



Teacher: Mr Hammond

Term: Spring 1 (A)

Class: Godrevy

Year group: 5 & 6

# By the Sea

As writers we will learn about:

**Fiction** — based on the books, 'The Whales Song', 'Flotsam' and film, 'The Lighthouse'

Creating atmosphere in our writing

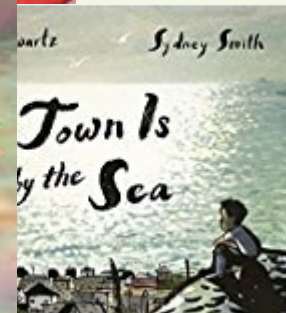
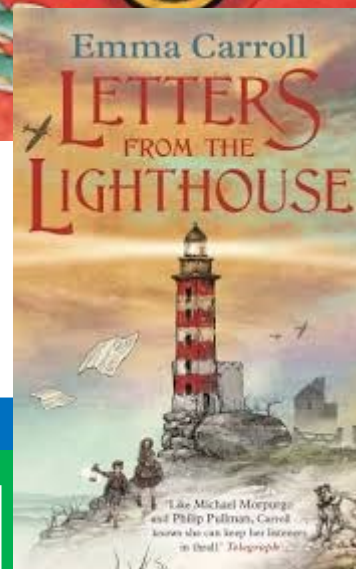
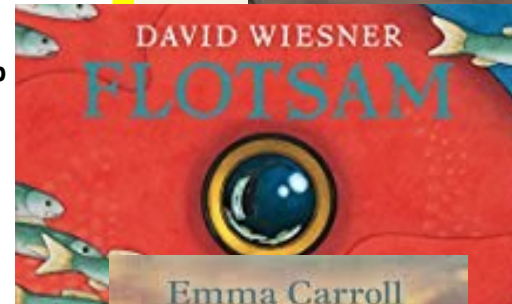
Range of sentence structures and punctuation

**Non-fictions**—Persuasive writing against plastic pollution in the sea and then followed up with fishing

Connecting our writing together using connectives

Punctuation for parenthesis (when a word has been inserted into a sentence) including brackets ( ), dashes - or commas

THE WHALES' SONG  
by Dyan Sheldon illustrations by Gary Blythe



## Homework

Monday: **Times Table Test** (99 club)

Wednesday (due in) : **Maths Homework** booklet 1 page per week

Friday: Spelling Test

Every Night: **Reading** at least 10 minutes each night. Please log in reading record.

**Topic Grid**: Optional homework linked to our topic of 'By the Sea'

As mathematicians we will learn about:

- ◇ Fractions Decimals and Percentages
- ◇ Algebra
- ◇ Shape

## Oceans and Seas

In our topic, we will learn about :

1. oceans and seas around the UK and the world
2. tides and currents
3. fishing in Cornwall and in impact on the economy
4. living by the sea

## The Marine Habitat

As scientists we will learn about:

1. the marine habitat
2. classification of sea creatures
3. adaptation
4. food-chains

## Photography and Digital Art

In computing we will learn to :

1. organise albums and portfolios
2. use camera settings and framing shots
3. explore light and shadows
4. explore different angles
5. edit photos to create different effects
6. take action shots

## Bridges

In DT, we will learn :

1. about arch and beam bridges
2. to build spaghetti truss bridges
3. to design and build our own bridges

## In art, we will learn to:

1. draw shells in colour
2. draw lighthouses in oil pastels
3. weave seaside scenes

## PSHE

Beach Clomb—Protecting our beaches

How important is reuse recycle and reduce?

In **Religious Studies** we will learn about Hinduism

## Cornish Songs

In music we will learn to:

1. sing Cornish songs
2. compose our own songs
3. Make our own backing tracks in Garage band.

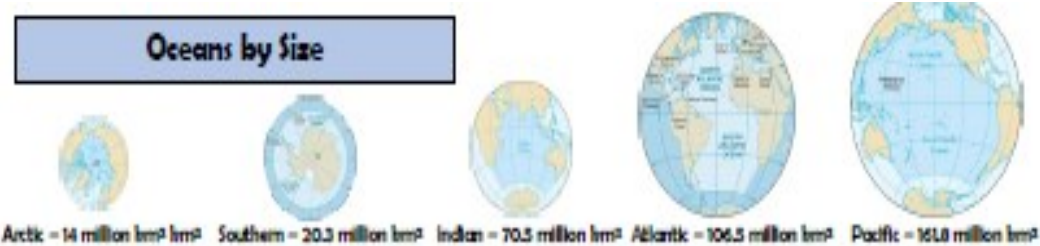


# By the Sea

The surface of the planet is 71% water. It contains 5 oceans: The Arctic, Atlantic, Indian, Pacific and Southern Oceans.



- The different oceans are shown by the different shades of blue on the map.
- All of the oceans are actually connected together.
- The word 'ocean' comes from Greek, meaning 'great stream.'



## Bridges

### Designing Structures

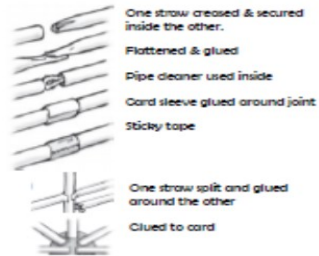
Some example of man-made objects that use frame structures are houses, skyscrapers, bridges, scaffolding, tables and roller coasters.

Prior Learning - a wide base can make a structure more secure

**Materials**—When considering the most appropriate materials, we need to consider properties such as weight, toughness, malleability, strength and presentation),

**Triangulation**—Triangulation can help to make structures stronger. Triangulation is important when bracing. When force is applied to one point on the triangle, the pressure is shared amongst the other two points, which provide a secure wide base.

When using straw, rolled paper, a number of adhesives can be used - e.g. sellotape, different types of glue. Creating a frame requires using secure joints. These can be made using these methods.



**Compression** - A squashing force caused when parts of a structure are pushed together

**Tension** - A stretching force caused by two parts of structure being pulled apart



**Truss bridge**— A bridge which is built from a series of triangular beams



**Arch bridge** - A bridge which is built with a curve



**Beam bridge** - A bridge which is built with horizontal beams and vertical pillars



**Suspension bridge** - A bridge which is supported by vertical cables which run between pillars that are connected into either end of the bridge

### The Five Oceans



**Pacific Ocean**

- The Pacific Ocean is the largest ocean in the world. It covers nearly one-third (30%) of the Earth's surface. It separates Australia and Asia from North and South America.
- The name Pacific Ocean means the 'peaceful sea' in Portuguese.



**Atlantic Ocean**

- The Atlantic Ocean is the second largest ocean in the world. It covers about 20% of the earth's surface.

-It separates North and South America from Europe and Africa. It contains the Gulf Stream.



**Southern Ocean**

- The Southern Ocean is the second smallest ocean. It is in the southernmost part of the world - around Antarctica.

-As it is so far south, much of the Southern Ocean is normally covered in ice (like the Arctic Ocean).

### Indian Ocean

- The Indian Ocean is the third-largest ocean in the world. It is the warmest ocean in the world!

-It lies south of India and separates Australia from Africa. It contains Madagascar and Sri Lanka.

### Arctic Ocean

- The Arctic Ocean is the smallest and shallowest of the world's oceans. It is in the northernmost part of the world.

-For much of the year, the Arctic Ocean is covered by ice. It has lots of fresh water, from melting ice.

### Seas

Seas are smaller than oceans, and are usually located where land and ocean meet. Sometimes, seas are a small section of an ocean. Below are some of the world's seas:

#### Mediterranean Sea

- The Mediterranean Sea is connected to the Atlantic Ocean through the strait of Gibraltar, which is only 9 miles wide.

- The Mediterranean Sea separates southern Europe from northern Africa.



#### Red Sea

- The Red Sea is an inlet of the Indian Ocean, which separates eastern Africa from western Asia (the Middle East).

- The Red Sea is the world's northernmost tropical sea, with lots of interesting marine life.



#### Caribbean Sea

- The Caribbean Sea is a far-western section of the Atlantic Ocean, which surrounds the Caribbean Islands.

The Caribbean Sea is bounded by Mexico and Central America.








#### Dead Sea

- The Dead Sea is called a sea, but is actually a hypersaline (very salty) lake.

It is so salty that animals and plants cannot live in it (dead!), and you can easily float on it.



### Interesting Features

<b>Mariana Trench</b>		The Mariana Trench is the deepest part of the Ocean. Its very deepest point, the Challenger Deep, is 10,971 metres deep! Even though it is very deep, a few people have visited it in submarines!	Where? Pacific Ocean, near the island of Guam.
<b>Hawaiian Islands</b>		The Hawaiian Islands are a series of eight islands in the Pacific Ocean. Even though they are a long way from the mainland, the islands are a state of the USA. They contain several large volcanoes.	Where? 1500km across the Pacific Ocean.
<b>Gulf Stream</b>		The Gulf Stream is a huge, warm, ocean current that moves from the Gulf of Mexico to North America and Europe. It helps to keep these places from getting too cold in the winter time.	Where? Atlantic Ocean, from central America northern to Europe.
<b>Tides</b>		Tides are the rise and fall of the levels of the ocean. They are caused by the pull of gravity from the Moon. Tides cycle as the Moon moves around the Earth. Therefore the oceans are always rising and falling.	Where? All over the world, in all oceans!
<b>North Pole</b>		The North Pole is actually a frozen part of the Arctic Ocean - there is no land beneath the ice! Because the ice keeps shifting on the ocean beneath, people keep having to move the flag that marks the Pole!	Where? In the middle of the Arctic Ocean.

# Fishing

Fishing is an important global industry and the livelihoods of millions of people around the world depend upon this vital food resource. But today our oceans are under more pressure than ever from human and environmental impacts. Overfishing is now our second largest sustainability challenge after climate change.

- Around 27% of the world's fish stocks are overexploited or depleted.
- 200 million jobs depend on the fishing industry worldwide.
- About a billion people depend on fish as their sole or main source of animal protein.



### Food Chains

All living things in an ecosystem depend on each other for food.

Food chains are a flow of energy that show who eats what (e.g. plants absorb energy from sunlight and animals their energy from eating plants or herbivores). They overlap and interlink to produce complex food webs. If one animal's source of food disappears, perhaps from a natural cause such as drought or disease, many other animals in the chain are affected. Plants are at the bottom of the chain, and humans are usually at the top. Humans are often responsible for disrupting food webs and damaging fragile ecosystems.



### Types of Fishing

A commercial fishing operation can vary in size from a single fisherman in a rowing boat using small hand-cast nets, right up to factory ships equipped with the latest technology to track, catch and process fish at sea. Commercial fishing, where fish are caught for profit, accounts for most of the seafood that is consumed each year with a large volume being caught in the developing world.