

# A STEM in the Park

## Take Home Activity

# STEM

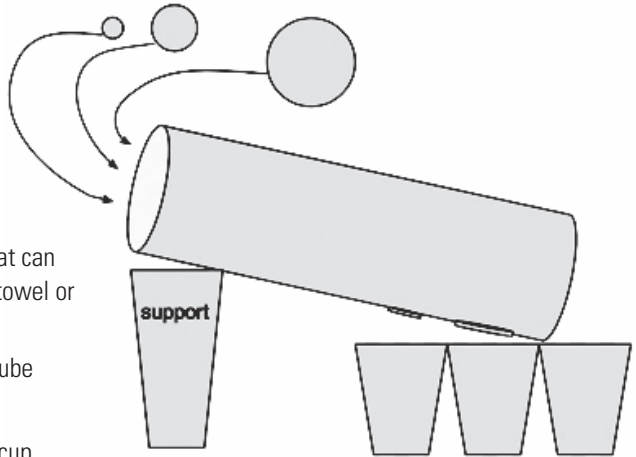
in the **PARK**™

Science, Technology, Engineering, and Mathematics

# Engineering Your Own Bead Sorter

### ***What You Need***

- 3 different size beads that can fit in a cardboard paper towel or wrapping paper tube
- Cardboard paper towel tube
- 3 small bowls or cups
- 1 stand or slightly taller cup
- Scissors



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## ***What To Do***

1. Cut one small and one large rectangular hole in the side of the tube. The large one should be near the end. The small one should be in the middle. The small one must be slightly bigger than the small bead but smaller than the middle size bead. The large hole should be larger than the middle size bead but smaller than the large bead.
2. Test the whole sizes by rolling beads down a slightly slanted tube to see if the beads come out the right holes.
3. Prop your tube on the 4 cups as shown.
4. Put the beads in.
5. Now comes the engineering part! Make it work better and explore the results of changes in the design.
6. Show someone!

## ***The Science***

**Separate materials:** Objects are separated then by their size and the “hole” in the material they are trying to get through.

**Note:** Students may need help cutting hole is their tubes. Google DIY coin separators for future ideas.

***This activity is brought to you by the St Ursula Academy STEM Club***

