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 **Findley Oaks STEM Challenge**

 **2nd Grade Design Brief**

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| **Challenge**Growing Plants | **Unit**Life Cycles |

**Standard:** Prioritized Standard: S2L1.b Obtain, evaluate, and communicate information about the life cycles of different living organisms. Plan and carry out an investigation of the life cycle of a plant by growing a plant from a seed and by recording changes over a period of time.

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

**Background/Problem:**

You have learned a lot of things about plants, including the parts of a plant. You know that plants have roots, stems, leaves and flower/fruit.

**Design Challenge:**

Using the materials available, design and create a plant that has a stem, a flower/fruit, roots and leaves.

**Criteria:**

Your plant should:

* be able to stand alone
* have at least two moving parts
* have all parts labeled
* use a different material for each part of the plant
* include all 4 parts – roots, stem, leaves, and flower/fruit
* be pretty and colorful
* the flower needs to be made out of petals and contain seeds

**Constraints:**

* you can use some of are all of the materials

**Materials:**

* 1 piece of construction paper any color
* 1 craft stick
* 20 cm. of yarn
* 20 cm. of tape
* 2 brads
* 1 index card
* 2 rubber bands
* 1 pipe cleaner
* 1 toilet paper roll

**Tools:**

* markers/crayons
* stapler
* hole punch
* ruler
* scissors
* glue sticks
* paper/pencil for design planning