STEM Kit:

**GOOBI**

Program Level: All

GOOBI materials are cool magnets, sticks and joints that fit together to create all sorts of structures.

**Supplies Provided:**
- Goobi sticks
- Goobi balls
- Goobi joints
- Trays (not in kit, but in STEM building)

**What to Bring:**
- NONE

**Instructions:**

1. Girls can do this individually or in small groups depending on the size of the troop. Suggest that girls gather materials and build on the trays provided in the STEM building. This will make it easier to keep track of materials.
2. To gain familiarity with the materials, offer a quick challenge to everyone – either build a cube or a pyramid using the materials. Regroup to discuss any tricks or tips the girls learned.
3. Depending on time – either issue a challenge to each group (build the tallest tower, build something the whole group can fit in, etc.) or allow girls to create their own structures. Take a look at the suggestions included in the kit for inspiration.
4. When finished, check the area for missing parts – the parts are easy to lose.

**Why?**

Engineering is all about problem solving. A couple things to ask while facilitating this activity are:

- What kind of plan did you make before you started building? Did you draw out a design, or just wing it and hope for the best?
- What didn’t go right the first time you tried it? Could you find a solution?
- How did working on your own or with a couple friends help you? What made that tough?
- If you were to plan to do this activity again, would you want to do differently?
- Was there a certain shape or method of building that resulted in the best structure?
- How could this activity relate to an engineer’s work?