



# Inspiring Children through Education, Conservation and Research: Building Partnerships with Industry.

HOW?



# Rational

- Why is this type of partnership important for The Deep and other attractions?
- UN Sustainable Development Goals (SDGs)
- **Goal 14: Conserve and sustainably use the oceans, seas and marine resources.**

The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind.

Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation.

Careful management of this essential global resource is a key feature of a sustainable future.



THE  
**OCEAN**  
**CONFERENCE**  
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# Why did the University of Hull become engaged with The Deep?



- Learning in the Outdoor Classroom (12 week module, HE L4, 1<sup>st</sup> yr UGs, optional science specialism module)
- **Aims and distinctive features** - There is an emphasis on active discovery learning and the module also aims to encourage students' reflection on their own and on children's learning.
- Week 3 – working with other agencies (planning a trip and risk assessment)  
Week 4 - Other educational settings  
Week 5 – Exploring educational resources (The Deep's Ocean box)  
Week 6 – Industry as a resource (visit to The Deep)



## Week 3

- Based on the Recommendations of the Henley Report (2012)  
<https://www.gov.uk/government/publications/cultural-education-in-england>

We consider the cultural opportunities for all pupils, to nurture talent and tackle disadvantage, to celebrate natural culture and history (Hull in particular has a rich Maritime History linking to The Deep's mission to preserve the river Humber and the ocean's wildlife.

Ultimately we wanted to create a lasting partnership to deliver our educational and conservation ambitions both now and in the future.

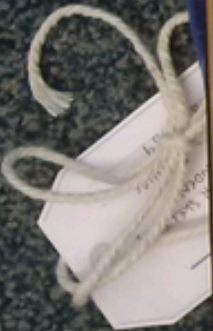
The students were charged with the task to create a display to support children's learning using ideas from attractions websites.



# Week 4

- Presentation of resources and creation of the Faculty display.



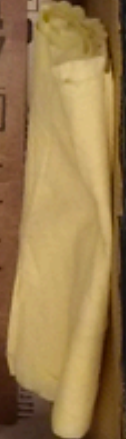
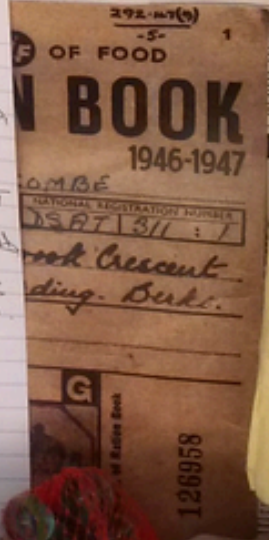


Daily Mirror

RUMANIAN OIL WELLS

MY DARLING,  
MOTHER LOVES YOU.  
DO AS YOU ARE TOLD  
AND BRUSH YOUR  
TEETH EVERY NIGHT  
AND SAY YOUR  
PRAYERS EVERY NIGHT  
FOR DADS RETURN  
SAFE FROM THE WAR  
SEE YOU AS  
AS I CAN.

LOVE  
MOTHER.  
XX





Grace

Darling



Grace Darling  
Born on the 24<sup>th</sup> November 1815 in the Victorian Era.  
Grace spent most of her childhood in 2 lighthouses,  
Stromness and Longstone.

She would watch the lighthouse day and night for ships that get in  
trouble at sea.  
On the 7<sup>th</sup> November 1838, aged only 22 Grace risked her life to save 9  
from a wrecked ship  
SS Forthshire. Such bravery changed Grace's life.



For this bravery, Grace was awarded a gold medal from the Royal  
Humane Society, and a silver medal for Gallantry from the National  
Institution for the preservation of life from shipwreck. This is now known  
as the RNLI.

Grace is now remembered for her courageous actions and bravery she  
demonstrated that night continues to inspire the values held in today's  
society.

Would you  
Feel scared?  
How would you  
feel?  
Would you  
be brave?



# The kingdom of Benin

Most West African kingdoms slowly came to an end. They were African kingdoms that grew up to take their place. However, some kingdoms were taken over by European monarchs.

By the 1600s, many countries in Europe were competing for land in Africa. They wanted to gain control of valuable trading goods, such as gold, oil and rubber. Britain and France both wanted land in West Africa.

In 1887, Benin became a British colony. Asante was declared a British colony in 1882. This marked the end of the great West African kingdoms.



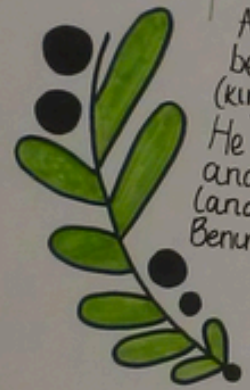
Until the 1900s Africa was ruled by European countries, but their things started to change. Over the next 30 years, more than 40 African countries won their independence. Today, the ancient kingdom of Benin is part of Nigeria and Asante is in Ghana.



Note: The Asante people did not wear their ancient crowns. They had special headdresses called 'bonties'. The photograph shows an Asante chief in a bontie.



The kingdom of Benin began in the 900s when the Edo people settled in the rainforests of West Africa. By the 1400s they had a wealthy kingdom.



Around 1440, Ewuare became the new Oba (king/ruler) of Benin. He built up an army and started winning land. He also rebuilt Benin city & the royal palace.

The people of Benin lived in villages in the rainforest. Benin was famous for its craft workers. Men from all over the kingdom served the oba as soldiers.

Oba Ewuare was the first of five great warrior kings.

Ehengbuda was the last of the warrior kings. He spent most of his reign stopping rebellions led by local chiefs.



The people of Benin traded with Europe and other African Kingdoms.

Instead of using money they exchanged goods.







# Coral Reefs

## What are Coral Reefs?

Coral reefs are large underwater structures composed of the skeletons of coral, which are marine invertebrate animals. The coral species that build coral reefs are known as hard corals because they extract calcium carbonate from seawater to create a hard, durable exoskeleton that protects their soft, sac-like bodies.



## Coral Reefs in Danger

Coral reefs are imperilled by several threats. The increasing acidification of the ocean — caused when oceans absorb immense amounts of carbon dioxide (CO<sub>2</sub>) released into the atmosphere through the burning of fossil fuels — inhibits coral's ability to produce the calcium carbonate exoskeletons they rely on for shelter.



## Different Types of Coral

There are hundreds of different species of coral, according to the Coral Reef Alliance (CORAL), a non-profit environmental group. Coral have a dazzling array of shapes and colours, from round, folded brain corals that resemble a human brain to tall, elegant sea whips and sea fans that look like intricate, vibrantly coloured trees or plants.

## Coral Reef Uses

About 25 percent of all known marine species rely on coral reefs for food, shelter and breeding. Coral reefs are the primary habitat for more than 4,000 species of fish, 700 species of coral, and thousands of other plants and animals, according to CORAL.

## Where are Coral Reefs Found?

Corals are found all over the world's oceans, from the Aleutian Islands off the coast of Alaska to warm tropical waters of the Caribbean Sea. The biggest coral reefs are found in the clear, shallow ocean waters of the tropics and subtropics where they grow quickly. The largest of these coral reef systems — the Great Barrier Reef of Australia — is more than 1,500 miles in length.



# Week 5

- Exploration of The Deep's Ocean Loan box and planning appropriate age/stage related activities using the resources.





# Activity and Discussion

- Around the room are some of the plans the students produced.
- Help yourselves to some of the resources from The Ocean's Loan Box and see how creative the students were with their plans for children's learning.