



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 $\frac{1}{2}$ 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)
- $\frac{1}{2}$ inch pvc pipe, $\frac{3}{4}$ inch long
- $\frac{3}{4}$ 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