


World Ocean Day - 8<sup>th</sup> June 2020

# WORLD OCEAN DAY FOR SCHOOLS

A festival celebrating our ocean connection.

On Monday 8th June we are bringing the wonder of the ocean from the deep blue to wherever you are. Our interactive line up of ocean advocates will unfold right here with live ocean films, science lessons, music performances, yoga, breath-work, storytelling and much more!

Dress up in blue on the day to get in the mood for the festival 

*Today is World Ocean Day, which children around the world will be taking part in. I have planned some activities that you could try during the day.*

*There are lots of things happening online during the day. Details of these can be found here:*

<https://worldoceanday.school/>

*The day starts at 9am with lots of workshops taking part in the day, including: Rockpool Ramble; Learn how to breathe like a dolphin; Creative Zone.*

*Read these extracts from 'A Youth Guide to the Ocean' (The whole document can be found here: <http://www.fao.org/3/a-i4224e.pdf>)*



*Kelly-Marie Davidson, Plymouth Marine Laboratory*

The ocean is the most essential building block for life. Without the ocean, the Earth would not be habitable for humans, animals or plants. In fact, without the ocean, life would never have begun all those 3.5 billion years ago! Let's take a look at the ocean and its different zones, and answer some key questions about this life-giving feature of the natural world.



*Can you remember from Year 4 the names of the 5 different oceans and where they are on the planet? Use a world map to help remind you.*

*Look at how we use the ocean:*

We use all parts of the ocean: the edge, the surface, the seabed and everything in the middle.

## FISHING AND FISH FARMING

About 56 million people are currently employed in fisheries and **aquaculture** (fish farming). In addition, many more are employed in follow-up activities, such as handling, processing and distribution. Altogether, fishing and fish farming support the livelihoods and families of some 660 to 880 million people – that's 12 percent of the world's population. More than 40 percent of fish and shellfish eaten by humans come from **aquaculture**, much of which is found in **coastal zones** (where it's known as **mariculture**).



CRAB BOAT FROM THE NORTH FRISIAN ISLANDS WORKING IN THE NORTH SEA.  
© J. de Wijk



GERMANY'S LARGEST OIL FIELD MITTELPLATE.  
© R&P Ralston, WMC

## NATURAL RESOURCES

Offshore oil and gas rigs currently provide 30 percent of the world's oil production and 50 percent of its gas production.

Marine sand and gravel are mined for use in the construction industry and interest is growing in mining the seabed for metals such as iron, copper, zinc, gold and silver.

## RENEWABLE ENERGY

Devices are being developed to generate electricity from waves and **tides**. Offshore wind farms are also under development, as are **biodiesels** made from marine **algae**.



OFF SHORE WIND TURBINES.  
© Steve Farnham, WMC

## A PLACE TO LIVE

About 60 percent of the world's population now live in the **coastal zone** (within 200 km of the ocean) and 21 of the world's megacities (cities with more than 10 million inhabitants) are in coastal areas.



THE GOLD COAST SKYLINE, AUSTRALIA.  
© Alamy, WMC

Answer these questions from the text:

What parts of the ocean do we use?

How many people are currently employed in fisheries and aquaculture?

What is aqua culture?

What metal might you find on the sea bed?

What title might you give for this page?

OVER CHECKING UNDERWATER PROTECTION OF CABLE. © CWB/Regulatory Commission



## COMMUNICATION

Submarine cables are essential for international communication. 99 percent of internet traffic flowing between countries goes via submarine cables!

A SURFER IN SANTA CRUZ. © Robert Scoble, BBC



## RECREATION AND LEISURE

It has been estimated that worldwide 121 million people take part in marine recreational activities such as fishing, whale watching and diving each year. This industry is thought to be worth more than US\$ 47 billion each year.

CAPSULES. © Amy WRC



## MEDICINES

Scientists have discovered that many marine **invertebrates** produce antibiotic, anti-cancer and anti-inflammatory substances. Horseshoe crabs, seaweeds and marine bacteria have also been found to have useful medical properties.

## TRANSPORT AND COMMERCE

90 percent of world trade is carried out by sea! Passenger ferries are also popular modes of transport. In the UK alone, 21.1 million people travelled to and from the UK by sea in 2011.

CONTAINER SHIPS, SAN FRANCISCO. © NOAA, BBC



## ORNAMENTAL RESOURCES

Global trade in marine ornamental resources (such as aquarium fish, corals and shells) is estimated to be worth between US\$ 200 and 330 million each year. Up to 2 million people worldwide are thought to own marine aquaria.



A SMALL AMATEUR AQUARIUM. © Alan Stewart, BBC



## Oceans and Plastics

Look at and read the Oceans and Plastic poster and fact sheet

Have you ever visited the sea before and, if not, would you like to? What did you do at the seaside? Have you ever travelled across the sea or been on a boat trip?

Activity 1: Make a list of all the things you might do at the seaside.

Now think about the role that the ocean may play in your life (eg providing fish for food - use some of the ideas from the text above) Add onto your list in another colour the role oceans may play in your life.

Look at these images.



What do you see in the photos? How does it make you feel? What questions do they raise?

All of these photos relate to plastic pollution in our oceans. This is an issue which threatens the future of our seas and planet. We can all do something about plastic pollution!

**Activity 2:** Look at the attached quiz and answer the True or False questions

Now look through the answers. How many did you get correct? Do any of the answers surprise you?

Finally, attached is a chart for you to document the amount of single-use plastic you and your family use each week.

**Activity 3:** Complete the chart for the single use plastic you use in one week.

Watching this video may help show some of the problems:

<https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/z6m7vk7>

Finally, complete the chart at least one thing you, your community and the wider world could do to use less plastic and keep our oceans free of plastic pollution.