

Water Resistance



twinkl

Water Resistance



How does it feel to walk through deep water?

Think of some words and phrases to describe the feeling.

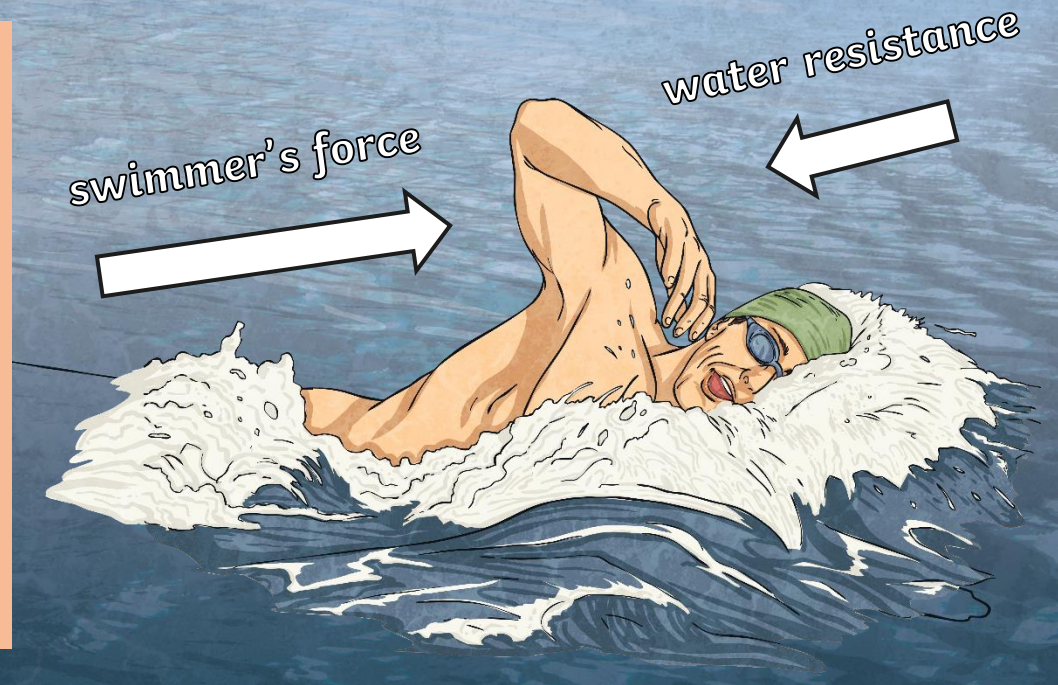
Share your ideas with the class.



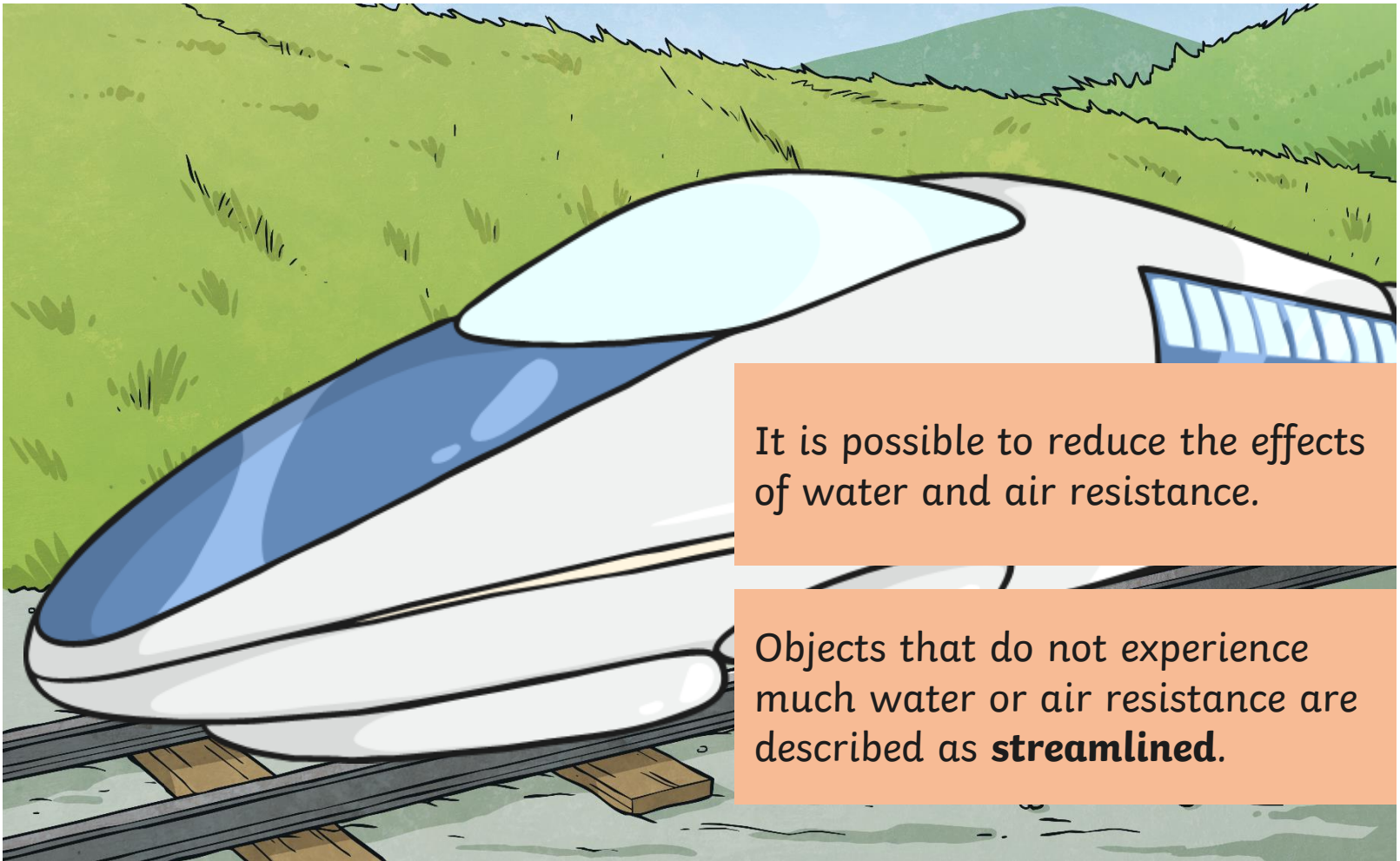
Water Resistance

If you have ever walked through water, you will have felt the effects of **water resistance** pushing against you.

However, this also helps you to swim, as when you push against the water with your hands, the water resistance pushes back and helps you to move forward, like using oars to push against the water to row a boat.



Streamlined Shapes



It is possible to reduce the effects of water and air resistance.

Objects that do not experience much water or air resistance are described as **streamlined**.

Streamlined Shapes

This aeroplane is **streamlined**.

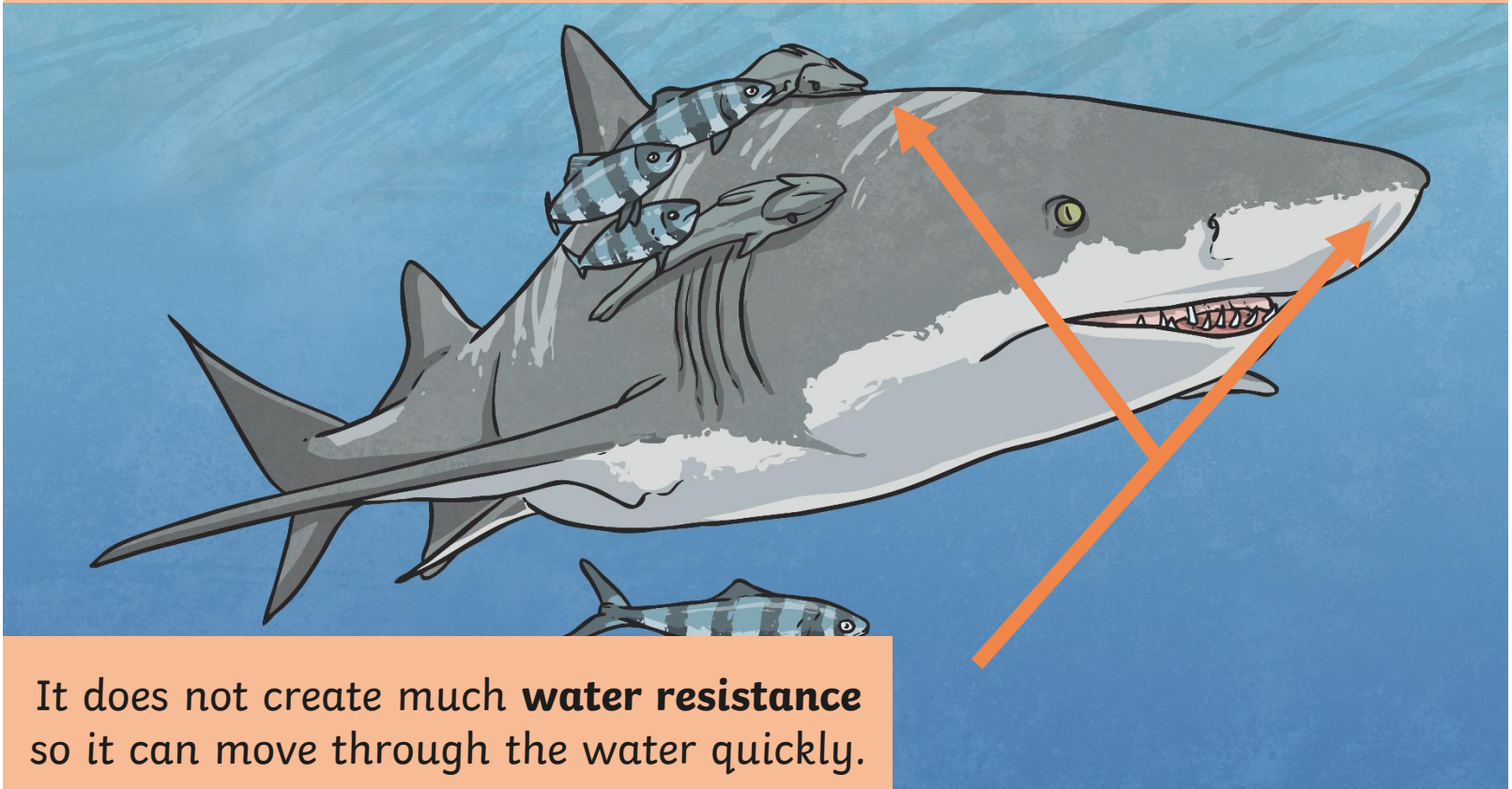


It does not create much **air resistance** so it can move through the air easily.

Its nose is **pointed** so that it can cut through the air, and it has a **smooth, low, curved back** to allow the air to flow over and around it.

Streamlined Shapes

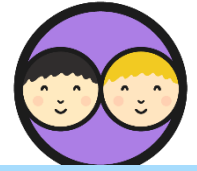
This shark is **streamlined**.



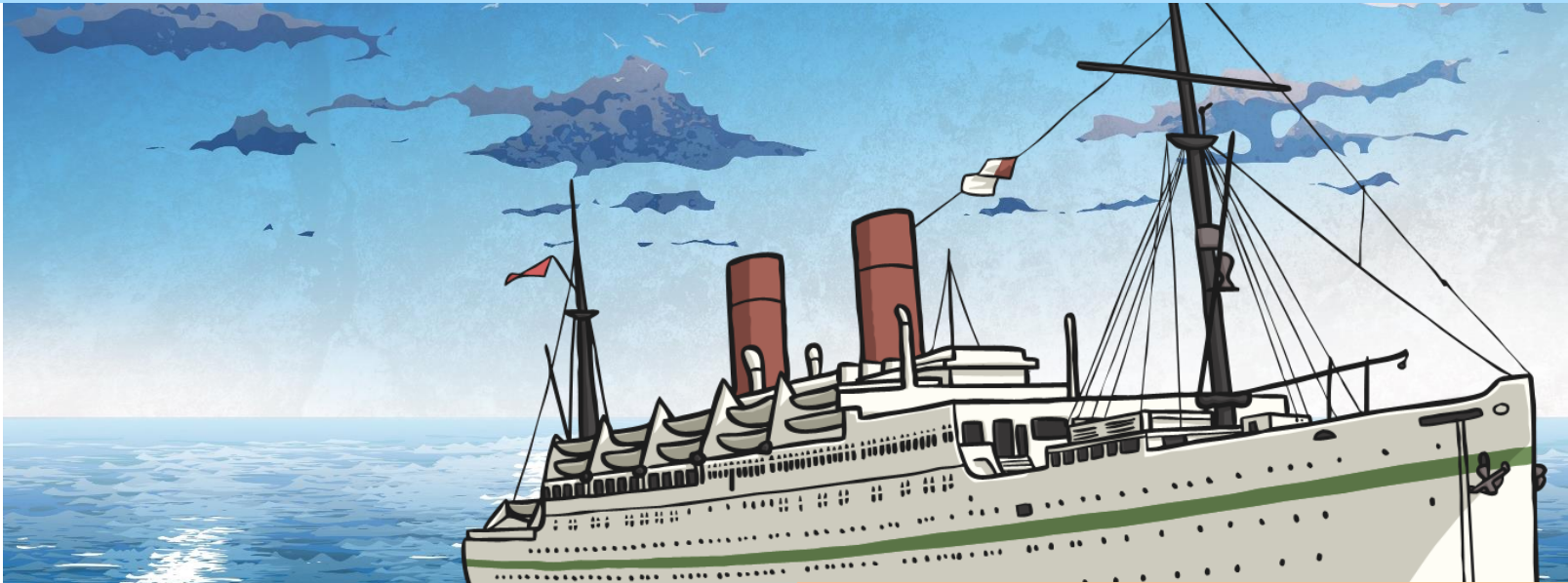
It does not create much **water resistance** so it can move through the water quickly.

It has a **pointed** nose to cut through the water, and a **smooth, low, curved back** to allow the water to flow over and around it.

Boat Building



You need to create a boat that will float on water. You need to think about the shape of boat and material you use. Will you use paper? Foil? Cling film? Playdough? Can you use a fan/hairdryer/your breath to make the boat travel across the water. Did it sink? Did it travel quickly? Slowly? What do you think this shows you about air resistance?



What do you think would be the best shape for your boat?

The **most streamlined** boat will create the **least water resistance**, and will move through the water the **fastest**.