

## Venus Home Learning Grid: Week Beginning 01.06.20

### What would you find under the sea?

This week, we are getting on our diving gear to explore life under the sea. Watch this Blue Planet II video as your starter activity and consider the questions below:

<https://www.youtube.com/watch?v=38JDGnr0vA>

1) What do you already know about life under the sea?

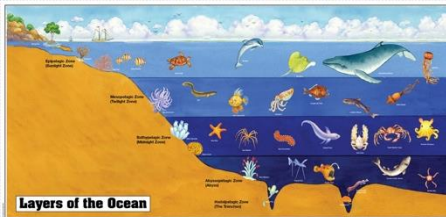
2) What would you like to find out about?

3) How are you going to answer the questions you've posed?

#### Show What You Know

A few weeks ago, we asked you to read a passage about Florence Nightingale. This week, we would like you to read some information about oceans. What can you find out? How many layers are there? Once you have become familiar with some of the facts, please use your jotter to answer a few short questions. You could use the passage to help you complete the 'Ocean Layers' task, too!

***The passage and question sheet can be found at the end of this document. Answers are also provided on this week's answer sheet.***



#### 'Sea' What You Can Spell!

This week's big question is 'What would you find under the sea?' Here is a list of some of the wonderful things that might be found:

- Algae
- Barnacle
- Currents
- Flounder
- Hammerhead shark
- Mackerel
- Manatee
- Orca
- Sea urchin
- Zooplankton

Read these words aloud with an adult. Some of them are quite tricky! Then cover them, write them and check them. How many were you able to spell correctly? What strategies did you use to help you spell them? Practise this a few times and then try to find their definitions. What do each of them mean?

#### Homophones Hunt

A homophone is a word that has the same sound as another word but is spelled differently and has a different meaning. For example, the words to, two and too all sound the same but have different definitions.

- To (I am going **to** London)
- Two (I have **two** sisters)
- Too (I enjoy cycling **too**)

If you are continuing to work your way through a book at home, keep a record of any homophones you find in it. Write them in your jotter with a short explanation for when you would use them. Alternatively, you could use each homophone to create your own sentences.

#### Ocean Layers

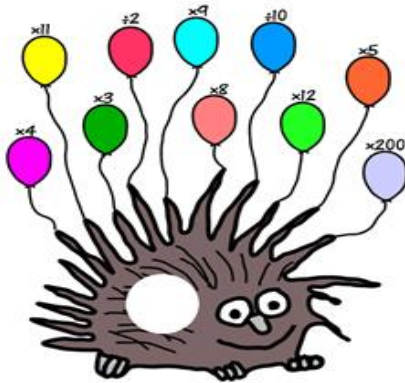
Watch the video about the ocean layers (link below), then create an interactive diagram summarising the ocean zones. Maybe it will be a "Lift the flap" poster, a poster/leaflet where the information slides out, or is in the form of a folded diorama. Make sure to include the name of the zone, what depth of the ocean it reaches, and examples of living things found there.

<https://www.youtube.com/watch?v=fHVE4B-UjmM>

### Harry The Hedgehog

Write a number in Harry the Hedgehog's tummy and use this number for each balloon calculation.

You can either use this picture (if you have a printed copy), draw your own hedgehog, or just write the sums out individually if that's easier. Check your answers either with a calculator or with a willing adult/older sibling.

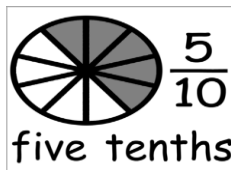


### Understanding Tenths

Last week, we asked you to start thinking about tenths and hundredths. This week, we are going to look at tenths in a little more detail.

Write the numbers 1 to 10 on separate pieces of paper. Place numbers 1 to 9 in a bag or jar and keep the number 10 beside you.

**(Number 10 will act as the bottom number of your fraction to give you tenths).** Pick a random number out of the bag to give you your top number. In your jotter, write down what that fraction looks like, draw a visual representation of it and then write it in words. For example, if you were to pull the number 5 out of the bag, the top number of your fraction would be 5 and the bottom number would be 10. You would then present your work like this:



Repeat this until you have used all the numbers from your bag.

### Sea Creatures - Sizing Up

Use this [link](#) to see a poster of 'Sea Creatures Sizes' online. Create a table/chart to record the information about the sea animals which feature on the poster.

List the animals in order of size from smallest to largest. With a calculator, you could also try converting the sizes to metres, which is a unit of measure we are more familiar with in the UK (1 metre = 3.3 feet).

E.g. a leather back turtle is 7ft, so  $7 \div 3.3 = 2.12$  metres.

Perhaps you could research the sizes of some other underwater creatures and add them to your table.

#### *Extra challenge:*

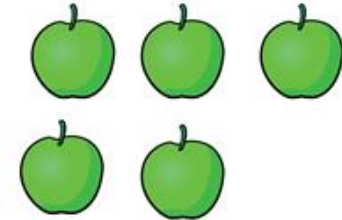
*A blue whale is 108.3ft ( $108.3 \div 3.3 = 32.8$  metres). With the help of someone else, measure yourself and try to work out how many of you it would take to reach the same size as a blue whale!*

### Problems of the Week

#### **I** In a box

- $\frac{1}{4}$  of the apples are green.
- The rest are red.
- There are 5 green apples.

How many apples are red?



Answers provided on this week's answer sheet.

## Seaside Safety

The seaside is a beautiful place. It is calm and relaxing; the air is crisp and clear and there are lots of different creatures to be seen. However, the deep water nearby means that we must be very careful when we are there. Think about a day at the beach. What would you wear? What would you need? What would you do or not do? Create a poster explaining how to stay safe at the seaside and talk through what you have designed with a family member. Why not share your top tips with us on our class Facebook page?



## Fitness Bingo

Have fun and get some exercise at the same time! You'll need to work with two other people for this game. Decide who will be the bingo caller and who will be the two competitors. Each player will have their own individual sheet and ten small, blank pieces of paper. **(The template can be found at the end of this document).** The caller will read out a task and a number of their choice. For example, if they say ten sit-ups, the two players will then race to find a spot and perform ten sit-ups. The first person to do this, get back to their chair and shout 'complete' wins that round. They will then place a piece of paper on the square marked sit-ups. The winner of the game will be the player who has completed four squares in a row. This can be done horizontally, vertically or diagonally.



## Crab Football

Challenge someone to a game of crab football, you need to get into crab position for this!



Can you invent any other new games which involve underwater creatures? We'd love to see some pictures of your efforts on our class Facebook page!

## Make Your Own Boat and River!

Most of us have seen boats travelling along the sea. Now it's time to create your own boat and river! To do this you will need:

- An empty plastic bottle (or light tin container)
- Lollipop sticks
- Glue
- Tin foil
- Water

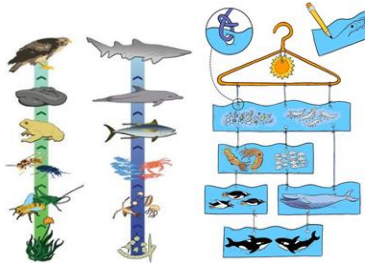
Create your own boat using the plastic bottle or the tin container. Decorate your lollipop stick and glue it to the centre of the boat to make a sail. Find a large, flat space outside and lay tin foil neatly on top. Place your boat at one end and using a hose, jug or bucket, gently spray water at the base of your boat. Watch the water and your boat run down the river! **This works best if one side of the flat surface is sloped or at an angle.**



### Ocean Food Chains

Watch the BBC Bitesize video about food chains (link below). Create your own, hanging, ocean food chain or web similar to the pictures below. Remember to clearly show the flow of energy at each part of the food chain.

<https://www.bbc.co.uk/bitesize/topics/zbnnb9q/articles/zwbtxsq>

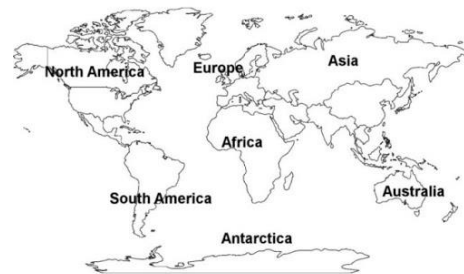


### Oceans of the World

Use the following link to watch a video about the oceans of the world:

<https://www.youtube.com/watch?v=X6BE4VcYngQ>

As you watch the video, try to take notes about the oceans. How many are there? What are their names? Where are they found? Use the template at the end of this document to label the oceans on a map of the world. Alternatively, you could show what you know by drawing your own map! Why not add some illustrations of things you might find in each ocean?

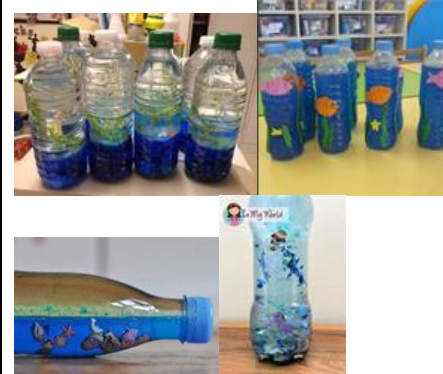


### Whole School Challenge

Can you upcycle a plastic bottle to create a model ocean? You may want to fill your bottle with things you might find in the ocean or you could make a sea scape with paper to stick on the back of the bottle and fill with water. We can't wait to see your creations.

For an extra challenge – can you make a fish or diver that moves up and down inside your bottle, using these instructions?

<https://www.youtube.com/watch?v=DU8wONWjIXg>



### How Do Fish Breathe?

How do fish breathe under water? Use this science experiment to find out! To complete this activity, you will need:

- 1 glass jar
- 1 cup
- Water
- Coffee filter (or kitchen roll)
- Coffee
- 1 rubber band

Fill a cup with water and mix in one tablespoon of coffee. (**The coffee mixture is like water in the ocean**). Place your coffee filter or kitchen roll over the top of a glass jar and use your rubber band to hold it in place. (**The coffee filter is like the gills on a fish**). Pour the coffee and water mixture into the jar through the kitchen roll. Watch the water filter through. Discuss what has been left behind. Now think about fish and what they filter from the water. Where does the oxygen go?

Write up your experiment and include equipment, method, observations and a labelled diagram.

## Useful Websites

<p><b>NUMERACY AND MATHS:</b>  <a href="https://www.topmarks.co.uk/">https://www.topmarks.co.uk/</a>  <a href="https://pages.sumdog.com/">https://pages.sumdog.com/</a>  <a href="https://mathsframe.co.uk/en/resources/category/22/most-popular">https://mathsframe.co.uk/en/resources/category/22/most-popular</a>  <a href="http://www.maths-games.org/">http://www.maths-games.org/</a>  <a href="https://login.mathletics.com/">https://login.mathletics.com/</a></p>	<p><b>LITERACY:</b>  <a href="https://www.literacyshed.com/home.html">https://www.literacyshed.com/home.html</a>  <a href="https://www.topmarks.co.uk/english-games/7-11-years/spelling-and-grammar">https://www.topmarks.co.uk/english-games/7-11-years/spelling-and-grammar</a>  <a href="https://www.doorwayonline.org.uk/literacy/">https://www.doorwayonline.org.uk/literacy/</a>  <a href="https://www.getepic.com/">https://www.getepic.com/</a></p>
<p><b>HEALTH &amp; WELLBEING/P.E:</b>          (Joe Wicks PE) -  <a href="https://www.youtube.com/channel/UCAxW1XT0iEJo0TYIRfn6rYQ">https://www.youtube.com/channel/UCAxW1XT0iEJo0TYIRfn6rYQ</a>          (Just Dance for kids) -  <a href="https://www.youtube.com/resultssearch_query=just+dance+kids">https://www.youtube.com/resultssearch_query=just+dance+kids</a>  <a href="http://www.gonoodle.com">www.gonoodle.com</a>  <a href="https://www.youtube.com/results?search_query=cosmic+kids+yoga">https://www.youtube.com/results?search_query=cosmic+kids+yoga</a>  <a href="https://www.bbc.co.uk/teach/supermovers">https://www.bbc.co.uk/teach/supermovers</a>  <a href="https://www.nhs.uk/change4life/activities">https://www.nhs.uk/change4life/activities</a></p>	<p><b>SOCIAL STUDIES:</b>  <a href="https://www.natgeokids.com/uk/">https://www.natgeokids.com/uk/</a></p> <p><b>EXPRESSIVE ARTS:</b>  <a href="https://artprojectsforkids.org/">https://artprojectsforkids.org/</a></p>
<p><b>SCIENCE:</b>  <a href="https://www.britishscienceweek.org/plan-your-activities/activity-packs/?gclid=CjwKCAjwsMzzBRACEiwAx4ILG8_zT4qImYI4UJfsRSgopbmELVOgfmo-9fYZ88SJEJ3QeEMP67LSDxoCzIsQAvD_BwE">https://www.britishscienceweek.org/plan-your-activities/activity-packs/?gclid=CjwKCAjwsMzzBRACEiwAx4ILG8_zT4qImYI4UJfsRSgopbmELVOgfmo-9fYZ88SJEJ3QeEMP67LSDxoCzIsQAvD_BwE</a>          (Learning with Lego)-  <a href="https://www.legofoundation.com/en/learn-how/play-tips/">https://www.legofoundation.com/en/learn-how/play-tips/</a></p>	<p><b>IDEAS TO HELP YOU TACKLE THE BIG QUESTION:</b>          (Travel as a humpback whale from Hawaii to Alaska)-  <a href="https://sanctuaries.noaa.gov/whales/main_page.html">https://sanctuaries.noaa.gov/whales/main_page.html</a>          (Find out about the coral reef)-  <a href="https://www.dkfindout.com/uk/animals-and-nature/habitats-and-ecosystems/coral-reef/">https://www.dkfindout.com/uk/animals-and-nature/habitats-and-ecosystems/coral-reef/</a>          (Games from the American Natural History Museum website)-  <a href="https://www.amnh.org/explore/ology/marine-biology#all">https://www.amnh.org/explore/ology/marine-biology#all</a></p>



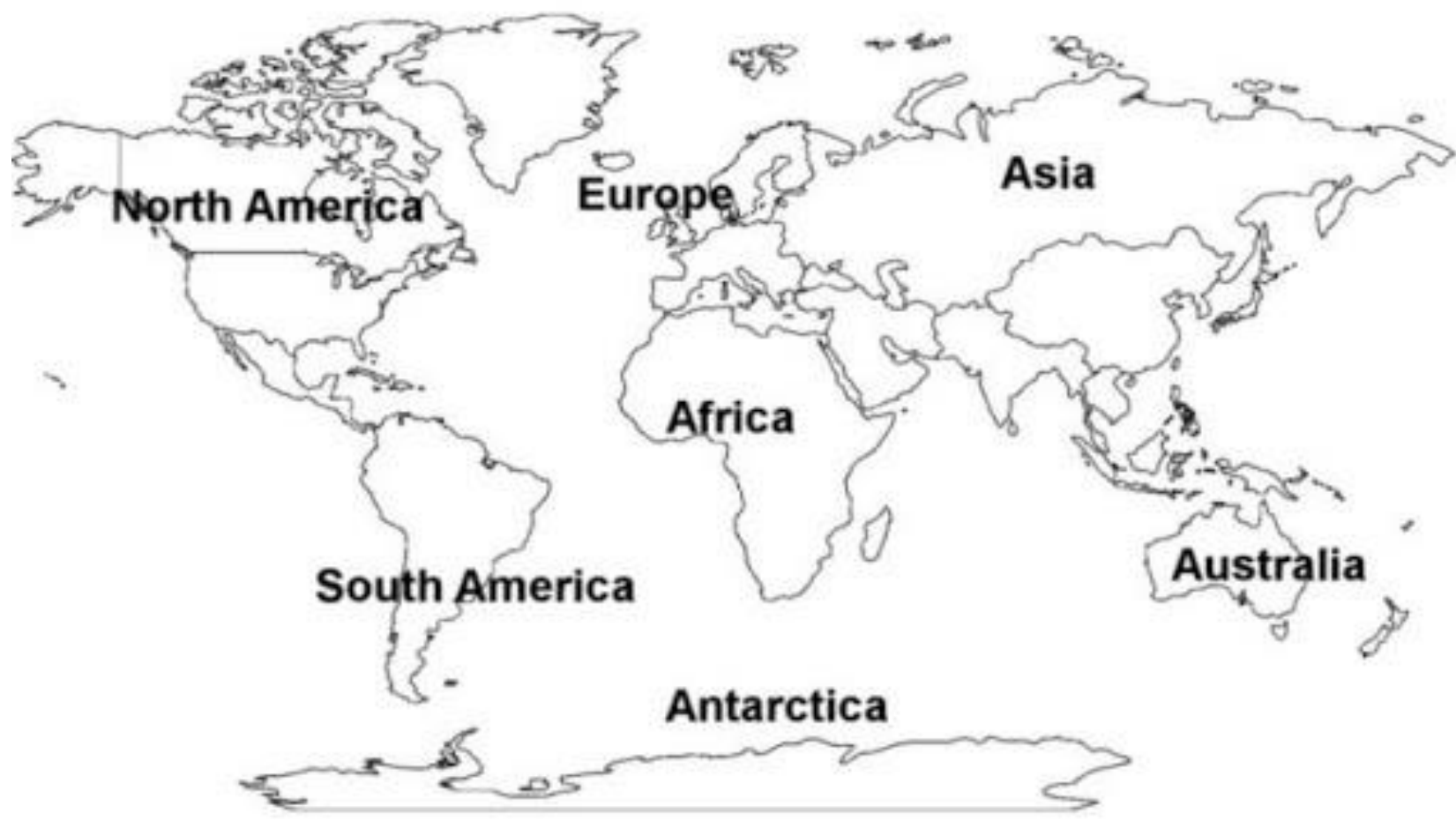
## Questions

- How much of the Earth do oceans cover? Tick **one**.
  - one third
  - two thirds
  - half
- Number these ocean layers in order of how **deep** they are. The first one has been done for you.
  - The Twilight Zone
  - 1 The Sunlight Zone
  - The Midnight Zone
  - The Abyss
- Draw lines to match the sentences to the ocean layers they describe.

Only a few animals can live here.	The Sunlight Zone
Humans can swim here.	The Trench
This layer is also called the ocean floor.	The Abyss

- Fill in the missing word.  
In the Midnight Zone it is pitch \_\_\_\_\_.
- Why do animals that live in the Twilight Zone often have big eyes?  
\_\_\_\_\_  
\_\_\_\_\_





**North America**

**Europe**

**Asia**

**Africa**

**South America**

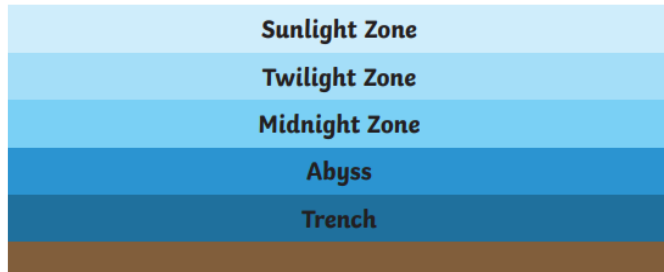
**Australia**

**Antarctica**

# The Layers of the Ocean

## Ocean Layers

Oceans cover two thirds of our Earth. The ocean is deeper in some places than others. We call these different depths, **layers**. Each layer is special, with different animals and plants living there.



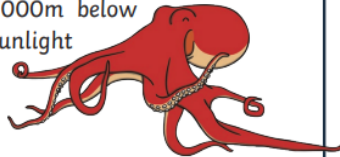
### The Sunlight Zone

The Sunlight Zone is up to 200m below the surface of the ocean. Sunlight can reach this layer. Most of all, ocean animals and plants live here. The water is warm and both humans and fish swim here.



### The Twilight Zone

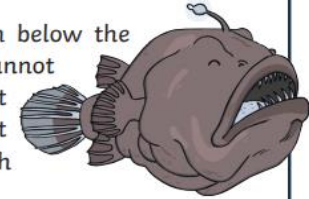
The Twilight Zone is up to 1000m below the surface of the ocean. The sunlight cannot reach this layer so it is very dark. Animals that live here often have big eyes to help them see.



# The Layers of the Ocean

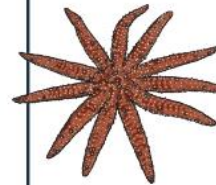
### The Midnight Zone

The Midnight Zone is up to 4000m below the surface of the ocean. Sunlight cannot reach this layer, which means it is pitch black. Many animals that live here make their own light, such as lanternfish.



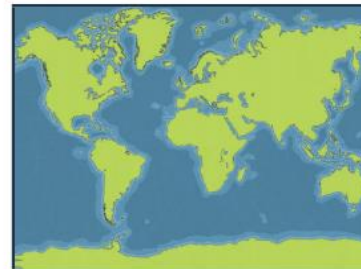
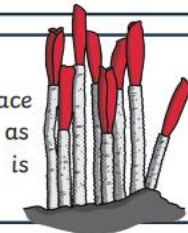
### The Abyss

The Abyss is up to 6000m below the surface of the ocean. Sunlight cannot reach this level at all and the water is near freezing. Only a few animals can live here, such as sea stars and crabs.



### The Trench

The Trench is up to 11,000m below the surface of the ocean. The Trench is also known as the ocean floor. The temperature here is near freezing.



### Did You Know?

The deepest part of the ocean is in the Mariana Trench. It is almost 11,000m deep!