass.**

**Design Challenge:** Your design challenge is to build a bird’s nest out of the material provided and see how many eggs it can hold.

**Criteria: Your nest must:**

* **be shaped like a bowl.**
* **be made out of mud, twigs, sticks, grass, feathers, and leaves.**
* **be as strong as possible.**
* **be between 5 and 10 centimeters tall.**
* **Be at least 5 centimeters wide.**

Constraints:

You must work with a partner (or in a group of 3) teacher discretion.

You can use some of are all of the materials.

You will make one nest together.

Test out your nest by pacing it in a low branch of a tree, or you can tape 3 rulers or yardsticks together into a triangle to simulate a tree branch. Place hard-boiled eggs in it. How many can it hold?

Materials: (per team or group) 2,3 (teacher discretion)

Mud

Straw

Grass

Twigs

String

Sticks

Leaves

Feathers

6 Hard boiled eggs for testing –how many can your nest hold?

Sticks/rulers/yardsticks

 (a foot long) 3 for testing

Tools:

Markers/crayons

Stapler

Hole punch

Rulers

Scissors

Crazy scissors

Glue and/or Glue Sticks

Paper/pencil for design planning

Options: weigh your nests, measure you nests, weigh the eggs