

# Natural History Summer Explorations: Deep Sea Animal Adaptations

Dive Deeper at Home

### MAKING A JELLYFISH PUPPET- DEEP SEA EXPLORATION CHALLENGE:

Jellyfish have two different swimming styles. Some use jet propulsion and are typically shaped like a cylinder. Others are flatter and disc-shaped and use a paddling motion to swim. Your challenge is to create a jellyfish puppet in one of these shapes to show how they move.



IMPORTANT: If you don't have any of the items listed below, you can be creative and use what you have!

#### WHAT YOU NEED:

- FOR JET PROPULSION JELLYFISH: 1 plastic bottle with the cap and label removed to serve as the "bell" or body of the jellyfish
- FOR PADDLING JELLYFISH: 1 wide, bowl-shaped item like an open umbrella to serve as the "bell" or body of the jellyfish
- 1 plastic or paper bag for the tentacles
- Tape or hot glue, and scissors
- Optional: pens, or other items to decorate your puppet

#### **DIRECTIONS:**

- 1. Place the "bell" or body of the jellyfish on a flat surface.
- 2. Cut through the straps and seams of your bag to separate it into two panels. Set one panel aside and cut the other into ¼ inch strips. These strips will be your "tentacles"!
- 3. Apply a strip of tape or pea-sized amount of glue to the end of one of the strips and attach it to:

**JET PROPULSION JELLYFISH:** right before the 'neck' of the bottle, where it narrows into the opening.

PADDLING JELLYFISH: along the rim of the umbrella

- 4. Continue placing the tentacles all the way around the "bell" or body of the jellyfish puppet until it is covered with evenly spaced tentacles.
- 5. Move your puppet so it can "swim"
  - a. Squeeze the bottle to create a jet propulsion
  - b. Open and close the umbrella to paddle your jellyfish



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## TAKE IT A STEP FURTHER:

- 1. **Simulate the jellyfish movement:** Submerge your jet propulsion jellyfish puppet in the sink -- give the body of the jellyfish a few squeezes to simulate the animal's movement. What do you notice about how the water around the jellyfish moves with each squeeze?
- 2. **Create an environment:** Jellyfish are not only found in the deep sea, they are also found throughout the different ocean ecosystems. Create a habitat for your jellyfish puppet by drawing, using construction paper, making a diorama, or other art form. Use the Ocean Portal to explore:
  - Different ocean ecosystems: <u>https://ocean.si.edu/ecosystems</u>
  - Other organisms that jellyfish might encounter: https://ocean.si.edu/search?f[0]=op\_generated\_tags:17483
- 3. **Put on a puppet show:** Create other puppets of animals that jellyfish might encounter. What do they eat? Who eats them? Who else lives in the deep sea? Play with the different ways to tell stories about who lives in the deep sea.
- 4. Explore more:
  - NOAA Okeanos Jellyfish Videos for World Jellyfish Day: https://oceanexplorer.noaa.gov/facts/worldjellyfishday.html
  - Ocean Portal Jellyfish Images, Videos, and Info: https://ocean.si.edu/search?search\_api\_fulltext=jellyfish
  - This robot jellyfish is a climate spy (Science News for Students): https://www.sciencenewsforstudents.org/article/robotic-jellyfish-climate-spy
  - 'Startlingly Large' Jellyfish Washes Up on Maine Beach: https://www.nbcboston.com/news/local/startlingly-large-jellyfish-washes-up-on-maine-beach/2131239/