

Activity Makeover

Apply the SciGirls Strategies

This page shows how to take traditional science or engineering activities and apply the **SciGirls Strategies**, making subtle shifts in how the activities are presented. In these examples, we model incorporating a few strategies at a time. (Refer to pages 12 thru 15 for full explanations of each strategy.) You can do the same with your activities and watch your girls' confidence soar!

Miniature Hovercraft

Supplies for each group

- an empty thread spool
- a 4-inch square of cardboard
- white glue, or a hot-glue gun
- sharpened pencil
- 1 balloon (12 inch, when inflated)

1. Glue the bottom of the empty spool to the center of the cardboard square.
2. Use the sharpened pencil to punch a hole in the cardboard that lines up with the center of the spool.
3. Blow up the balloon. Hold the bottom without tying it.
4. Get your partner to hold the spool for you. While pinching the neck of the balloon, stretch the bottom over the top of the spool, release the neck, and lift off!
5. Experiment with different sizes and shapes of cardboard to get the best hover out of your balloon hovercraft. Give your hovercraft a shove along a smooth tabletop, and see how far it goes.

Strategy 6

Invite a rescue worker who may use hovercrafts or an engineer who designs them.

Strategy 2

Have a table full of additional supplies to promote creative solutions to the hovercraft design: old CDs, water bottle caps of various shapes and sizes, an assortment of tape, scissors, push pins, paperboard cereal boxes, etc.

Strategy 1

Come up and share creative ways to use hovercrafts in their community to rescue families or animals in flooded coastal areas or along rivers.

Strategy 3

Once hovercrafts have been constructed and tested, change the focus from "best hover" to fastest craft, farthest hover, or maneuverability/steering through a course. Ask girls to redesign their craft to meet the new challenge.

