### Materials List

**For the Instructor:**

- *SOS Presentation Slides for Students* ready to project on a screen
- Copy of *SOS Discussion Guide*
- Copy of *SOS Challenge Checklist*
- Copy of each Lesson *Center of All Things, Hovering on a Cushion of Air, and Javelin Rockets*

**For each group of 2-3 students:**

**Center of All Things Activity:**
- Prepared cardboard “stars”
- 5 metal washers, string
- Short stick (10 cm-long piece of wooden skewer, small dowel, or drinking straw)
- Copy of student sheets

**Javelin Rockets Activity:**
- 15-inch lengths of ½ inch PVC pipe
- 1 rocket pattern
- Scissors
- Cellophane tape
- Rulers
- Felt target
- 2- to 3-inch velcro strips
- String
- Washers
- Copy of student sheets

**Hovering on a Cushion of Air:**
- CDs
- Balloons (preferably five inch round, but most balloons will work)
- ½ inch pvc pipe, ¾ inch long
- ¾ or 1-inch gummed label dot
- One hole rubber stopper, #2 size
- Copy of student sheets
For each Challenge team:

- Copy of *SOS Student Guide* for each team of 3-6 students
- Camera or video camera to document their activities
- Access to laptop or desktop computers with high-speed internet connection and video editing software

For the classroom:

- 1 or 2 low-temp hot glue guns and glue sticks
- Eye protection
- Dish with cold water
- PVC cutting tool
- Standard paper punch (1/4 inch hole)
- Meter sticks
- Balloon air pumps
- Painter’s tape for marking out the size of the play area