Dock Detectives!

STUDENT INTRODUCTION

Portsmouth is a city on the south coast of England. The **coast** is the boundary between the land and the sea. With a population of just over 200,000, in the 2011 census, Portsmouth is one of the south coast's major **urban** areas. An **urban area** is a built-up area.

In fact, together with the wider built up area along this stretch of coast, which includes the city of Southampton, Portsmouth forms a single urban area that is larger than cities like Liverpool or Newcastle; it is a pretty important place!

In this study, you are going to be learning about the *physical* and *human* geography of Portsmouth Harbour, and what made this an ideal location for the development of a major Port and Naval Base.

Firstly, though, let's find out a little bit more about the background/history of the area, and also make sure that you understand what the *key geographical terms* you need to know mean.

PRE-VISIT TASKS

There has been a settlement here since Roman times, where a settlement called 'Portus Adurni' was built in the 3rd Century. This area is now a **suburb** of the North-west of the city. A **suburb** is a district of/part of an urban area, usually on the outer edges.

Task 1: In site…

Settlements originally developed in certain **sites** because there were certain features / characteristics that made it ideal. Your teacher will now show you a web-link that gives a definition of the term site. Write that definition in your own words in the space below:

A site is… _____

Your teacher will now go through with you some of the factors/characteristics that influenced the choice of a good site for early settlements.

▶ Listen and look carefully, and then write some notes into the table below to summarise what you have learned:

Characteristic/ factor	What makes a good site	What makes a bad site
Relief (height and gradient of the land)		
Water supply		
Building materials		
Defence		
Own choice:		

Well done - you should now be happy with this key term.

Task 2: Portsmouth's site

Looking at the map below, which shows the area of Portsmouth and its immediate surroundings. From what you have learned about what does, and what doesn't, make a good site for the settlement, can you label the map to indicate BOTH. Perhaps use different colours for the things that made it a good/ not so good site for the settlement to develop.

Extension: Try to develop some of your labels into annotations to describe in more detail and also to *explain* them as well. For example, why is something a good thing, that would have made it a good site. For some of the things that make it not such a good site, why do you think that these were not a 'deal-breaker'… why did they still decide that it was a good site, despite this?

PRE-VISIT TASKS

Task 3: An early settler's story...

Imagine that you are one of the first settlers to decide that this site would be a good place to settle down and build your dwellings and farm your animals and grow your crops.

▶ Write a story about your 'journey of discovery' as you searched for a suitable site, and found this one, making sure that you fully describe what was so good (and maybe also what wasn't!) about your final choice.

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The Physical Geography of Portsmouth and the Solent area

Portsmouth is an **island** city, surrounded by water. In fact, it is the only city like this in the UK.

▶ Look at the map on page 3 and see if you can find Portsea Island – it is surrounded by water on all sides, which makes it officially an island.

A narrow tidal creek, called Portsbridge Creek, separates it from the mainland to the north.

▶ See if you can name the areas of water that separate it on the other 3 sides:

1. To the East is _____

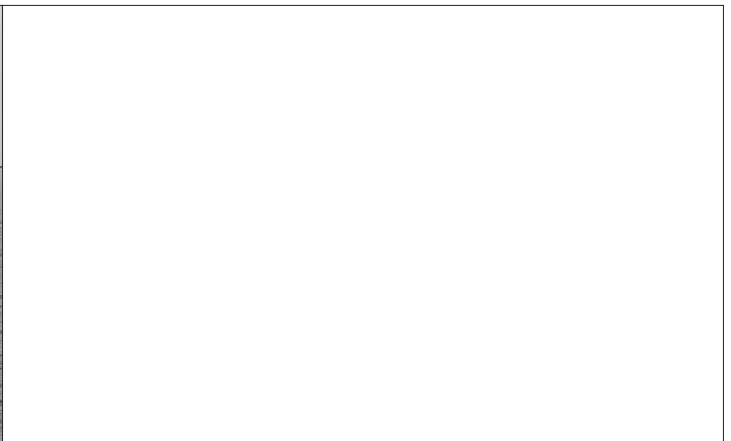2. To the West is _____

3. To the South is _____

PRE-VISIT TASKS

Once a dry valley, now the Solent…

Yes, that's right… the area now under the sea and known as the Solent was once a dry **valley** with trees, rivers and animals like Elk and Woolly Mammoths roaming around! The Solent River ran through this valley, with many smaller **tributaries** joining it along its course. Our early ancestors even lived here; evidence of stone age settlements, and the lives of their dwellers, have been found under the sea here!

About 9000 years ago, this all changed though. Vast amounts of water, that had been 'locked up' as ice and snow on the land, melted and basically 'drowned' this valley, cut through the chalk ridge that once joined the Isle of Wight to the mainland, and flooded the whole area to form what we now know today as the Solent – the area of sea that separates the Isle of Wight from the South Coast of England!

Task 4: Before and after…

On the left is a picture of what the Solent looks like today. The picture was taken looking west towards the Needles, at the end of the Isle of Wight. In the frame on the right, draw a picture of what this area might have looked like before the ice and snow melted and flooded it. You could add labels if you like, to pick out key features.

PRE-VISIT TASKS

Task 4: Before and after…

When sea levels rose, the sea also extended inland up the estuaries and valleys of rivers and streams. The stream that once flowed into the Solent at Portsmouth was flooded and became much larger; much wider and deeper.

On the left is an image showing Portsmouth Harbour today.

Draw a sketch below to show what this area might once have looked like, before sea levels rose and created the natural harbour.

When you are on the ferry, look out for the features and characteristics of the physical Geography of Portsmouth Harbour, and this part of the Solent.

The Human Geography of Portsmouth and the Solent area

Human Geography is all about people; what we do, where we live, and how we live our lives.

Well, you know something about the human geography of Portsmouth already… that more than 200,000 people live there! But, what else could we say about the human geography of the area? Use the map on page 3 and write some ideas down in the space below:

Extension: see if you can categorise what you have written above, and give each a title/ heading, e.g. 'transport'…

Task 5: Using the land...

Human beings use the natural landscape in many ways. These land uses can be categorised. Can you think of any (those of you that had a go at the extension should be able to name at least one!)

Your teacher will show you a website. Write down a list of land uses in the left-hand column of the table below, and then use the map on page 3 to write down examples of different types of land-use in and around Portsmouth. If you can, name specific features and even grid references for them!

Land use category	Specific examples from map

Well done – you will be using everything that you have learnt when you complete the activities on the ferry!

ON-SITE TASKS

You are now going to carry out some activities on board the Wightlink Ferry as you make the crossing across the Solent to/from the Isle of Wight. Read and follow all instructions carefully!

The Spinnaker Tower and Gunwharf Quays

The image here shows the Spinnaker Tower, a 170-metre high observation tower which was built as part of the £38 million redevelopment of Gunwharf Quays.

Visitors can get almost 360 degree views for up to 23 miles across the city, the south coast of England, and across to the Isle of Wight.

Gunwharf Quays is an area of residential, commercial, retail, office, leisure and dock space. It involved the major redevelopment of Naval land, known as HMS Vernon.

Your teacher will show you a slideshow of what this area was once like, and how it changed during construction, and the Gunwharf Quays website which shows what it's like today.

You will now see it for yourself, from the Wightlink Ferry.

Task 1: An artist's impression…

In the space below, draw a simple sketch of the Harbour, focusing on the Gunwharf Quays area around the Spinnaker Tower. Then, try to label as many different types of land-use as you can.

ON-SITE TASKS

Task 2: Name the features
Look at the images below, all taken in the harbour. See how many of these human features you can identify – write a description of each beneath the photo

See how many of these human features you can identify –
write a description of each beneath the photo:

Extension: Can you also write down what type(s) of land-use can be seen in each image. Is there any type of land-use NOT shown in these images? Why do you think that this type of land-use is not evident here?

Task 3: Fort spotters

Portsmouth is home to a Naval base, which has been an important part of the city since 1194. By the early 19th century Portsmouth was considered to be the 'World's greatest naval port'.

Today, it is home to almost two-thirds of the Royal Navy's surface ships, including the new formidable Type 45 destroyers, and HMS Queen Elizabeth which was docked here at the time of writing and can be seen in the background of the picture here. It is the first of a new class of aircraft carriers which are the largest and most powerful ever built. At a cost of £3.1 billion to build, it can carry up to 40 aircraft. Currently undergoing sea trials, it will be commissioned at the end of 2017. The wider Naval base here includes officer accommodation and messes, as well as support for them such as education, medical and welfare facilities. Also, several training bases and facilities have been established in other parts of the city, including in Fareham and Gosport. In all, there are about 17,300 people working in the bases here, which forms a significant part of the total population

The entrance to Portsmouth Harbour, and the bases within it, has been protected from both the land and sea with defence lines constructed from 1665 and fortified over centuries since.

In addition to the Naval Base at Portsmouth, the Solent has other forms of protection in and along it, some of which you will see as you travel across it on the ferry…

Four **Solent Forts** were built between 1865 and 1880, with the aim of protecting the coast and the entrance to Portsmouth Harbour from attack by the French. These are called Spitbank Fort, St Helen's Fort, No Man's Land Fort and Horse Sand Fort. However, none of them ever got used for their original intended purpose and were sold after the second World War. They have now become part of a chain of luxury hotels and a museum.

Palmerston Forts were built around the coast of the Isle of Wight and were added to the line of defences around the entrance to Portsmouth Harbour.

Questions to consider:

1. Why do you think that Portsmouth Harbour was vulnerable to attack?

_____

_____

2. Why do you think that Portsmouth Harbour made a good location for the Naval Base/Port?

_____

_____

_____

ON-SITE TASKS

3. How does the physical geography of the coastline here make it suitable/good for the development of:

a) Ports/harbours?

_____

_____

_____

_____

b) The Naval Base/Port?

_____

_____

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c) Defences?

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ON-SITE TASKS

Task 4: French attack!

Imagine that you are trying to attack Portsmouth.

Write a letter/postcard home, to describe your attempts… what were you aiming to achieve?

Have you been successful? Why/Why not?

POSTCARD

ON-SITE TASKS

Task 5: Comparing coastlines

▶ Fishbourne is the other end of the Ferry route from Portsmouth Harbour. You will notice immediately how different it is!

▶ Make some observations from the ferry and complete the table below to indicate at least five key differences, and also any similarities, between these coastal locations.

Differences	Similarities

Summary presentations

Why was Portsmouth Harbour a good site for a settlement, port and Naval Base?

You are going to work in small groups to develop a presentation with the above title.

How, exactly, you decide to put together your presentation is up to you, but it should cover the following:

- ✓ An introduction to Portsmouth – where it is (including maps) and what it is like (pictures!)

- ✓ What the physical Geography of the site is like

- ✓ What the human Geography is like today – the human features and characteristics of the city and harbour

- ✓ How the physical Geography (past and present) has made it a good site for the development of the city, the port and the defences/naval base here

Think about how you are going to divide the work between your group members, so that you each have a 'job' to do. Also, think about the design of your presentation – it needs to be attractive, clear and informative!

This is a summary task so try to use all that you have learned during the pre-visit and on-site tasks, including all those good geographical terms!

Good luck!