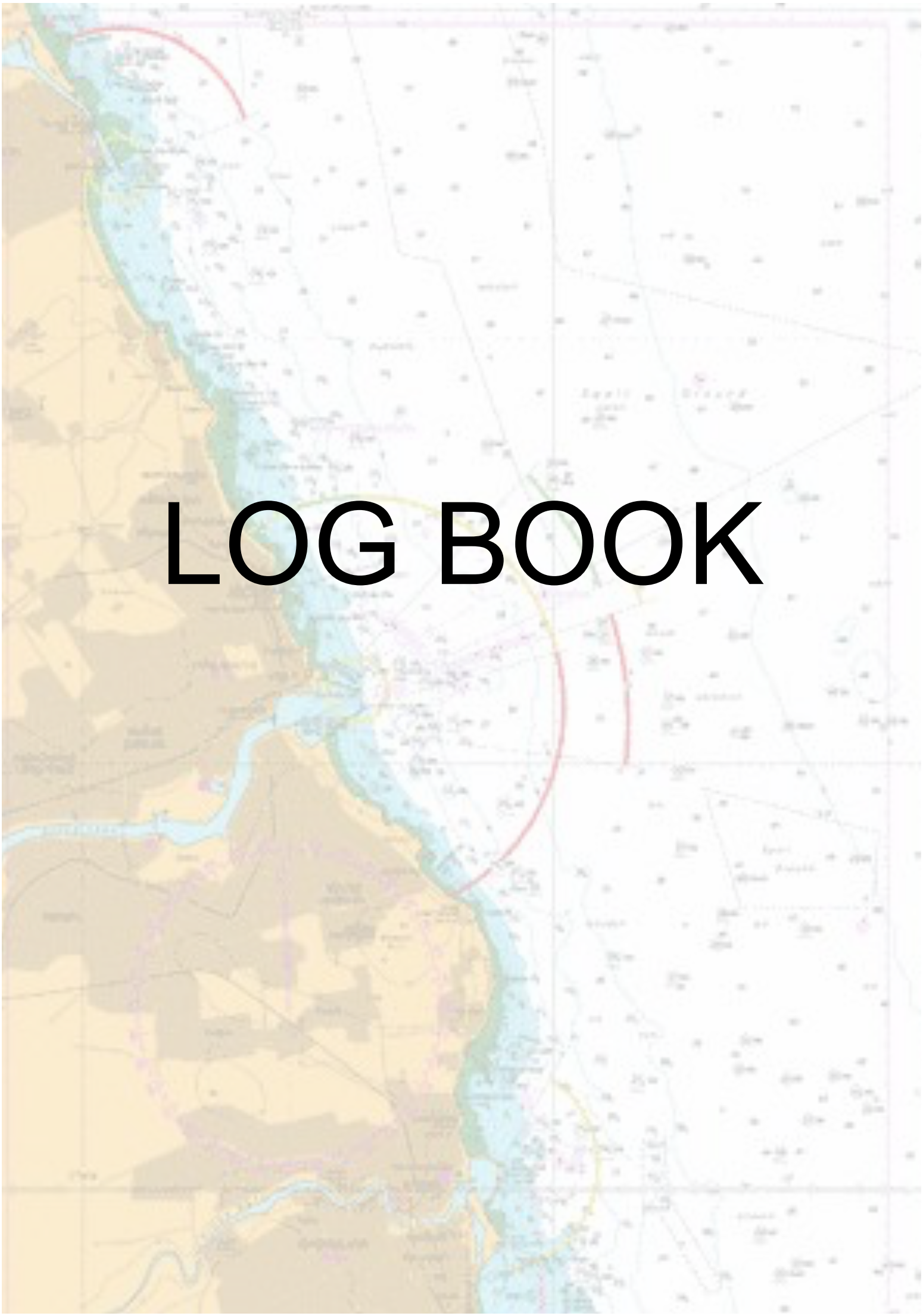
LOG BOOK

INTRODUCTION TO YOUR NAVY

In the Merchant Navy you will find lots of different types of ships all doing completely different jobs.

Watch the video to spot some different types of ships and complete your Tally Sheet.

Type of Ship	Number of Ships
Container Ship	
Passenger Ferry	
Bulk Carrier	
Gas Carrier	
Platform Support Vessel	
Oil Tanker	
Cruise Ship	
General Cargo Ship	
Super Yatch	
Car Carrier	

How much do you know about container ships?

Watch Nita's video to find the answers to these questions.

In which year did container shipping begin?	
List three items which are shipped across the world.	
What is the length of a container?	
Before container ships were introduced, how were goods packed?	
How many countries could be involved in the making of a jacket?	
Name the two singers mentioned in the video.	

Containers come in two lengths but they are all 8' 6" tall.

First of all, estimate the size of the largest container and then measure accurately – how did you do, were you close? Find a large area to carry out this task.

How much do you know about Cruise ships?

Watch Jack's video to find the answers to these questions.

What is the name of the biggest cruise ship ever built?	
How many swimming pools are on board?	
How many passengers does it carry?	
How many rolls of toilet paper were loaded on board and how long would it take for your school to use that many?	
Which part of the ship did the Captain call to give the order to sail?	
Did the ship leave on time?	
Do you think that belly flop hurt?	

SHIP'S CREW LIST

Name Your Ship

The first job of the Captain is to name your crew.

Name of Crew Member	Their Role on the Ship
	Captain
	Engineer
	Deck Officer
	Purser (Cruise Ship)
	Chef/Cook
	Fitter

People who work on ships need to be very good at working in a team. In your group discuss how YOU will work as a team to support each other.

CAPTAIN'S LOG BOOK

NAME OF SHIP:

Draw the design of what your ship might look like.

YOUR IDEAS
(Jot down some of the ideas your team has been discussing, eg the shape, materials, size).

CAPTAIN'S LOG BOOK– Page 2

Build Your Ship

Your Task:

Build your ship. Your team will use this ship throughout this maritime adventure. You will eventually power your ship, launch it and load it with either 'passengers' or 'containers' so be sure to build it well!

Adjust your design as necessary.

Your Findings:

The materials we chose: -

The reasons why we think these materials will make a good ship: -

The materials we used to join parts of our ship together: -

The reasons why we think these materials will make a strong ship: -

CAPTAIN'S LOG BOOK– Page 3

Propel Your Ship

Your Task:

Using ANY method you can (except batteries or electricity) propel you ship across a suitable container of water.

Time your ship crossing the container of water.

Adjust your design as necessary.

Race your ships and create a leader board.

Your Findings:

Describe the method of propulsion you used.

Explain any adjustments you have made to your original propulsion design to improve results.

How long was the container of water you were using?

How quickly did your ship cross the water?

How fast was your ship traveling?

CAPTAIN'S LOG BOOK– Page 4

Load Your Ship

Your Task:

Gather some small materials that can act as either 'containers' or 'passengers', eg lego bricks, counting blocks, marbles etc.

Decide as a class how many of your blocks are going to represent 1 container or 100 passengers.

Load your ship with 'containers' or 'passengers'.

Adjust your design as necessary.

Your Findings:

How many blocks did your ship hold?

How many 'containers' or 'passengers' did 1 block equal?

How many 'containers' or 'passengers' did your ship hold?

Explain any adjustments you have made to your original propulsion design to improve results.

CAPTAIN'S LOG BOOK– Page 5

Measure Your Ship

Your Task:

Measure the length, breadth and depth of your ship.

Calculate the surface area of your ship.

Calculate the volume of your ship.

Using the website find how big REAL ships are.

Calculate how many times you would have to scale up YOUR ship so that it was the size of a REAL ship.

Find a space, outside if possible, and measure the LENGTH and BREADTH of a real container ship or a real cruise ship.

Imagine YOUR ship filling this space **WOW!**

Your Findings:

Length: -

Breadth: -

Depth: -

Surface area: -

Volume: -

CAPTAIN'S LOG BOOK– Page 6

Let's Go To Sea

Your Task *This is the moment of truth! You must take your fully loaded ship and sail it, using your tested propulsion method, across a suitable container of water.*
Time your ship crossing the container of water.

Examine the cargo when the ship reaches its destination.

Adjust your design as necessary.

Race your ships and create a leader-board.

Your Findings:

Did your ship float?

Did your ship stay upright?

Explain why you think your ship is the right shape and strong enough to carry 'passengers' or 'containers'.

Did your fully loaded ship make it to the other side of the container of water?

Did your fully loaded ship travel in a straight line?

How much of your cargo stayed dry?

How fast did your fully loaded ship travel?

Explain any adjustments you have made to your original ship design and propulsion system to improve results.

CAPTAIN'S LOG BOOK– Page 7

How Much

Your Task:

Before you set sail you must be sure that your ship can make a profit. Using the figures below find out which team would make the most profit.

Your Findings:

If each passenger or container paid £1 to travel on your ship how much money would you have taken at the beginning of the voyage?

If you had to refund every passenger or container that got wet how much money would you have left?

If fuel cost 1 penny per cm how much would it cost to sail your ship across your container of water?

Using these figures, how much money have you made for this voyage?

What other costs might you have to incur that would affect your profit?