MOST*

Shark Buoyancy

Materials

- Toilet paper roll
- 1/3 cup vegetable oil
- Picture of a shark (or a drawing!)
- 3 pennies
- Tape
- Balloon
- Funnel
- Bowl filled with water

1 Draw or print out and color your shark and tape it to one side of the toilet paper roll.

2 Tape three pennies across the bottom of the toilet paper roll. Try to keep them as even as possible.

3 Ask the kids what they think will happen if they put their sharks in the water. Try it! What happened?

4 Carefully fill a balloon with 1/3 cup of oil and tie it tight. Place the balloon inside the middle of the tube.

5 Have your students feel how heavy their shark has become and ask what they think will happen. Place your sharks in the water. What happened?

The Science Behind It

Buoyancy is the ability to float in water. Sharks and fish are heavier and denser than water. How do they stop themselves from sinking to the bottom of a body of water? While most fish skeletons are made of bone, sharks consist of cartilage which is half the density of bone. This still makes both of them heavier and denser than the water they swim in. Most fish use a swim bladder, sac filled with gas, to keep them from sinking. Sharks do not have a swim bladder but instead have a large liver that contains a high level of oil. This help them maintain their buoyancy in the water.