

SQUID LOCOMOTION ACTIVITY

Giant squid, colossal squid, humbolt squid or even the common squid, let's take a look at these fascinating creatures of the ocean. Squid have a long body, large eyes, arms and tentacles but how do they swim or move around?

HOW DO SQUID SWIM? SQUID LOCOMOTION ACTIVITY

IT'S LOCOMOTION!

Get ready to check out how a squid or similarly, an octopus moves! Take it to the bathtub, sink, or larger bin to explore how the siphon helps a squid move through the water. If you want to learn more about how squids move, let's get started.



YOU WILL NEED:

- Balloons
- Dish soap top
- Water
- Sharpie (optional)



SQUID LOCOMOTION SET UP:

STEP 1: Carefully place the open end of the water balloon over the tap and fill it up halfway.





STEP 2: Have a second person pinch the balloon top so the water stays in and carefully place the open end of the water balloon over the bottom side of the dish soap top.

STEP 3: Draw on the balloon to make it look like a squid (optional as the marker might come off in the tub).

STEP 4: Parental supervision: Add a couple of inches of water to your tub, place the balloon in the tub and open the top of the dish soap top to watch the squid balloon move. Record or discuss your observations.

HOW DO SQUID SWIM



Both the squid and the octopus use jet propulsion to move around in the ocean. They do this by using a siphon! A siphon refers to a way of carrying water from one area to another area through a tube.

Both creatures have a siphon that acts as a funnel. They take water into a hole in their body called the mantle and then get rid of it through this funnel to move! The siphon also helps them get rid of waste and with respiration.

This ability to use jet propulsion is one way they can get away from predators. Plus, it means squid can move fast in open water and can change direction easily. They can even tighten up their bodies to become more streamlined to move even faster.

In our balloon squid activity, the dish soap top acts like the siphon to push water out thus moving the balloon around in the water!

How do whales, polar bears or even penguins stay warm? The ocean can be a chilly place, but there are many mammals who call it home! How do some of our favourite mammals live in such cold conditions? It is to do with something called blubber. While you and I don't need much of it to survive, creatures like polar bears, whales, seals, and penguins definitely do!

HOW DO WHALES STAY WARM?

BLUBBER EXPERIMENT

Let's explore blubber!

This blubber experiment asks a couple of questions.

- What is blubber?
- How does blubber keep animals such as whales warm?
- Do all whales have the same amount of blubber?
- What else makes a good insulator?

YOU WILL NEED:

- Large bowl
- Ice
- Cold water
- 4 ziplock sandwich bags
- Vegetable shortening/lard/butter/coconut oil
- Spatula
- Towel



BLUBBER EXPERIMENT SET UP:

STEP 1: Fill a large bowl with ice and cold water.

STEP 2: Turn a ziplock bag inside out, place the bag on your hand, and use a spatula to cover both sides of the bag in vegetable shortening.

STEP 3: Place the shortening coated bag inside another bag and seal.

STEP 4: Turn a clean bag inside out, place it inside another clean bag and seal.



STEP 5: Place one hand in each bag and place your hands in the ice water.



STEP 6: Which hand gets cold faster? Observe how your hands feel and then use a thermometer to check the actual temp inside each bag.

WHAT IS BLUBBER?

Whales and Arctic mammals like penguins and polar bears, have a thick layer of fat under their skin called blubber. This fat can be anywhere from a couple of inches to a foot thick!

The blubber keeps them warm and also stores nutrients their body can use

when there isn't much food. Different species of whales have varying amounts of fat, which is why some whales migrate, and some do not.

The Humpback whale migrates out of cold waters but lives mostly off of its blubber until it returns! The Narwhal, Beluga, and Bowhead whales generally stick around the colder temperature waters all year!

What is blubber? Fat!

The fat molecules in the shortening act like an insulator, just like the blubber.

Insulation slows the transfer of heat, keeping the whale warm in very low temperatures. Other animals that use this feature are the polar bear, penguin, and seal!