

Experiment 2

Why did pirates all use eye patches? So they could see into the dark hold of the ship!



Equipment:

Dark room, Eye patches

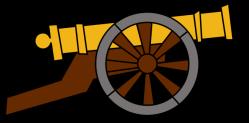
Go into the dark room, keeping the eye patch on.

Cover your left eye with an eye patch and keep it covered for at least 30 mins.

Now remove the eye patch and cover your left eye with your hand. What can you see?

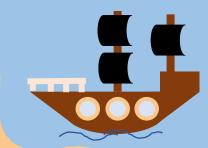


Swap eyes and cover only the right eye. Can you find the canon ball now?



PIRATE PUPILS

EXPERIMENT 3

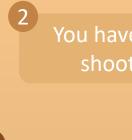


The pirates are practicing firing their cannons. Should they keep their eye patches on it or not?

Put on your eyepatches.

EQUIPMENT NEEDED

- Cut out target (ship/pirates)
- Eyepatch
- Water Pistol
- 3D ship picture
- 3D glasses



You have one squirt to shoot the target.



Take the eyepatch off.



Why are you a better shot with two eyes?



Make a hole with your pointer fingers and thumb.
Look through at something far away.

2

Roll up the piece of paper to make a telescope.

Look through the telescope and keep both eyes open. Bring your left hand up to the end of the telescope, with your palm flat and facing away from you.



What can you see?

Put your eyepatch on.

Redo step 3 with the eyepatch on.

What do you see?

EQUIPMENT NEEDED

- A4 Paper
- Eyepatches

PIRATE PUPILS

EXPERIMENT 4

Experiment 5

How did the navy sneak up on the pirate ships to capture them, and not get seen by the pirates

They used submarines, and looked up through a long tube called a periscope... lets see if we can make a submarine periscope.

Lets use a periscope:
Show the pupils the
periscope and explain how
it works

Light comes in the top and hits a mirror so it bounces to the bottom where a second mirror bounces the light into your eye

One pupil in each pair gets a periscope and crouches down below desk level and sees if they can tell what image their partner is holding up. Swap roles.





PIRATE PUPILS

OPTICAL ILLUSIONS

Look at the image of the green elephant on the screen

- For 30 seconds
- You must not look away!

Look at the white screen

- Do you see a pink elephant?
- Or is it just a white screen?

