

Year 4 Timetable 28th May 2020

**Reading
Mission:**
30 minutes

Children to read or support them to read the following text.

Plastic Pollution

What is plastic and why is it useful?

Plastic is a man-made material. Almost all plastics are made from chemicals that come from oil or natural gas that are found deep underground. Plastics are useful because scientists can make them different so that they have many different uses: this is why there are such a wide range of plastics. Mobile phones, shopping bags, chairs, furniture, water bottles and even clothes can all be made of plastic. What other uses do you know for plastic?

Plastics are very useful materials because they can be moulded into many different shapes. They can be quite cheap to make and they last for a long time so most plastic objects can be used repeatedly. As well as being reusable, some plastics can be recycled. This means that old plastic is broken down by machines and used to make new objects. For example, some plastics can be recycled to make furniture, plastic bins and even clothing such as fleeces. However, many plastic items are thrown away after just one use (single-use plastic) and this is costly and wasteful because manufacturing plastic uses a lot of oil, which is a useful natural resource and the process also uses a lot of water and heat energy. If we simply throw plastic items away after just one use, it is a huge waste of natural resources. The British Government* say that 13 billion plastic bottles are used every day yet only 7.5 billion are recycled.

What happens to plastic when it is thrown away?

Some plastics cannot be recycled. Some of these plastics are burned in incinerators but most of them are buried underground in huge holes called landfill sites. Most other waste, such as leftover food or paper, biodegrades (breaks down) quite easily and small creatures called microbes can eat the waste and help it to decompose. However, no creatures can eat plastic and it does not break down, or biodegrade, easily so plastic that is buried can stay underground or in environments such as rivers and oceans for many years.

What is plastic pollution and why is it harmful?

Plastic pollution mean pieces of plastic that have been thrown away are found in rivers, in soil, on the beach or in the sea. Plastic pollution not only looks horrible but it can damage the environment and harm animals and wildlife too. Some plastic pollution is made of large pieces of plastic like bottles or plastic bags but sunlight and the action of moving water, such as rain or the sea, can make plastic break down into smaller pieces, called microplastics, and these can be buried in the soil or float in rivers and seas without breaking down.

While recycling seems like an environmentally-friendly solution, items such as plastic bottles are often broken down into small pieces to be used to make carpets or fleeces. This seems like a positive use of these plastics but when they are cleaned, tiny plastic fibres are washed into the waterways and they cannot be filtered out so they end up in rivers, lakes and oceans.

When plastic pollution reaches rivers and seas, the results for habitats and wildlife can be disastrous. Large pieces of plastic like nets, bottles and bags can trap or injure animals. Small plastic fibres can look like food to marine creatures, such as fish, so they eat these plastics that contains chemicals and toxins. With tummies full of plastic these creatures are not getting the nutrients that they would usually get from their natural food and eventually, some animals die because they have swallowed so much plastic. In addition, it should be considered what the effect could be on humans as they eat fish and other creatures that have been poisoned by plastics.

After they can answer these questions. These can be verbal answers or they could be written down or typed. Children could even draw their responses. Suggested answers are in italics.

Which word tells you that plastic is not a natural material?

Give two advantages of using plastic.

What happens to plastics that cannot be recycled? Give two answers.

Why doesn't plastic biodegrade?

Describe ways that plastic pollution can harm animals.

Do you think plastic waste should be buried under the ground in landfill sites?

What animals might be harmed by plastic pollution?

Do you think it is OK to use plastic?

How do you know if the plastic you are using can be recycled?

What are the issues with single-use plastic?

How can we reduce our use of plastic cups, straws, bags and bottles? What other materials could be useful?

Which word tells you that plastic is not a natural material?

Man-made.

Give two advantages of using plastic.

They can be very different and make different things, they can be made into different shapes.

What happens to plastics that cannot be recycled? Give two answers.

They are thrown away or recycled.

Why doesn't plastic biodegrade?

No creatures can eat it.

Describe ways that plastic pollution can harm animals.

Big bits can trap them and kill them, small bits might look like food and poison them.

Do you think plastic waste should be buried under the ground in landfill sites?

Your child's answer, with reasons.

What animals might be harmed by plastic pollution?

Fish, anything that eats those fish.

Do you think it is OK to use plastic?

Your child's answer.

How do you know if the plastic you are using can be recycled?

It will have a recycle symbol.

What are the issues with single-use plastic?

It is designed to be thrown away and that will cause pollution.

How can we reduce our use of plastic cups, straws, bags and bottles? What other materials could be useful?

Your child's ideas.

Writing Mission:
30 minutes

Today we are going to revise co-ordinating conjunctions. These conjunctions join two main clauses to make one sentence. We remember co-ordinating conjunctions with the acronym FANBOYS.

Can you remember what each letter stands for?

F
A
N
B
O
Y
S

There is a BBC Bitesize series of lessons and activities here:

<https://www.bbc.co.uk/bitesize/articles/z48xt39>

Alternatively, you can complete the following activity:

In English there are seven coordinating conjunctions which can be used to join sentences.

They are easy to use by remembering: **FANBOYS**

For And Nor But Or Yet So

Underline the conjunctions in the sentences below:

1. It was hot this morning and it was humid in the afternoon.
2. I would rather play basketball or soccer.
3. My dad said I can play football or I can play basketball.
4. Elizabeth joined the gymnastics team so she could improve her fitness level.
5. I spend ages doing my homework yet I never seem to get it all completed on time!

For each sentence, add the best conjunction:

1. The builder worked really hard on the house _____ that he would receive a good price.
2. My dog refuses to eat chicken _____ fish.
3. The flowers in the garden were beautiful _____ unfortunately I was allergic to them.
4. I felt like having soup for dinner _____ I knew my sister would probably disagree.

5. My brother refuses to clean the bathroom _____ will
he tidy the kitchen table when I ask.

6. I saved up all of my pocket money _____ I really wanted to buy the new
toy car.

For each set of sentences below, choose the best conjunction (you may need to
rewrite it slightly):

1. Benjamin played with the dog. Mary played with the dog.

2. My friend used live bait when he went fishing. He thinks it catches the biggest fish.

3. I wanted to go to the movies. Mum wouldn't allow me.

4. It was a rainy day. The students ate their lunch inside.

5. Neither of the cats were friendly. They were happy to be petted.

6. I saved my money to go shopping. I didn't seem to have enough.

7. My favourite thing to eat is pizza. My favourite thing is chocolate.

Now write 3 sentences of your own using coordinating conjunctions.

1. _____

2. _____

3. _____

Answers:

Underline the conjunctions in the sentences below:

1. And
2. Or
3. But
4. So
5. Yet

For each sentence, add the best conjunction:

1. So
2. And
3. But
4. Yet
5. Nor
6. For

For each sentence below choose the best conjunction (you may need to rewrite it slightly):

1. And
2. For
3. But
4. So
5. Nor
6. Yet
7. Or

**Maths
Mission:**
30 minutes

We have decided it would be a good idea to explicitly set some times tables practice every day to help keep us sharp! You could have your own mini-test at the end of week, and send me the results if you like! As a reminder, there are plenty of online games to help practise these as well (e.g. <https://www.topmarks.co.uk/maths-games/hit-the-button>).

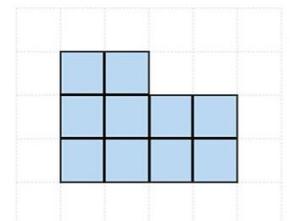
Today's times table is the **10 times table**.

When we were last in school, we had just begun to look at different ways of finding the area of a shape.

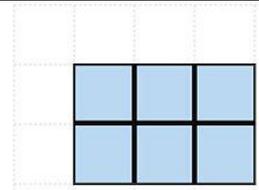
- Perimeter is the distance **all the way around the outside** of a shape
- Area is all the space on the **inside** of the shape.

There are two ways to find this. One is to count how many squares are on the inside of the shape.

If each of these squares is 1 cm wide and 1 cm tall, each square has an area of 1 cm squared (1cm^2). Altogether this shape has an area of 10 cm^2 .



What if there are no squares inside the shape? You can multiply the height of the shape by the width if it is a rectangle, like this one.



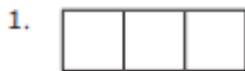
The height is 2 cm, and the width is 3cm. $2\text{cm} \times 3\text{cm} = 6\text{cm}^2$
We can confirm this is correct by counting the squares.

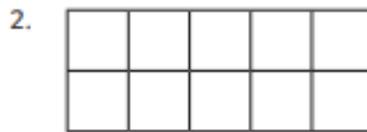
BBC Bitesize has a set of lessons and activities here:

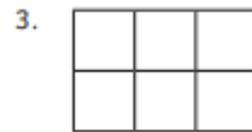
<https://www.bbc.co.uk/bitesize/articles/zjf2xyc>

Alternatively, you can complete this activity:

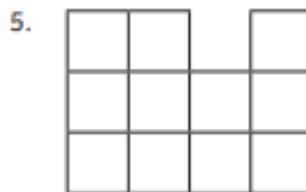
What is the area of these shapes in cm^2 ?

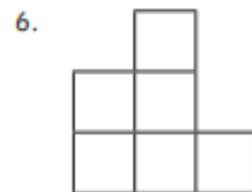


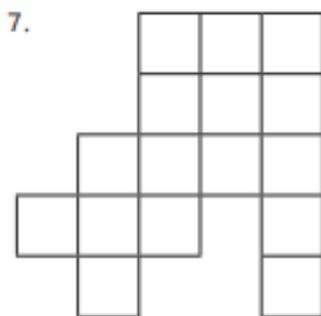


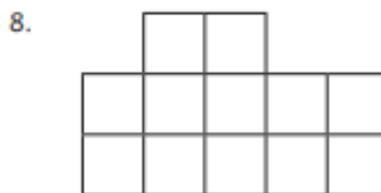


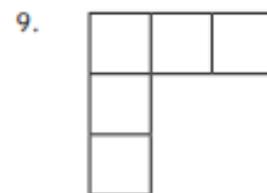


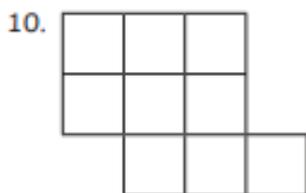


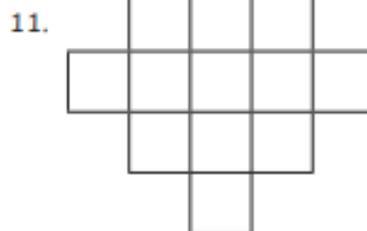


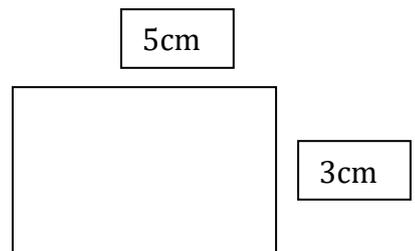








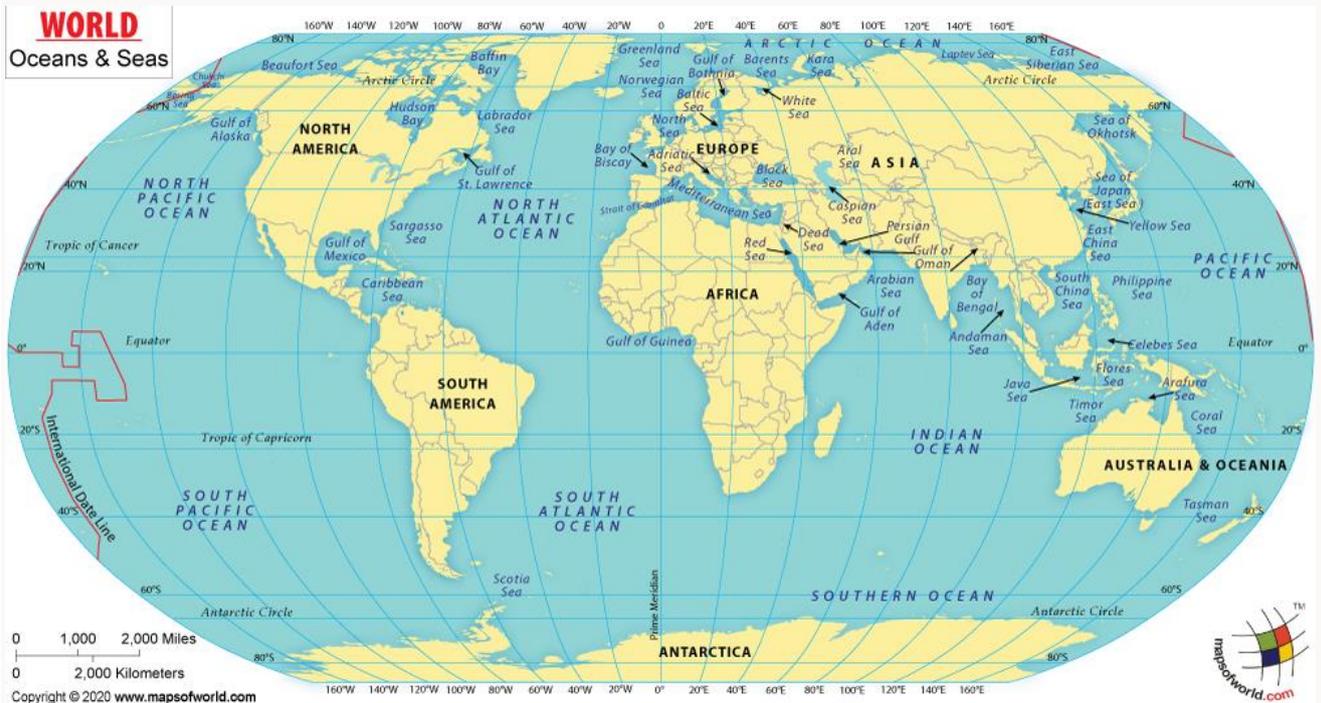




- | | |
|----------------------|-----------------------|
| 1. 3cm ² | 7. 16cm ² |
| 2. 10cm ² | 8. 12cm ² |
| 3. 6cm ² | 9. 5cm ² |
| 4. 4cm ² | 10. 9cm ² |
| 5. 11cm ² | 11. 12cm ² |
| 6. 6cm ² | |

12. 15cm²

Topic Mission: There are 5 oceans on Earth. Can you spot them on the map? Hint: North and South parts still only count as one ocean!
Day 4



You can learn more about the oceans on BBC Bitesize:
<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