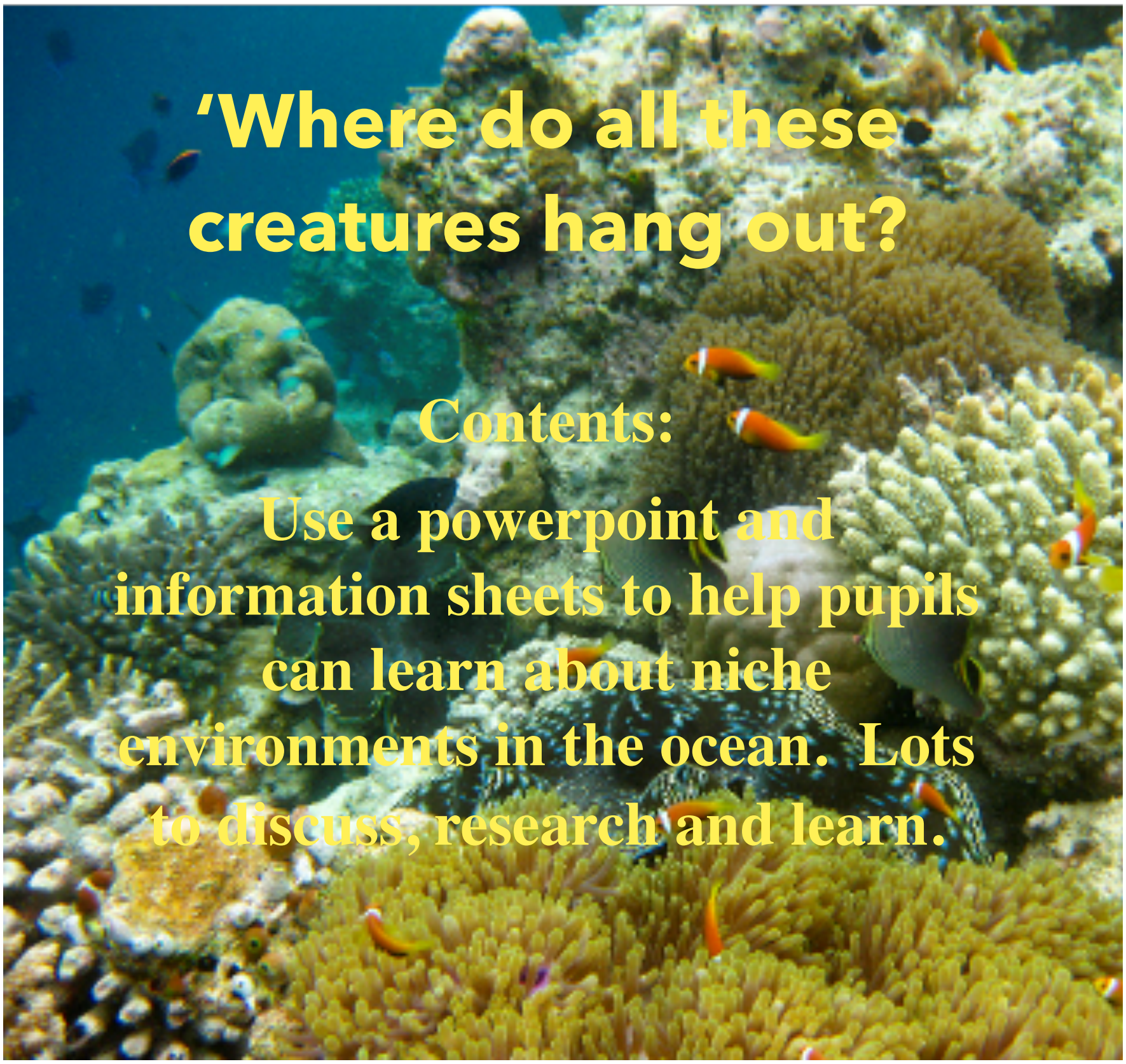
The Weird Fish Lady

Ocean World
Lesson SEVEN



Teachers' Resource

'Ocean World'

KS2 - Year 5/6 - UK Curriculum: Science

Lesson Seven
'Where do all these creatures hang out?

Resources in this unit are:
1.Ocean World Powerpoint (14 slides.)
2.Info Sheets and opportunities for learning about the seven niche environments in the ocean with lots to discuss, research and learn.
3. Activity Sheet Guide for teachers, includes key words, ideas and literacy work.
4. A list of 'Sea music' is also included for use throughout the eight-lesson project.
5.The BIG Question (pupils are encouraged to discuss and/or write a sentence to answer - The BIG question: - 'Where do all these creatures hang out?'

Teachers can establish pupil progress when discussing with pupils what they have learnt so far. It is suggested that work can be glued into a BIG BOOK/JOURNAL where pupil's work can be built up over the full teaching unit of 8 lessons.

All lessons are flexible - so spend a whole day on the lesson, or one section a day or one a week to suit your Geography/Science time slot.

Ocean Habitats

Footprint TO THE FUTURE

ACTIVITY 7

Where do all these creatures hang out?

Resources:

PPT **7: Marine Habitats**

Info Sheets: 7a and 7b

Suggested Activities:

A: Teacher led discussion – Use PPT 7 : "Marine Habitats"

Discussion:
This is a simple power point with easy to understand ideas about different creatures living in different environments of the Ocean. Every animal is **adapted differently to suit its special lifestyle (niche)**.
Narration (Info Sheet 7a) can be for the teacher **OR** given to students – one slide each to read out as the class watch the presentation. The slide presentation can take place as a whole – or can be delivered more slowly, a few slides each day.
Show and discuss the whole presentation as an overview of **Activity 7**.

OR

B: .....break the presentation down into the 7 parts

Progress at your own speed – depending on your timetable requirements.

B1. Teacher led activity - Slides 2-5
Why are Ocean Habitats so special?
Lead discussion

Pupils to discuss what they have learnt from the Power Point slides and add to their individual 'Learning Journal'.

Repeat activity above for all the following habitats:

Slide 6 Ocean Habitats
Slide 7 The Big Blue
Slide 8 The Deep
Slide 9 Coral Reefs
Slide 10 Seagrass Meadows
Slide 11 Ice World
Slide 12 Rock Pools
Slide 13 Island Life

Ocean Habitats

ACTIVITY 7

C: Pupils add to their 'Learning Journal'.

Use Info Sheet 7b.
Pupils to choose a habitat to research and add notes, drawings and diagrams to their research journal.

D: Teacher to put Key Words on the board.

ENVIRONMENT **THE BIG BLUE** **THE SEABED** **SEAGRASS MEADOWS** **CORAL REEFS**

E: Pupil Activity

Extension: Are some of these habitats endangered? Look for information on coral reefs – are they dying, if so why and what can be done. What research is being done to see if coral can regrow in a) higher temperatures of water or b) higher acidity of water.

Research: The Great Barrier Reef is the largest natural structure on Earth and can be seen from Space. Find out everything you can about this enormous reef system.

F: Answer the Big Question

Where do all these sea creatures hang out?

The answer is…….?

Ocean World

Information Sheet 7a

Read this information in conjunction with Powerpoint Presentation 5 – Marine Habitats

Slide 1

Habitats – the places where creatures live.

Slide 2

4 facts here – the World Ocean is special because

a) 70% of the Earth is the Ocean – that is a lot of water
b) The deepest part of the Ocean is 11km down and that is deeper than the tallest mountain (Everest) is high, 8 km up on land.
c) Hidden under the Ocean are large mountain ranges, and lots of volcanoes
d) The space for living things in the Ocean is 300 times that of the space on land

Slide 3

Tiny microscopic algae called plankton is not a plant, yet it makes glucose energy from the Sun just like Plants. It also makes lots of oxygen – between 50% and 80% of the Earth's oxygen comes from plankton. The amount of oxygen plankton makes varies depending on the part of the Ocean and the time of year. There is 10 times the amount of plankton compared to human beings. That's a lot of plankton.

Slide 4

All the water we use comes from the Ocean. Water in the Ocean is sucked up (evaporated) into clouds, leaving the salt behind. The water in the clouds form rain. We collect rain to give us fresh water to drink.

Slide 5

There are more different types of animals living in the Ocean (65%) than on land (35%).

Slide 6

There are seven different types of Ocean habitat.

Slide 7

There are lots of animals living in the wide open Ocean. These are just some of them.

Slide 8

Some of the deep sea creatures look like monsters

Slide 9

The highest number of different creatures in the Ocean live amongst the coral. From tiny invertebrates to giant octopus, they all find their own special place to live. They are in a constant battle for survival.

Top Left: Lionfish swimming near hard Staghorn Coral. Top Middle: a herbivorous Angel Fish. Top Right: a Starfish which is an invertebrate.

Ocean World

Information Sheet 7b

Project Work

Habitats in the Ocean

The Big Blue

Research what animals live in the open ocean.

Find out what they eat – and who eats them (food chains).

What is special about their lifestyle?

How far do they travel?

Are they caught by humans fishing for food?

Are they ‘endangered’ by the human methods of fishing?

Hiding at the bottom of the Ocean

Research what animals hide in the sand and seagrass at the bottom of the sea.

What do they eat, and who eats them (food chains)?

What is special about their lifestyle?

What sort of protection do they have to avoid being eaten?

Are they active during the day or during the night?

Are any human fishing methods endangering their lives?

Living in a Coral Reef

Research what animals live in a coral reef?

What do they eat, and who eats them (food chains)??

What is special about their lifestyle?

How do they behave to avoid being eaten?

Are they active during the day or during the night?

What type of human fishing methods endanger the lives of ocean creatures?

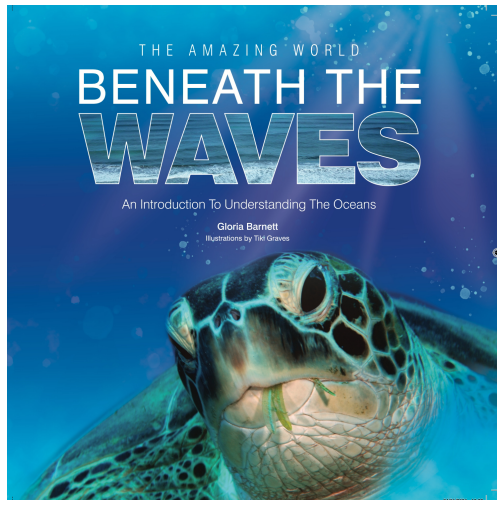
Ocean World

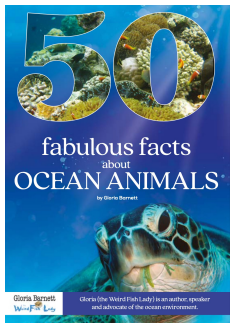
Sea Music

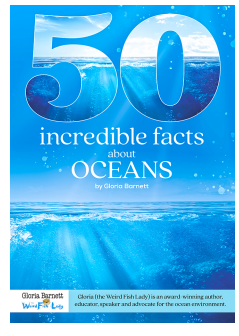
1	The Mystic	Van Morrison
2	Yellow Submarine	The Beatles
3	https://www.youtube.com/watch?v=GHgE5fQxvW8	
4	The Hebrides (Fingal's Cave http://www.bbc.co.uk/programmes/articles/3Fm3H66YnxNZslLrSX3mMvh/top-six-sea-pieces	Felix Mendelsohn
5	La Mer	Debussy
6	Sea Fever	John Ireland
7	Storm	Benjamin Britten
8	The Flying Dutchman	Richard Wagner
9	Octopuses Garden	Beatles
10	Under the Sea	Little Mermaid
11	Hawaii Five-O	The Ventures
12	Shark Attack	John Williams
13	Wipe Out	The Safaris
14	Sittin' on the Dock of the Bay	Ottis Reding
15	Pirates of the Caribbean	Any
16	Sparticus (Onedin Line Theme)	Kachaturian
17	Preservation / Kyance Cove / Marazion	Keynvor
18	The Aquarium: Carnival of the Animals	Saint -Saens

Ideas to enhance this lesson ...

Buy '*The Amazing World Beneath the Waves -Guide to the Oceans'* or the *'50 Facts'* Books for your classroom from the book section on www.barnettauthor.co.uk







14 slides - copy and paste to Powerpoint

Ocean World

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Marine Habitats

Ocean World

Why are ocean habitats so special ?

Size – 70% of Earth Is Ocean

Deepest (11 km) in Mariana Trench Pacific Ocean.

Ocean hides mountain ranges with more volcanoes than on land.

© Ocean World

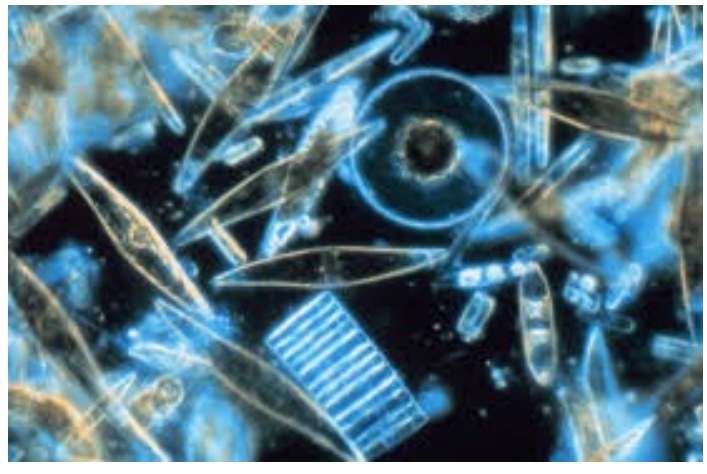
Volume of Ocean environment has 300x more space for life than that provided by land and freshwater combined.

Why are ocean habitats so special ?

Life forms in the Ocean supply our oxygen

Plankton
produce
50 % of Earth's
oxygen.

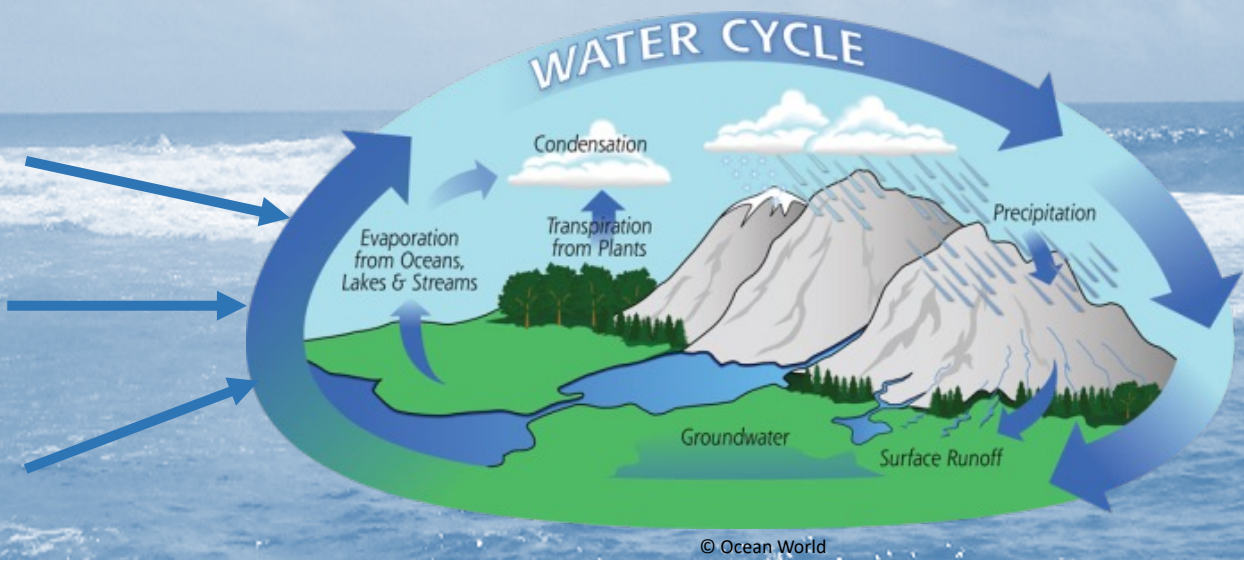
200 million tons of
plankton grows
each year
[10 x mass of
human population]



Ocean World

Why are ocean habitats so special ?

All the water we use comes from the Ocean



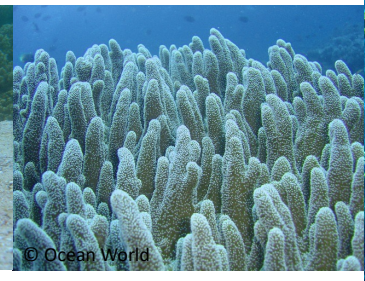
Why are ocean oabitats so special ?

Life started in the oceans and there are 65% of all animal species living in the sea

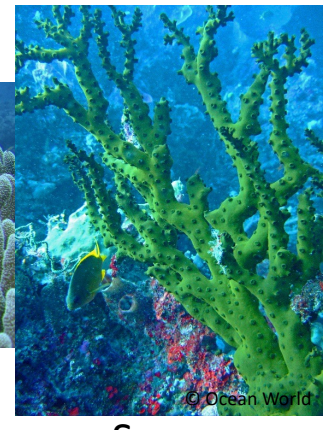
Sea Snake

Fish

Sea Cucumber



Coral



Sponge

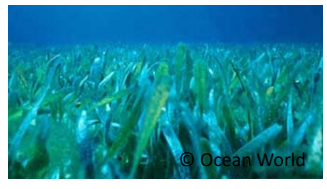
Ocean Habitats

The Big Blue

Deep Sea


© NOAA

Sea Grass Meadows



Coral Reefs

Ice World

Rock Pools

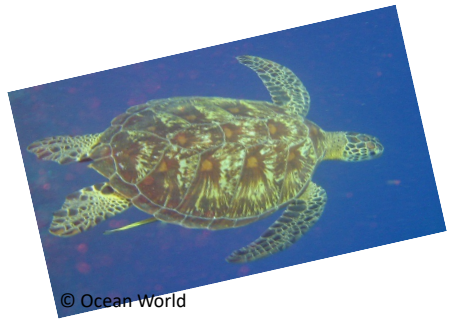
Island Life

Ocean World

The Big Blue Habitat

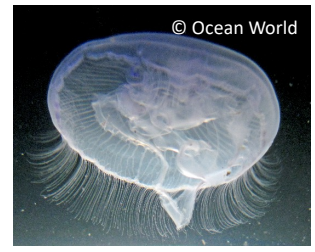
Hunters

Shoals of fish

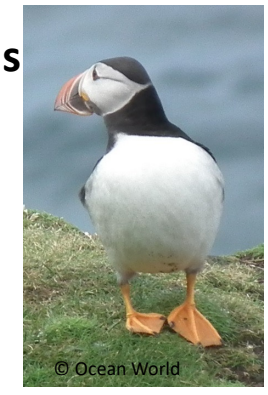


Reptiles

Drifters



Sea Birds



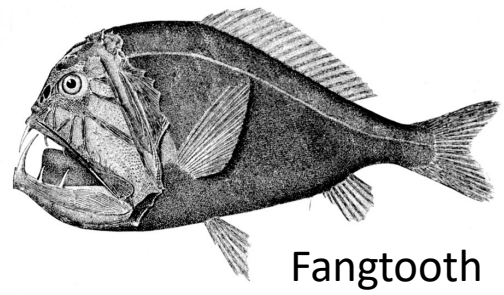
Mammals

Ocean World

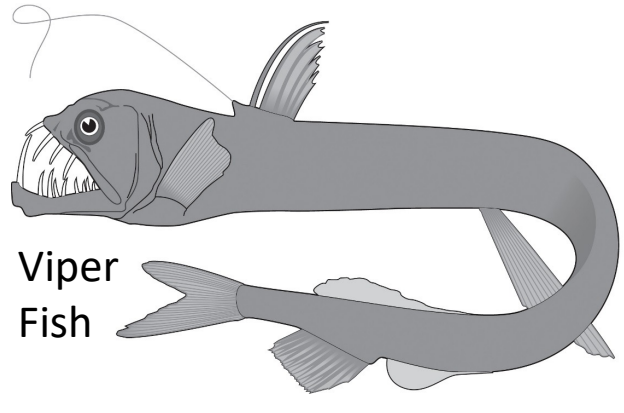
Deep Sea Habitat

Deep Sea Angler Fish

Vampire Squid



Fangtooth



Viper Fish

Ocean World

Coral Reefs

Lionfish

Angel Fish

Sea Star (Star Fish)

Coral

Anemone Fish

Octopus

Ocean World

Coral Reefs

Lionfish

Angel Fish

Sea Star (Star Fish)

Coral

© CC Vasenin

Anemone Fish

Octopus

© Ocean World

9

Ice World Habitat

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© mother nature network

Where land meets the oceans- there are rock pools

Limpets

Crab

Islands in the Oceans
– where life relies on food from the sea

Penguins

Marine Iguana