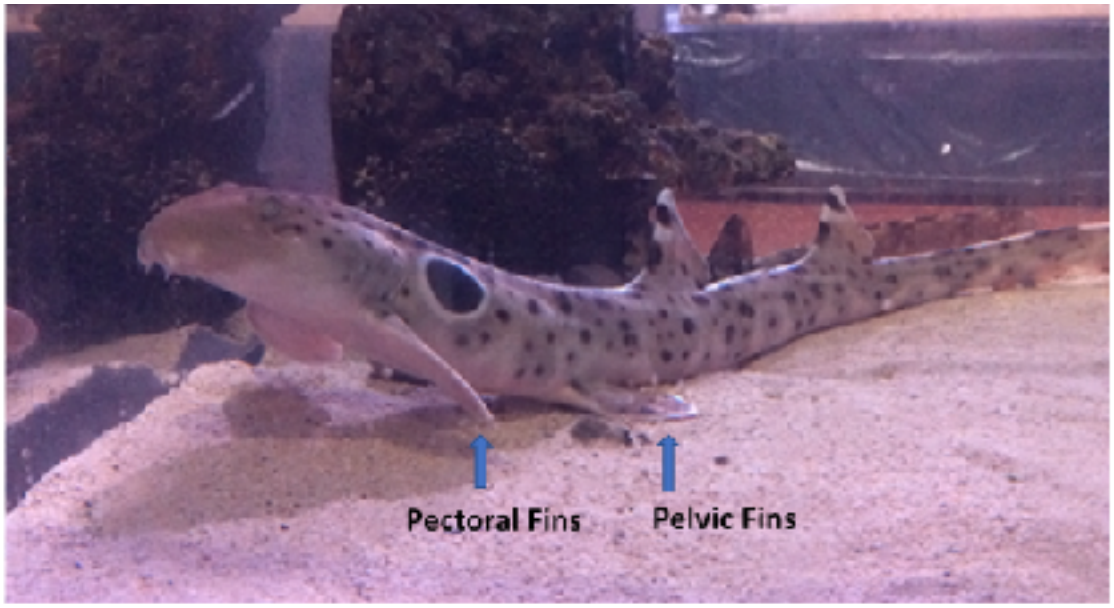
Sharks4Kids
Make your own Walking Shark!
Grade 2-3 Craft

K-2-ETS1-2 Engineering and Design
3-LS4-4 Biological Evolution and Diversity

Introduction:

Epaulette SHARKS live in the shallow waters of CORAL REEFS in northern Australia up to New Guinea. They are sometimes called the "walking shark" because their strong pectoral and pelvic fins are ADAPTED to "walk" across the sea floor instead of swimming. They are small sharks growing to a maximum of 42.1 inches (107 cm) long. These sharks are CARNIVORES and feed on invertebrates (animals without backbones) that crawl in and around the coral. Their ENVIRONMENT changes quickly when the tide goes out. Taller corals become exposed to the air but the shorter coral is still underwater or at the surface. This creates small pools of water in the reef called tide pools. Swimming sharks would not be able to get the invertebrates that are hiding in these pools but the epaulette shark simply walks over the coral to get to the invertebrates! When they are out of the water they cannot get any oxygen from the water to pass through their GILLS, so to conserve energy, they have adapted to be able to slow down their heart rate and turn down their brain power.



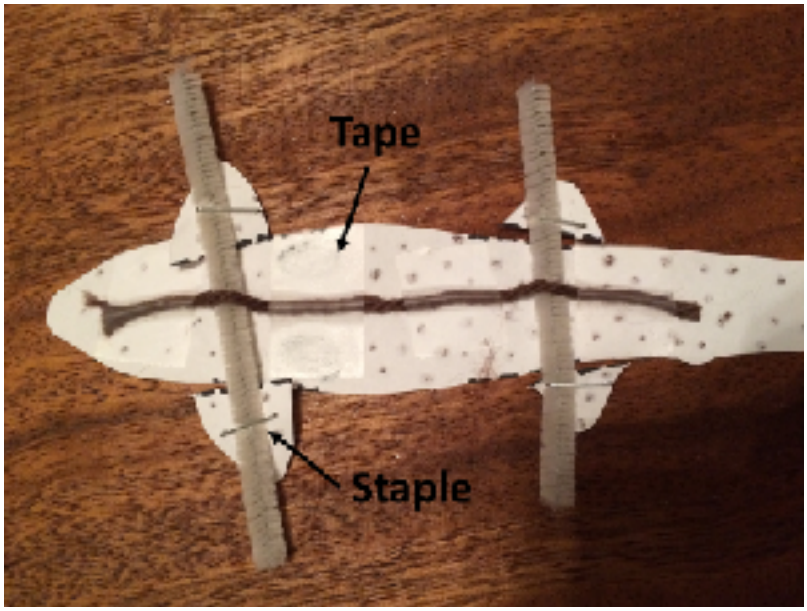
Time: 40-60 minutes

Materials:

- Epaulette Shark coloring sheet
- Scissors
- Pipe cleaners
- Yarn
- Tape/glue
- Stapler
- Popsicle sticks
- Markers/crayons/colored pencils

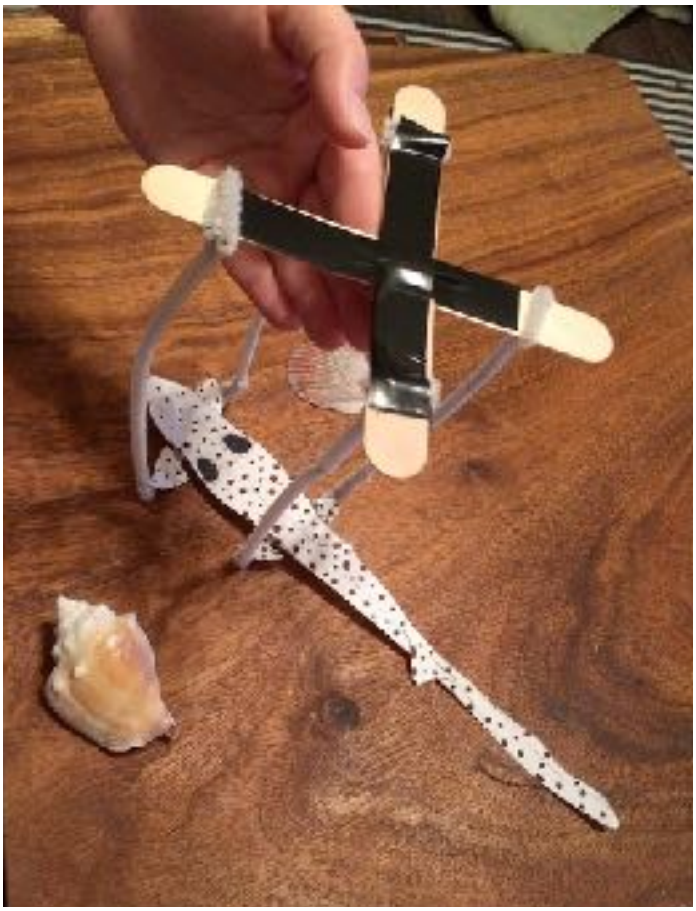
Procedure:

1. Color and cut out the Sharks4kids epaulette coloring sheet.
2. Cut along the dotted lines to cut the pectoral and pelvic fins off.
3. Take a pipe cleaner and cut it to be a few centimeters longer than the width of the shark. Flip the shark upside down and attach a pectoral fin to each end of the pipe cleaner (a single staple works well of this). Next, attach the pipe cleaner to the shark with yarn and tape so the fins can move. (see picture)



4. Repeat step three for the pelvic fins.
5. Flip the shark over and attach the end of each pipe cleaner to another pipe cleaner so they air sticking straight up.

6. Separately, glue or tape two popsicle sticks together in an X.
7. Twist the ends of the pipe cleaners to the popsicles sticks.
8. You now have your very own walking shark!



SQ & Discussion:

1)How is the epaulette shark adapted differently than other sharks?

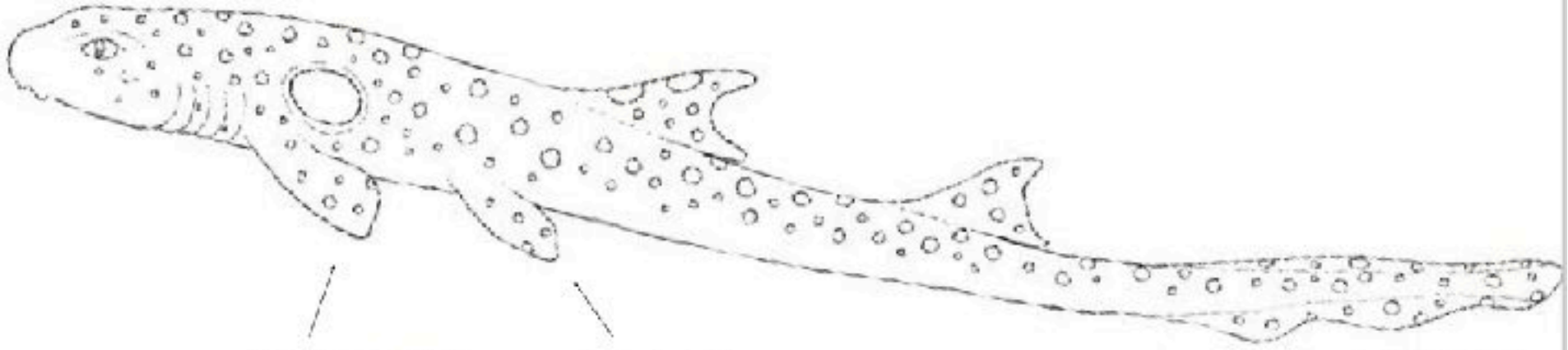
2)What advantage does this adaptation give the shark?

3)Are there any disadvantages to this adaptation?

Epaulette Shark (*Hemiscyllium ocellatum*)

When the tide goes out, this shark can use its pectoral and pelvic fins to walk out of the water and over rocks and coral to get to tide pools filled with trapped *benthic invertebrates* such as crustaceans and worms. They cannot get oxygen when they are out of the water so they must slow their heart rate down and use less brain power to conserve energy.

- Found in coral reefs around the northern coast of Australia up to New Guinea
- Can grow up to 42.1 inches (107 cm)



Artwork K Delany