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 **Findley Oaks STEM Challenge**

 **2nd Grade Design Brief**

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| **Challenge**Operation Top Secret Message | **Unit**Pushes and Pulls |

**Standard:** Prioritized Standard: S2P2.c Obtain, evaluate, and communicate information to demonstrate changes in speed and direction using a force (a push or a pull). Record and analyze data to decide if a design solution works as intended to change the speed or direction of an object with a force (a push or a pull).

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

**Background/Problem:**

Cinderella has been locked in the tower of her castle by the evil queen.

**Design Challenge:**

Your challenge is to relay a “Top Secret Message” to the princess locked in the tower. You need to build a contraption to deliver the message safely.

**Criteria:**

Your contraption needs to:

* be able to deliver a message to the princess
* have a moving part
* be as tall as possible
* be free standing and portable

**Constraints:**

* You can use some of are all of the materials.

**Materials:**

* 10 pieces of paper
* 10 paper clips
* 10 rubber bands
* 20 feet of string
* 3 feet of masking tape

**Tools:**

* rulers
* scissors
* paper/pencil for design planning