

## Plastic Smell

### What did scientists find out?

- Scientists from the University of North Carolina did an experiment with 15 turtles.
- The turtles confused the smell of plastic for food.

Photo: Loggerhead turtles.

# Turtles Confuse Smell of Plastic for Food, Say Scientists

**Scientists say plastic confuses turtles. They used to think it was down to how plastic looked. Now, they say turtles think plastic smells like their food.**

The scientists in the USA did a test. They put different materials out for the turtles. These were clean plastic, ocean plastic, water and turtle food.

The turtles did not react with the clean plastic. When they smelled the ocean plastic, they searched for it.

So why did the smell make the turtles react? The scientists from a **university** in North Carolina, USA, say it's to do with **algae** on plastic that has been in the ocean.

The algae start to grow on the plastic. It then gives off a smell which turtles think is food.

The turtles did not eat any plastic in the experiment. They also went back into the wild when it was over.

Dr Kenneth Lohmann says the plastic can block their "**digestive systems**".

He says if we stop "plastic getting into the ocean", we can help the turtles.

Governments and other groups are taking action. The UK will ban some **single-use** plastics in April 2020.

Girlguiding says they will ask Guides and Brownies to take a plastic pledge. It asks them to promise to speak out about plastic waste.

### Glossary

<b>university</b>	A place where scientists do research.
<b>algae</b>	A family of plants that can be found in the sea, such as seaweed.
<b>digestive systems</b>	Group of organs in the body, such as the stomach, that help to break down food.
<b>single-use</b>	Something that is only used once.

## Reading Mission

30 mins

Children to read or be supported to read the newspaper article.

**After, they can answer these questions. These can be verbal answers or they could be written down or typed. Suggested answers are below in red.**

1. Where were the scientists working?
2. How many turtles were involved in the experiment?
3. Why is plastic a problem for turtles if they eat it?
4. 'Girlguiding says they will ask Guides and Brownies to take a plastic pledge.'  
Which word is closest in meaning to 'pledge'?
  - a) Answer
  - b) Promise
  - c) Question
  - d) Understanding
5. The scientists took good care of the turtles. Find and copy a piece of evidence that shows this.
6. What do you think people will do next after reading the story?
7. Write a summary of the story in 15 words or fewer.
8. Why does the news story contain a glossary?

### Answer

1. USA
2. 15 turtles
3. Plastics can block their digestive systems.
4. B- promise
5. The turtles did not eat any plastic in the experiment.  
They went back into the wild when it was over.
6. Accept any answer that refers to the story, e.g. I think people will try to find ways to stop plastic getting into the world's oceans as this is what a scientist has said they should do.
7. An example answer- Scientists say that turtles are confusing the smell of plastics for food.
8. The glossary gives definitions for words in the text that the reader may not understand.

Writing Mission  
30 mins

Suffix- A **suffix** is a letter or group of letters that goes on the **end** of a word and **changes** the word's **meaning**.

Sometimes they also change the original word's spelling. When adding a suffix you might have to double the last letter. For example when adding 'ed' to 'drop' you also double the p so it becomes 'dropped'.

Some suffixes have specific uses. Adding 'ing' can change a noun into a verb eg 'garden' to 'gardening'. While 'ed' can put a verb in the past tense eg 'jump' to 'jumped'.

Here are the spelling rules for adding a suffix.

Adding a <b>suffix</b> to words ending in a <b>silent 'e'</b>	When the suffix begins with a vowel, drop the 'e'.	like + ing = <b>liking</b>
	When the suffix begins with a consonant, keep the 'e'.	use + ful = <b>useful</b>
	When the word ends in 'ce' or 'ge', keep the 'e' when adding 'able' or 'ous'.	service + able = <b>serviceable</b>
Adding a <b>suffix</b> to words ending in 'y'	When there is a consonant before the 'y', change the 'y' to an 'i' before adding the suffix.	beauty + ful = <b>beautiful</b>
	When the suffix starts with an 'i' keep the 'y'.	worry + ing = <b>worrying</b>
	When there is a vowel before the 'y', don't change the 'y', just add the suffix.	enjoy + ment = <b>enjoyment</b>
Adding a <b>suffix</b> to words ending with a <b>consonant</b>	If the word is one syllable long and ends in a consonant, with one vowel before it, double the last letter.	drop + ed = <b>dropped</b>
	If the word is one syllable long and ends in a consonant, with two vowels before it, then you don't double the last letter.	feel + ing = <b>feeling</b>
	If the word is one syllable long and ends with two consonants in a row, do not double the last letter.	wash + er = <b>washer</b>

Find out more on BBC Bitesize :

<https://www.bbc.co.uk/bitesize/topics/z8mxrwx/articles/zwgbcw>

Activity: Add a suffix to the ending of each word. Answers are below.

There may be more than one suffix that can be added to a word. For example, **hopeful** and **hopeless**.

Not every suffix will work for a word.

For one of the words you will need to check the spelling rules above.

bad play hope care happy sad colour harm	ful	less	ly
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Once you have your new list of words your challenge is to write a sentence containing each word.

For example:

I am **hopeful** we will all see each other again soon.

### Answers

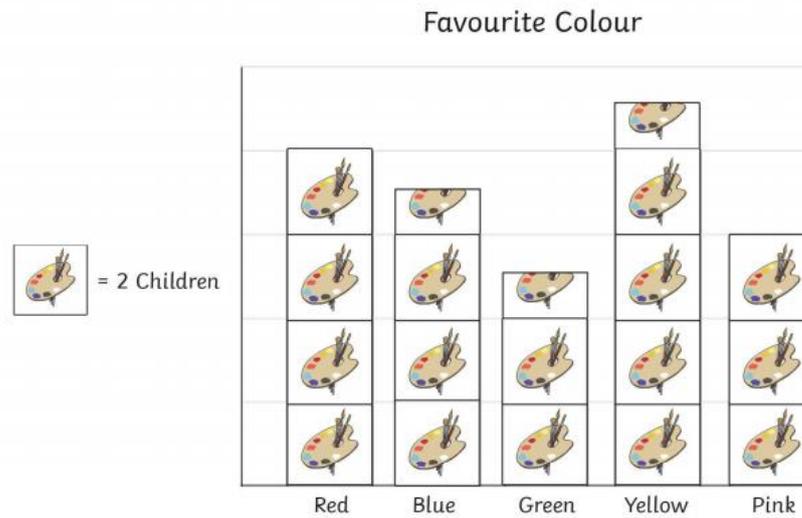
Root word	ful	less	ly
bad			badly
Play	playful		
Hope	hopeful	hopeless	
care	careful	careless	
Happy			happily
Sad			sadly
Colour	colourful	colourless	
harm	harmful	harmless	

Maths Mission  
30 mins

In today's maths mission we are looking at pictograms.

A pictogram is a chart that uses pictures to represent data. Pictograms are set out in the same way as bar charts, but instead of bars they use columns of pictures to show the numbers involved.

In the example below each picture represents 2 children. Therefore, half a picture represents 1 child.



Answer the following questions.

1. What is the least favourite colour?
2. How many children chose yellow as their favourite colour?
3. How many fewer children chose green than blue as their favourite colour?
4. How many children chose pink and red as their favourite colour?

Use the pictogram to write your own question.

**Answers**

Favourite Colour

1. What is the least favourite colour? **green**
2. How many children chose yellow as their favourite colour? **9**
3. How many fewer children chose green than blue as their favourite colour? **2**
4. How many children chose pink and red as their favourite colour? **14**

Topic Mission  
Ideas for the week.  
Choose activities  
based on what  
interests you.

### Art and Design

Create an under the sea scene. You could use a shoebox to present your scene in, create a back ground and place your sea creatures in front or even use an egg box.

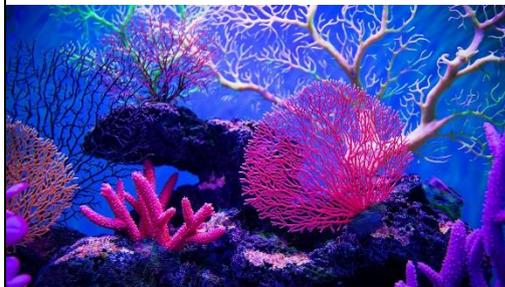


### Art

Corals are living creatures that live in all the oceans of the world. Some types live alone. Many live in groups. When several different types of corals live together this forms a coral reef. The largest coral reef in the world is the Great Barrier Reef off the coast of Australia.

As they grow corals form different patterns and shapes. They may look like feathers, fingers, branches or even a brain.

Use the photos and examples below to create a coral reef landscape.



## Science

Explore how water behaves by creating a wave in a bottle.

### **You will need:**

- An empty plastic bottle
- Vegetable Oil
- Water
- Food colouring

### **Activity:**

1. Wash a bottle and take off the label by soaking it in hot water.
2. Fill the bottle with 3/4 cup of water.
3. Add a few drops of food colouring.
4. Pour 1 cup of oil into the bottle.
5. Screw the cap on.
6. Roll the bottle on its side and let it settle for a few minutes.
7. The water will sink to the bottom and the oil will rise to the top.
8. Now tip the bottle back and forth and make some waves.

The waves will be bigger at one end of the bottle and smaller at the other.

### **What causes ocean waves?**

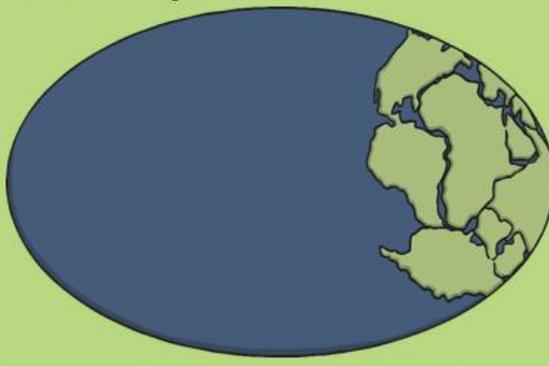
Obviously, waves are not caused by oil floating on water. However this ocean waves in a bottle activity is a good picture of the movement of ocean waves.

Ocean waves are created by energy moving through the ocean water. Most of the time, the energy comes from wind blowing on and disturbing the surface of the water. Other things cause ocean waves too such as the gravitational pull of the sun and the moon. This causes tidal waves or tides!

When you move the bottle, you're seeing energy move through the water to make waves, just like out in the ocean! Did you know if a wave doesn't have anything to stop it, it can travel far distances?

## Geography- Find out about the world's seas and oceans

Oceans are large areas of salt water joined to each other but they are separated into five major sections. Oceans cover around 70% of the Earth's surface.



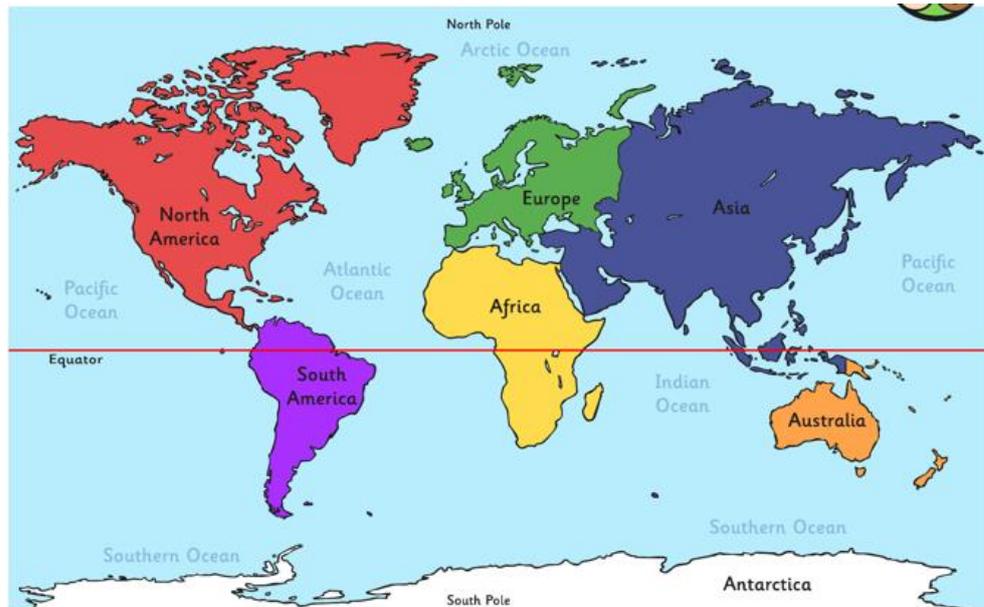
The Pacific Ocean is the largest ocean.



Seas are smaller areas of water and are found where the land and water meet.



There are 5 oceans, the Pacific, Atlantic, Indian, Southern and Arctic. Can you spot them on the map?



You can learn more about the oceans on BBC Bitesize. Link:

<https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/zmqwscw>

You might also enjoy learning the five oceans song on Youtube

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

Can you use the map and your own research to answer the following questions?  
The answers can be found below.

1. How many oceans are there in the world?
2. Which is the largest ocean?
3. Which is the smallest ocean?
4. Which ocean surrounds the Antarctica?
5. Which ocean is the furthest North?
6. Which ocean can be found between North America and Africa?
7. Which ocean can be found between North America and Asia?

Answers:

1. 5
2. Pacific Ocean
3. Arctic Ocean
4. Southern Ocean
5. Arctic Ocean
6. Atlantic Ocean
7. Pacific Ocean

## **History**

Find out about a famous explorer that travelled the oceans by ship. You can present what you have learnt however you like. This could be a poster, a leaflet or a fact file. You could even write in role as the explorer.

Below are a list of some explorers you might want to find out about and some links to useful information.

- Christopher Columbus <https://www.bbc.co.uk/teach/class-clips-video/ks2-christopher-columbus/z7j3hbk>
- Captain James Cook <https://www.natgeokids.com/uk/discover/history/general-history/captain-cook/>
- Ferdinand Magellan [https://www.ducksters.com/biography/explorers/ferdinand\\_magellan.php](https://www.ducksters.com/biography/explorers/ferdinand_magellan.php)