

Streamlined sharks



Details

What you need

- A large, clear plastic container filled with water
- Modelling clay or sticky tac
- Timers or stop watches
- Paper towels

Introduction

During this activity, you will carry out your own investigation to find the relationship between shape and how fast an object moves through water. You will explore key concepts, such as streamlining and water resistance, by creating your own coral creatures from modelling clay and racing them through the water.

Activity steps

1. Fill your large plastic container with water and ensure it is in a safe, stable position.
2. Take two equally sized lumps of modelling clay. Mould the first lump into a shape that you think will move slowly through the water. Mould the second lump into a shape that you think will move quickly through the water.
3. Make a prediction as to how long you think it will take for each model to sink to the bottom.
4. Hold the first shape at the water's surface. Ask a partner to time how long it takes for each shape to reach the bottom of the container, using a stop watch or timer. Drop your model and record the time it takes to reach the bottom of the container.
5. Repeat with your second shape.
6. Now take a piece of modelling clay and mould into the shape of a shark.
7. Make a prediction as to how long you think it will take for the shark model to sink to the bottom.
8. Drop your shark model and record the time it takes to reach the bottom of the container.