# Houston Zoo at Home

## **AQUARIUM**

## Soap Powered Fish

All Ages

Underwater creatures can move in a variety of ways using their fins, flippers, tentacles, and even jet propulsion! After watching the video, did you notice how differently some of these animals use their bodies to swim? What is unique about the movement of a puffer fish versus a moray eel? In this activity, test out your fish designs to see how well your fish can swim.

#### Materials Needed:

- A foam tray (meat trays work well) or a piece of non-corrugated cardboard
- A tray, bowl, or cookie sheet full of water
- Liquid dish soap
- A toothpick
- Scissors

#### Steps

1. Cut the foam or cardboard into a boat (or fish, like an ocean sunfish) shape about two inches long. Be sure to leave the triangle cut out on one end (see below).

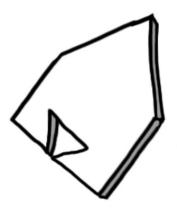




Photo Credit: Sunfish from National Geographic.

- 2. Dip the toothpick into the liquid soap and spread some of the soap inside the triangular notch at the back of your cutout.
- 3. Now carefully place your boat (or sunfish) in the water and watch it swim! To have it swim again, rinse out and refill the tray to remove any soap residue from previous trials.

## Share your project with us!

Tag your photo using #HoustonZoo or email us your story at communications@houstonzoo.org.

## **Color Symphony**

### All Ages

Cuttlefish and octopus are known for their color changing skin. (Fun Science Fact: they have special cells in their skin call chromatophores that allow them to do this... how cool!!) They put on magnificent shows to communicate with predators, potential mates, and of course to camouflage and blend into their environment. Can you create a color explosion like one of these creatures?

#### Materials Needed:

- A flat tray (rimmed baking trays work well)
- Food coloring (3 different colors or more)
- Whole milk
- · Liquid dish soap

#### Steps:

- 1. Carefully pour the milk into the tray so that it just covers the bottom.
- 2. Add about 6-8 drops off food coloring into the milk at different spots; be sure to alternate colors!
- 3. Add about 5 drops of the liquid soap into the food coloring drops and watch the show.
- 4. Level Up: Cut out your own cuttlefish (or octopus) and see if you can color it so it blends in with the milk and food coloring when you add it to the tray.
- 5. Activities adapted from sciencebob.com.