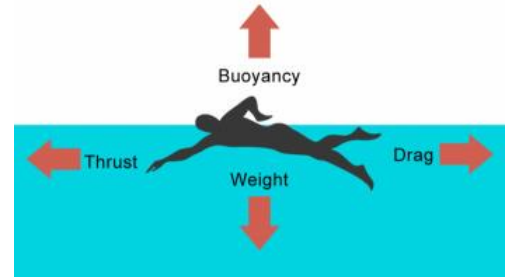
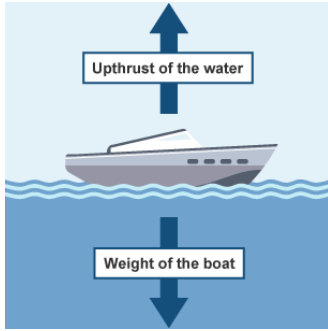


**LI: to understand water resistance.**

I can carry out an investigation

I can ensure that my investigation is fair.

I can use scientific language (buoyancy, upthrust, resistance, surface area).

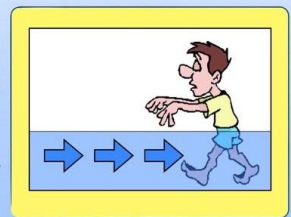


**Task 1:**

Find out what water resistance is and explain it below in your own words – you could use images from the internet to help you explain, or even draw one, so long as you draw the force arrows in action correctly! Think about: why are penguins so good at going through water, but pushing a plastic board is so difficult? Why do you slow down when you walk through water?

It is difficult for humans to walk in water because of **WATER RESISTANCE**. Water resistance is the force that pushes against objects as they pass through the water. This is what you can feel pushing against you as you try to walk in water and why it makes it more difficult than walking on land.

The shape of an object dictates how much water resistance it will meet as it moves through the water. This is why boats and fish are able to move easily through water. Their shapes are **STREAMLINED**. This means they encounter little resistance.



**Task 2:**

Watch this video:

<https://www.youtube.com/watch?v=a85Qepkt6J0>

We would like you to carry out the same investigation they do at home. However, before you do that, think about how you are going to ensure it is a fair test:

- To make sure it is a fair test, I will...M
- My prediction is that...
- This is because...
- What materials will you need? (instead of plasticine you could use blu tac)
- What are your variables (things you will change)?
- What were your results? Why was this?

**Take pictures of you doing the investigation or videos and send them into the school email!**

**Challenge:**

Can you create a graph, using excel spreadsheets (we did this in class) to show your data and what you discovered? If you do, please copy and paste it on here!