SCIENCE

In the Victory Gallery

There is so much **Science** going on in the **Victory Gallery** that I'm confused! Could you help me?

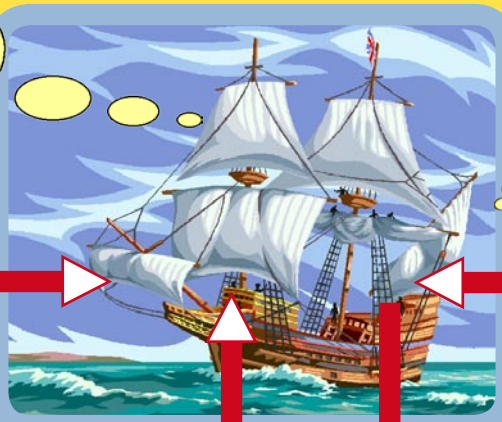
Investigation 1

Look at the **big model** of **HMS Victory** at sea, and **play** the **'Sailing Close to the Wind'** activity.

What forces do you think are acting on the ship? These force arrows have points on them to show the direction of the forces. Can you label which forces are acting on the ship?

Why is it important that the position of the sails can be moved?

Why don't modern ships have sails?



_____

_____

_____

_____

Can you label which forces are acting on the ship?

ROYAL NAVAL MUSEUM

SCIENCE

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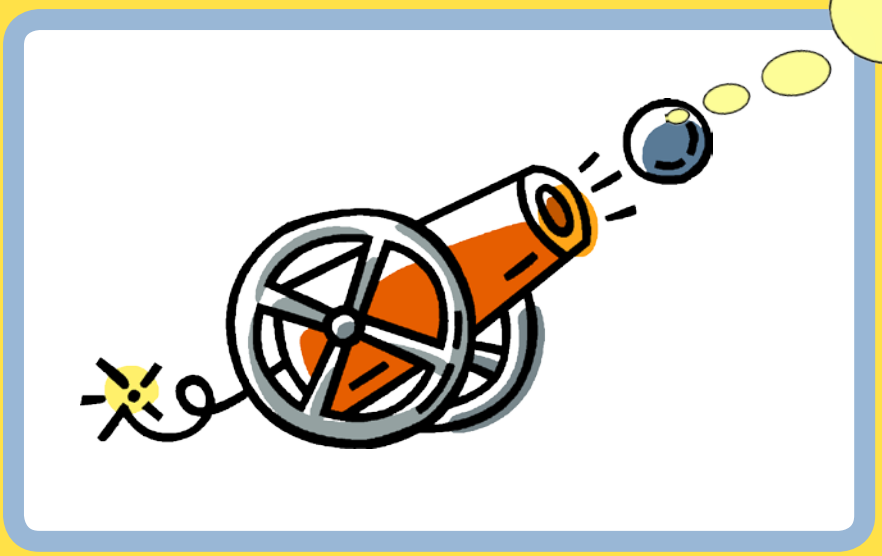
Investigation 2

Go to the **'The Great Guns'** exhibit next. Have a go at the **interactive game** and then perhaps you can help me again. This time you can **draw the force arrows** that are acting on the cannon ball.

Why does heavier shot need more gunpowder in the gun?



Excellent, now draw lines to show which forces are pushes and which are pulls.

push	gravity
pull	air resistance
	upthrust

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Investigation 3

Climb the stairs and you will see some amazing **figureheads**. What is the **boat** right in the middle of the gallery?

It is _____

This boat does **not have sails** like HMS Victory **or an engine** like modern ships. **What makes it go?**

I think that this boat is powered by _____

Do you think that this is an example of a push or a pull?

Investigation 4

Super. I think that's enough about ships and boats for the moment but back downstairs there is something that I would like you to test for me.

Make your way to the **'Heave Ho'** exhibit and try pulling on the two blue ropes. They are both pulling on the same block of timber, so why do they feel so different?

Look above, can you spot the difference?

The difference is

_____

SCIENCE

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Hooray, now you are a top scientist and understand more about forces.

Two things I have learned about forces:

1. _____

2. _____

Two questions I still have about forces?

1. _____

2. _____

Perhaps you could share your discoveries and your questions back at school.

Thank you, we hope to see you again.