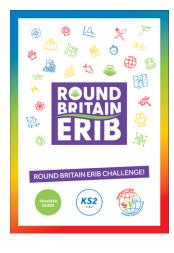
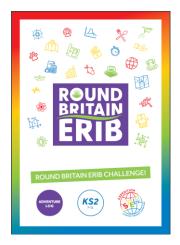
Click on the icon below for the Teachers Guide





Click on the icon below for the Adventure Log







A message from our Skipper ....

"Electric boats are more usable than you might think they are!" *Harry Besley, Skipper (Age 18)* 

Thanks for being interested in my Challenge to help save our oceans and our planet.

By completing the Challenge I want to:

- show people what electric boats can do
- meet people who also want to stop using fossil fuels
- visit different harbours and ports all around the UK
- try and set a Guinness World Record to be the first person to circumnavigate Britain in an ELECTRIC BOAT







Harry's love of boating started Age 3, driving a motorboat on his local canal.

Over the years the boats became BIGGER along with his ambition for driving in rougher seas!

He joined the **Royal Navy Combined Cadet Force** at school.

For clubs outside school, if you're Age 9 and above you can join the:

**Royal Navy Junior Sea Cadets** 

**Royal Navy Sea Scouts** 



BALAX





Harry will be driving an electric boat called an **eRIB**.

RIB stands for **R**igid Inflatable **B**oat like those used by the RNLI, the Coastguard, the Royal Marines and the Police.

An electric-RIB is better for the environment than a traditional motorboat because it is powered by electricity instead of **fossil fuels**.

But it means that he will need to find lots of stopping places on his **chart** to keep recharging the eRIB's batteries.





### Is Harry going CLOCKWISE or ANTI-CLOCKWISE?

Lyme Regis
Newlyn Harbour
Saundersfoot
Pwllheli
Larne (NI)
Laggan Locks
Peterhead
North Shields
Grimsby
Ramsgate
Cowes

Dartmouth Hayle Harbour Milford Haven Holyhead Ballycastle (NI) Inverness Stonehaven Hartlepool Wells-next-the-Sea Dover Poole

Falmouth Bideford Aberystwyth Peel (IoM) Portavogie (NI) Oban Port Askaig Fraserburgh Evemouth Scarborough Bridlington Great Yarmouth Harwich Shoreham Eastbourne

Plymouth

Padstow

Fishguard

Buckie

Dundee

Portland



#### Now complete **Activity 1** in your Adventure Log

#### Some FACTS about ocean pollution:

Almost 1,000 species of marine animals are impacted by ocean pollution.

Over 500 locations are 'dead zones' where marine life cannot exist.

The oceans absorb a quarter of all artificial carbon emissions.

The pH level of the ocean surface has increased by an estimated 30%

# PLANNING

#### **CLEAN MACHINES**

As well as being better for the **climate**, electric boats are also cleaner and quieter than fossil fuel-powered motor boats. They don't give out as much pollution in the water, which makes it a nicer environment for everyone!







Source: Greenmatch.co.uk April 2024

Now complete **Activity 2** in your Adventure Log







Spirit Yachts Foiling technology: everything you need ... electric foiling yacht | Spirit Yachts

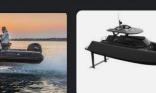


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- Plugboats electric hydrofoiling boat from Sweden

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Foiling technology: everything you need...

Soundings Online Foiling Powerboat







YouTube

Hydrofoiling electric boat Candela C-8 Racebird electric foiling boat

# O Move Electric

#### FOILED AGAIN

The shape of Harry's eRIB is also really important because it helps the boat to float and move smoothly on top of the water. This is called planing and reduces water resistance so the eRIB needs less electric power to drive it.

Some engineers are designing new and exciting boat shapes that lift the boat right out of the water, so there's hardly any water resistance! These are called foiling boats.

#### Now complete Activity 3 in your Adventure Log



#### STEP UP TO THE CHALLENGE

Steering the eRIB for hours at a time is a lot of hard work! Harry needs to have strong legs and core muscles to keep his balance as the boat moves over the waves.







#### Some FACTS about fitness:

The human body has 650 muscles.

The only exercise you should hold your breath for is underwater swimming.

The heart is the strongest muscle in the body.

Nearly 50% of all young people ages 12-21 are not vigorously active on a daily basis.

Source: DoSomething.org

Now complete **Activity 4** in your Adventure Log



 $\bigcirc$ 

#### **CHARGING AHEAD!**

When Harry stops to charge his eRIB, he needs to make sure all the electric **components** are connected carefully to make a complete circuit. Each harbour has a different layout for where he can **dock** the boat and how far away the charging sockets are, so each time he has to think carefully about the length of cable he needs and how long it will take.

5



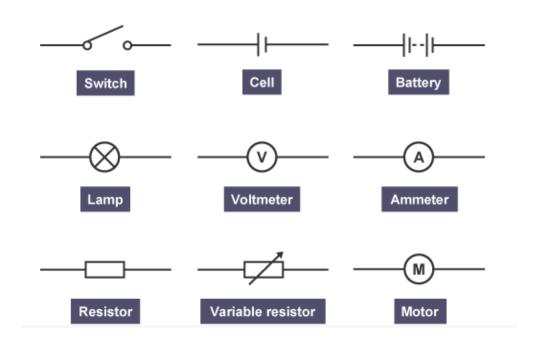
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RNING THROU

The Challenge boat will be use a large battery pack.

Which of the following symbols should be in the circuit diagram?





# WHAT IS SUCCESS?

#### THE ADVENTURE IS ONLY JUST BEGINNING...

Harry is hoping to start his adventure in Summer 2023 with the vessel launch and sea trials, building up to the main Challenge event next year.

In Summer 2024 you will be able to check the live tracker online to see Harry's progress round the British coast. He may even be charging his eRIB at a location near you! Why not plan to come down and show him your support?

The Locations can be found on the website: www.roundbritain-erib.org/our-locations





#### Now complete **Activity 6** in your Adventure Log

## THIS IS A CALL TO ACTION!

https://www.roundbritain-erib.org/support-us

ENTER OUR COMPETITION TO NAME THE VESSEL

**HELP RAISE FUNDS** TO HELP US CHARTER THE BOAT (ANY EXTRA FUNDS WILL GO TO MARINE CHARITIES)

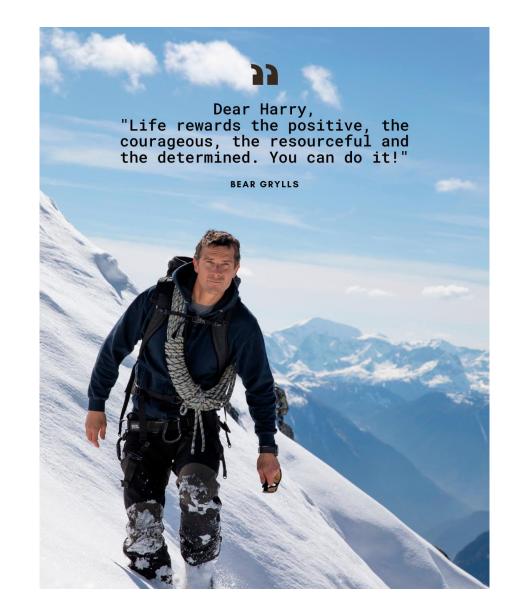
**ENTER OUR PRIZE DRAW** 

**GET YOUR NAME ON THE CONSOLE** 

ONCE WE SET OFF YOU CAN FOLLOW THE ADVENTURE ON FACEBOOK, INSTAGRAM AND YOUTUBE

COME AND SEE US AT ONE OF OUR STOP LOCATIONS

AFTER THE CHALLENGE LOOK OUT FOR OUR CHARITY KIT AUCTION





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