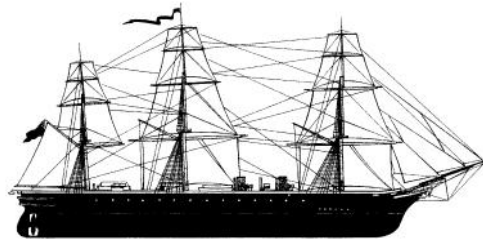


HMS Warrior 1860

Key Stage 3 Explorer Trail



Welcome Aboard!

Follow the trail and complete the activities to find out about the men who lived and worked on board Warrior.



Walk along the jetty.

- Warrior was the first iron-hulled warship.
- She was built at Blackwall in London and was launched in 1860.
- The figurehead shows a Greek warrior.
- It was one of the last to be made – ships now have badges.



Sketch Warrior's figurehead.



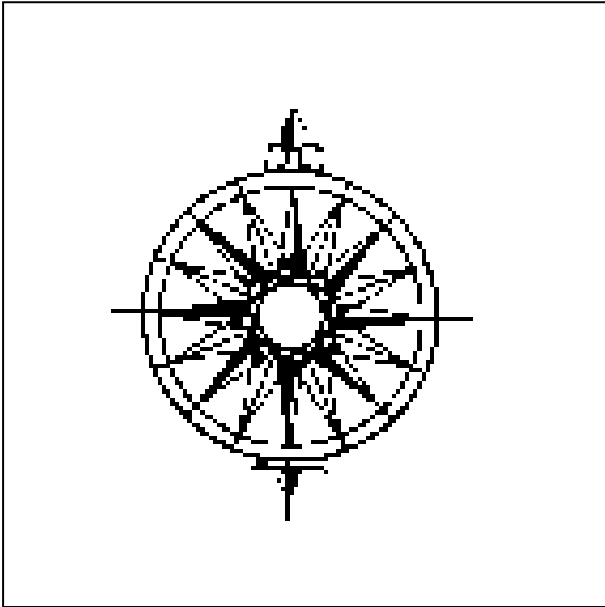
At the top of the gangway turn right and walk towards the stern (back) before returning to stand by the "aft" bridge.

- The Captain had overall responsibility for the ship and all the men who served in her.
- Below him came the Commander, responsible for the day-to-day running of the ship.
- The navigation and sailing of the ship was handled by the Master.
- Today he would be known as the Navigator.
- He took sun and star sights to keep track of the ship's position.



Write in the points on the compass below.

You will find a compass on the bridge if you need some clues!



Easy: Put in North (N), South (S), East (E) and West (W).

Medium: Also add North East (NE), North West (NW), South East (SE) and South West (SW).

Hard: See if you can put in NNE, ENE, ESE, SSE, SSW, WSW, WNW and NNW.



From the bridge walk towards the bow (front) of the ship.

- Warrior has 3 masts – the foremast, mainmast and the mizzen.
- Imagine climbing up to furl the sails - sailors worked in bare feet for better grip.
- The ship sailed at night so ropes had to be recognised by touch – hence “know the ropes”.
- There are two funnels – Warrior was powered by a steam engine as well as sails.
- The funnels could be lowered (and the propeller raised) when the engine was not in use.

At the very front of the ship.

Look at the brass strips on the deck by the gun.

- These are “racers”.
- They made it easier to move the gun so it could be fired from various different positions.

Go down the ladder marked with ☆. You are now on the main deck.

Turn left towards the bow of the ship. Go through the doorway.

This is the Cable Deck.

- The huge chains are for the anchor.
- Live animals were kept to supplement food – meet “Victoria” !



Look in the glass case on the table.

Now make a list of the sailor's kit and items in his "ditty box".

Turn around and walk back through the doorway towards the rear of the ship.

- This is where most of the sailors lived, ate, relaxed and slept.
- Each set of tables and benches is called a "mess".



Find a mess table with all the plates laid out. Count the plates.

How many sailors lived in each mess? _____

What did the sailors sleep in? _____

Look at the galley (kitchen).

- Each week, one man from each mess was chosen to be mess cook.
- He had to collect the day's rations from the issue room and prepare the food.
- The food was put in containers marked with the mess number.
- The cooks in the galley cooked the food for dinner at 12 o'clock.

Now look at the guns.

- On this deck there are 26 x 68 pound guns and 8 x 110 pound guns.
- Spot the "hearts" and "arrows" on the deck head above the guns.
- These are marks for aiming the guns to fire ahead or astern.



Walk to the capstan nearest the stern of the ship.

- The capstan was used for raising the anchor.
- The “stanchions” (metal poles) around the capstan could be lifted out of the way.
- Bars were slotted in place for the sailors to push against to turn the capstan.
- Over 100 sailors were needed to turn the capstan.
- Each of Warrior’s 4 anchors weighs around 5.6 tons.
- It would take 4 to 5 hours to raise the anchor!



Walk to the Captain’s cabin at the stern of the ship.

- Look at the amount of space the Captain had for his quarters.
- This is his day cabin. His night cabin with his cot bed is separate.
- Look at the quality and style of furniture and decoration.



The Captain’s Cabin has been furnished in the style of a Victorian drawing room.

Look closely at the black and white floor.

What does it look as though it is made from? _____

What is it actually made from? _____

Can you find three more things that make this space look more like a room in a house than part of a ship?

1. _____

2. _____

3. _____



Look down to the Officer’s Wardroom through the glass panel then go down the ladder closest to you, turning left at the bottom into the Wardroom area.

This is the Wardroom.

- The Wardroom was the mess for the ship's other officers.
- Their cabins are around the edge of the Wardroom area.
- The Captain had to be invited before he could come in!
- The dining table was only set like this when the ship was in harbour (or in calm weather).
- The pictures are of Queen Victoria and Prince Albert.



Walk past the bottom of the ladder into the Gunroom.

- The gunroom was where the Sub Lieutenants and Midshipmen lived.
- They were training to become Officers.
- They kept all their belongings in chests like these.



Walk through to the next compartment. This is the Issuing Room.

- A sailor from each mess collected the day's ration of food from the Issuing Room.
- Sailors mostly ate "hard tack" – salt meat, dried vegetables and ship's biscuit.
- Breakfast was usually "kye" (cocoa), biscuit or bread and preserves or cheese.
- Dinner was soup or porridge, boiled meat and vegetables, suet pudding and tea or kye.
- The evening meal was usually a cold version of the midday meal.
- The arrows on the boxes showed the stores were government issue.



Look at the "Scale of Victualling in Her Majesty's Navy" by the Issuing Room door.

How much of these foods were the Seamen (Officers and Crew) given each day?

Biscuits or soft bread	lb (pounds)
Sugar	oz (ounces)
Chocolate	oz
Tea	oz
Rice	oz

Choose 3 other food items and write down the quantity given to each Seamen and how often.
(e.g. Seamen were given $\frac{1}{4}$ pint vinegar each week)

1. _____
2. _____
3. _____



Continue towards the bow (front) of the ship. Walk through the next compartment. This is called the Marines Flat.

- Royal Marines were (and still are) the Navy's own soldiers.
- There were about 120 Royal Marines serving on Warrior.
- All their kitbags were stored here.
- Look down on the engine room, which you will visit later.



Walk through the next compartment. This is called the Cable Tier Flat.

- The sailors' daily allowance of "grog" was issued from here.
- This was a mixture of two parts water to one part rum.
- Look at the chains or cables for the anchor.



Walk through the next compartment. This is called the Seamen's Flat.

- This is the storage area for the sailor's kitbags.
- Every sailor had a numbered kitbag.

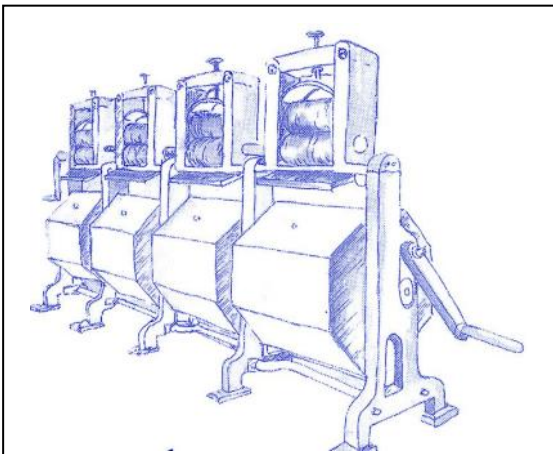


Walk to the next compartment. This is called the Bathroom Flat.

- Boy seamen and the men who worked in the boiler and engine rooms used the baths.
- Things were rather different for the rest of the crew – each mess of 18 men had two buckets of cold water twice a week to wash in! Imagine the state of the water!
- Warrior was the first ship to have washing machines.



Here is a picture of the washing machines.



Mark X where the clothes go in.

Draw a circle round the part that squeezes out most of the water from the clothes.



Put these sentences into the correct order to explain how the machines were used.

The clothes were put in, along with scrapings of soap. _____

Clothes were put through the mangles to remove the water. _____

Turning the handles worked all the machines at the same time. _____

The washing machines were filled with hot water. _____



**Walk past the ladders and into the last compartment.
This is the Cell Flat.**

- The cells were used for men who had committed serious crimes.
- Picking oakum (pulling old rope to pieces) was a common punishment.
- Another punishment was to be lashed with the “cat o’ nine tails”.



**Go back one compartment and down the ladder. Go down the second ladder.
This is where the stokehold (boiler room) and engine are.
Pass through the first stokehold to the second.**

- Warrior has 10 boilers, each with 4 furnaces.
- The men who worked here were Stokers and Trimmers.
- Trimmers brought the coal from the bunkers to the furnaces in trucks that ran on rails.
- Stokers kept the furnaces evenly fed with coal and removed the ash and clinker.
- Conditions were very noisy, hot and dirty – around 110°F, 43°C.

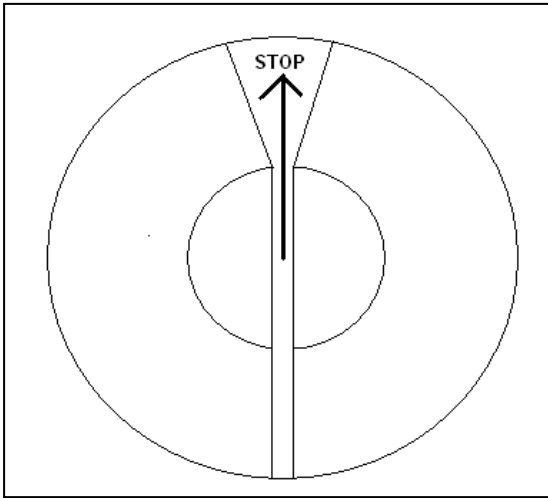


**Walk through the next opening and up the metal ladder.
This is the engine room.**

- This engine is an accurate reproduction of the original steam engine.
- It can usually be seen working at a very slow speed.
- Warrior’s engine and boilers were built by Penn’s Engineering Works at Greenwich – just a little further down the Thames from the Ironworks where the hull was constructed.
- Warrior’s maximum speed under steam was 14.5 knots (about 17mph) and 13 knots (about 15mph) under sail.
- On one occasion, Warrior reached speeds of 17.5 knots (about 20mph).
- When she was new, Warrior was the largest and fastest ship in the world!



Can you finish this drawing of the ship's telegraph?



The telegraph was used to tell the Ship's engineers whether Warrior was to go ahead (forwards) or astern (backwards) and how quickly.



**Walk through the engine room and into the next compartment.
This shows access to the hold.**

- The ship's stores were held in the hold.
- They were only brought up when needed.



**Walk through to the next compartment.
This is the Handing Room.**

- Gunpowder was passed through here from the powder magazine to the gun deck.
- Great safety precautions were taken to ensure minimal risk.
- The powder magazine was lit by lamps sited by glass portholes outside the room.
- Gunpowder charges were carried in leather cartridge cases.
- Spot the hand!

**Well done! You have completed the Warrior Explorer Trail.
Enjoy the rest of your visit.**