

## ARTIFACT RETRIEVAL

Often when divers are working underwater on a shipwreck, they find valuable artifacts that they want to bring up to the surface to examine. Instead of swimming back up to the surface every time they find something, the divers use an object called a **lift bag**. To send the artifact to the surface, they place it in a basket attached to a lift bag and then use air from their SCUBA equipment to inflate the bag. It rises slowly to the surface and is picked up by the crew aboard the boat. This means divers can stay underwater longer, safely sending artifacts up to the surface without stopping their work!

**Make your own lift bag to retrieve an artifact without getting wet!**

### Materials:

- Tall, clear, plastic cylinder
- Small piece of plastic - an empty candy wrapper will work
- String
- Scissors
- Paperclip
- Small magnet
- Metal washer for your artifact
- Straw

### To Make Your Lift Bag:

1. Cut the piece of plastic into a circle.
2. Poke four evenly spaced holes around the edge of the plastic.
3. Tie a piece of string to each hole.
4. Tie all four pieces of string together underneath the plastic so it looks like a parachute.
5. Attach a paper clip to the knot.
6. Attach a magnet to the paper clip.

7. Now your lift bag is complete!

**To Retrieve Your Artifact:**

1. Fill your plastic cylinder with water.
2. Carefully drop the artifact into the water, and let it sink to the bottom.
3. Drop your completed lift bag into the cylinder—did it attach to the artifact? If not, try again.
4. Once you have the artifact attached to your lift bag, carefully lower the straw into the water, moving it around until the end of the straw is underneath the lift bag.
5. Blow into the straw and watch your lift bag rise to the surface. Retrieve your lift bag and attached artifact!

How well did your lift bag work? Can you think of ways to improve it? How much weight can your lift bag lift?