Please find today's learning tasks below.

The table below explains the tasks and you will find the resources underneath. Your child will know which challenge they usually access in each subject and which task will be appropriate for them.
Unless otherwise specified, please complete the tasks in either your Home Learning book or on a word document.

Year group: 4 Date: 11/5/20			
	Challenge 1	**Challenge 2**	**Challenge 3**
English	**Apostrophes for plural possession** Read and work through the 'Monday – apostrophes for plural possession PowerPoint' on the school website. Then complete the sheet below	**Apostrophes for plural possession** Read and work through the 'Monday – apostrophes for plural possession PowerPoint' on the school website. Then complete the sheet below	**Apostrophes for plural possession** Read and work through the 'Monday – apostrophes for plural possession PowerPoint' on the school website. Then complete the sheet below
Maths	**Negative numbers** Watch the negative numbers explanation https://www.bbc.co.uk/bitesize/topics/znwj6sg/articles/zxthnbk Then complete the worksheet below	**Negative numbers** Watch the negative numbers explanation https://www.bbc.co.uk/bitesize/topics/znwj6sg/articles/zxthnbk Then complete the worksheet below. There is an additional optional task if you wish to complete this too.	**Negative numbers** Watch the negative numbers explanation https://www.bbc.co.uk/bitesize/topics/znwj6sg/articles/zxthnbk Then complete the worksheet below. There is an additional optional task if you wish to complete this too.
Reading	Complete the comprehension below. Read the text and then answer the questions	Complete the comprehension below. Read the text and then answer the questions	Complete the comprehension below. Read the text and then answer the questions

Topic	**PSHE** To help you stay positive throughout the home learning period, use the template below to design your own positive thinking cap. Use lots of positive messages and bright colours!

English – Challenge 1

Using an Apostrophe of Possession with Plural Nouns

Complete the sentences by making the singular noun into a plural noun and by using the apostrophe of possession correctly.

Example: The scarves' tassels are all red. (Noun: scarf)

The _____ shoes were all dirty.

(Noun: boy)

The _____ habitat is grassy and dry.

(Noun: lion)

The _____ summits were all covered in snow.

(Noun: volcano)

The _____ flesh was too ripe.

(Noun: mango)

The _____ dressing rooms are down the corridor.

(Noun: actress)

The _____ toys were all over the room.

(Noun: baby)

The _____ blades all needed sharpening.

(Noun: knife)

English – Challenge 2

Using an Apostrophe of Possession with Plural Nouns

Complete the sentences by making the singular noun into a plural noun and by using the apostrophe of possession correctly.

Example: The scarves' tassels are all red. (Noun: scarf)

The _____ stables were warm and dry.

(Noun: pony)

The _____ summits were all covered in snow.

(Noun: volcano)

The _____ mood was great.

(Noun: people)

The _____ dressing rooms are down the corridor.

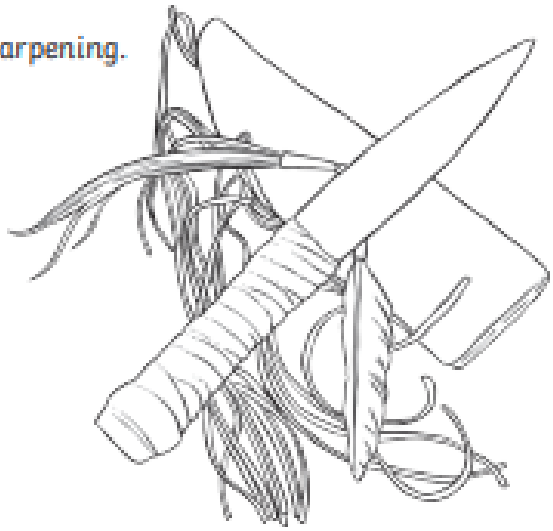
(Noun: actress)

The _____ clothes were dark blue.

(Noun: thief)

The _____ blades all need sharpening.

(Noun: knife)



English – Challenge 3

Using an Apostrophe of Possession with Plural Nouns

Complete the sentences by making the singular noun into a plural noun and by using the apostrophe of possession correctly.

Example: The scarves' tassels are all red. (Noun: scarf)

The _____ shoes were all dirty.

(Noun: boy)

All of the _____ desks were tidied.

(Noun: teacher)

The _____ habitat is grassy and dry.

(Noun: lion)

The _____ home is called a den.

(Noun: fox)

The _____ hair all had to be tied back.

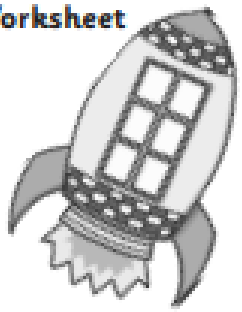
(Noun: girl)

The _____ summits were all covered in snow.

(Noun: volcano)

Maths - Challenge 1

Counting Backwards Through 0 Using Negative Numbers Worksheet



Aim – I can count backwards through 0 including negative numbers.

Counting backwards can be useful – especially if you want to make a rocket take off!

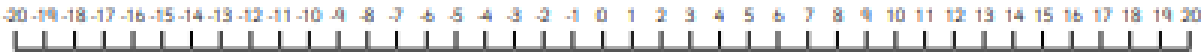
10, 9, 8, 7, 6, 5, 4, 3, 2, 1 BLAST OFF!

BUT what happens when we are counting backwards and we get to '0'?

We keep going using negative numbers.

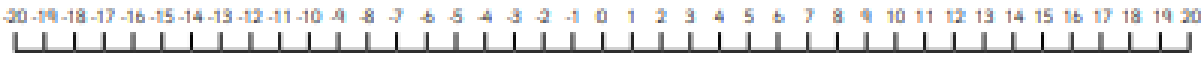
A. Use the number lines to help you count backwards through 0. Start on the number given and draw the right number of jumps backwards until you have your answer.

1. From 5, count back 7.



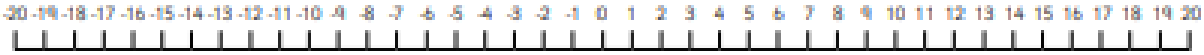
Answer = ☐

2. From 8, count back 12.



Answer = ☐

3. From 7, count back 15.



Answer = ☐

4. From 2, count back 9.

Answer = ☐

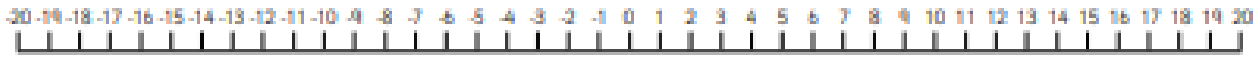
5. From 12, count back 22.

Answer = ☐

Maths – Challenge 1 (continued)

B. These counting back tasks can be written as calculations e.g. 7 – 8. 7 is the number you start on and 8 is the number of jumps you count backwards. 7 – 8 = -1

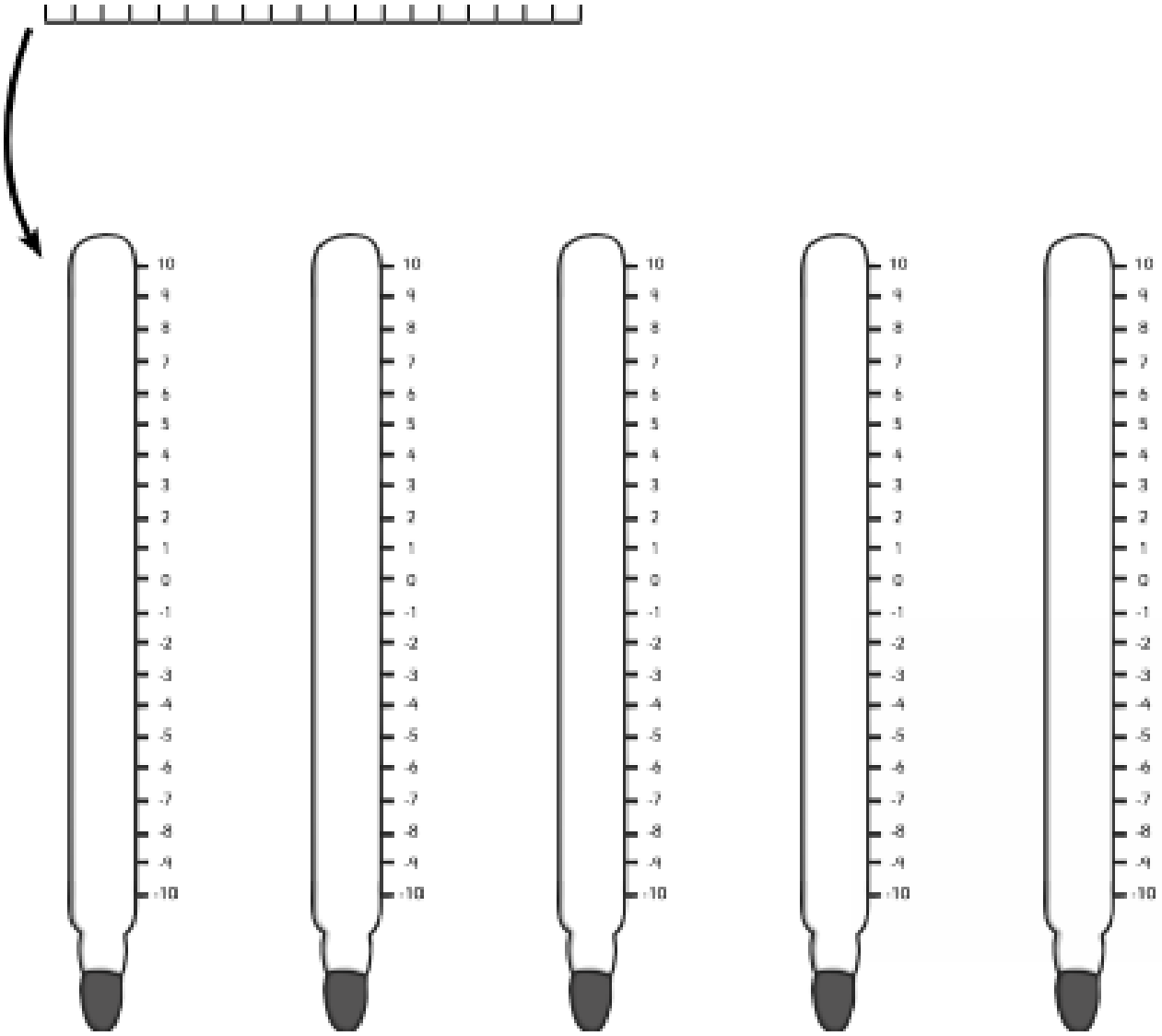
Use the number line below to jump with your finger to count backwards and work out the answers to the calculations.



1. 6 - 12 = ☐ **2.** 5 - 10 = ☐ **3.** 7 - 15 = ☐ **4.** 16 - 17 = ☐

5. 11 - 20 = ☐ **6.** 1 - 7 = ☐ **7.** 6 - 11 = ☐ **8.** 19 - 30 = ☐

C. Being able to count back through 0 can help you understand temperature changes. Imagine a thermometer is a number line on its side. Use these thermometers for drawing jumps on to help you answer the questions on the next page.



Maths – Challenge 2

An Amazing Fact a Day

Negative Numbers and Temperature

Amazing Fact

The warmest temperature ever recorded at the South Pole was a freezing -12.3˚C in December 2011, making it one of the coldest places on Earth.

Challenge

Complete the activities using negative numbers in a temperature context.

1. Put these temperatures in order, the coldest first.

   a. 2˚C, -8˚C, -1˚C, -6˚C, -4˚C

   _____

   b. 6˚C, 10˚C, -15˚C, -11˚C, 14˚C

   _____

   c. 16˚C, 18˚C, -23˚C, -25˚C, -13˚C, 12˚C, 20˚C

   _____

2. Which of these temperatures is lowest?

   a. -4˚C or -2˚C

   _____

   b. -8˚C or 8˚C

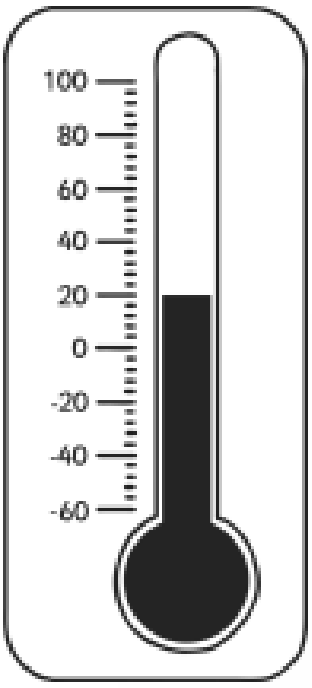
   _____

   c. -16˚C or -17˚C

   _____

   d. -5˚C or -6˚C

   _____



Maths – Challenge 2 (continued)

An Amazing Fact a Day **Negative Numbers and Temperature**

3. Answer the questions below:

a. The temperature rises by 15 degrees from -4˚C. What is the new temperature?

_____

b. The temperature falls from 11˚C to -2˚C. How many degrees does the temperature fall?

_____

c. The temperature is 6˚C. It falls by 8 degrees. What is the temperature now?

_____

d. The temperature is -3˚C. How much must it rise to reach 5˚C?

_____

e. What is the difference in temperature between -4˚C and 14˚C?

_____

f. The temperature was -5˚C. It falls by 6 degrees. What is the temperature now?

_____

g. The temperature is -11˚C. It rises by 2 degrees. What is the temperature now?

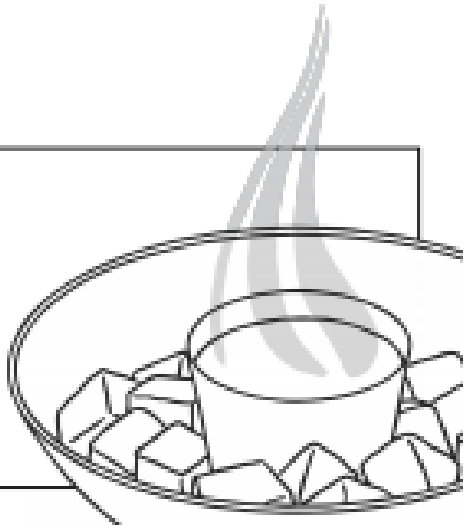
_____

h. The temperature is -20˚C. How much must it rise to reach -5˚C?

_____

You could also try to find out:

- which places, if any, are colder;
- how scientists based at the South Pole survive the cold;
- when, and for how long, the South Pole gets sunshine;
- where the hottest place on Earth is.



Maths – Challenge 3

Negative Numbers

Aim: Count forwards and backwards past zero into negative numbers. Solve problems using negative numbers and give reasons for answers.

Denis the Delivery Man

Denis has 10 parcels to deliver in a block of flats. The deliveries need to be made in a certain order depending on when people are at home. The flats have floors above and below ground level. The lift only stops at even numbered floors and Denis has to use the stairs to the odd numbered floors.

	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor 3			
	Floor		Order	
	Floor		Order	
	Floor 0			
	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor -6			
	Floor		Order	
	Floor		Order	
	Floor		Order	
	Floor		Order	

Maths – Challenge 3 (continued)

As Denis delivers the parcels, mark the floors he visits in the order that he makes the deliveries. Remember to use the negative value to mark the basement floors.

1. Denis starts his delivery at floor 7.
2. He then needs to travel down 10 floors. Where is he now?
3. Up he goes 7 floors for his next delivery.
4. He now delivers to basement floor -9. How far has he travelled? In which direction has he travelled?
5. He then climbs up 5 floors. Mark the floor on the scale.
6. For his next two deliveries, Denis must use the stairs for his first delivery; he must use the lift for the other journey. He wants to choose the journey with the least amount of stairs to walk. If he has a parcel for floor 6 and floor -10, which delivery must he go to using the lift? Explain your answer.
7. Denis has delivered 7 parcels now and he must go to reception on the ground floor to pick up his last three deliveries. How many floors must he travel?
8. Two parcels are for floor 5, the final parcel is for 12 floors below that. Where does Denis finish his deliveries?
9. How many floors must Denis travel by lift to get back to the ground floor?
10. How many floors has Denis not visited on his delivery round?

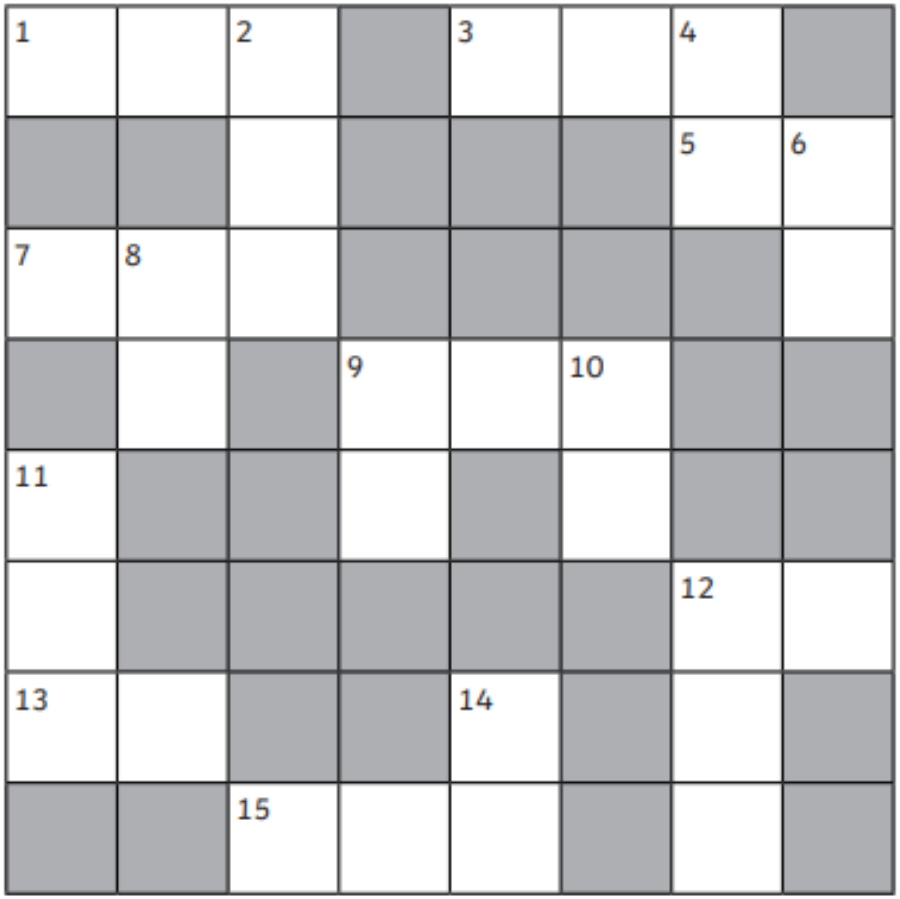
Challenge

If Denis now has to start at the lowest floor and deliver parcels to every floor that he hasn't delivered parcels to, how many flights of stairs would he need to use? He must always be walking up the stairs. Show how you worked this out.

Maths – Additional Task (Optional)

Negative Numbers Puzzle

I can solve number and place value reasoning problems involving negative numbers.



Across

1. 10 - 45
3. -50 + 3
5. -50 + 102
7. 50 - 100
9. 1 - 20
12. -5 + 18
13. -2 + 56
15. 10 - 20

Down

2. -1 + 521
4. -25 + 100
6. -2 + 25
8. -1 + 52
9. 3 - 8
10. -100 + 199
11. 5 - 30
12. -5 + 105
14. -15 + 45

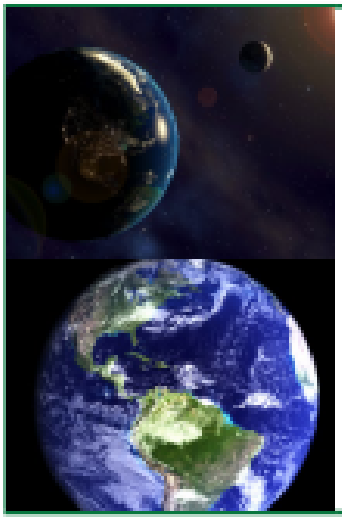
Reading – Challenge 1 Text

Planet Earth

Why do we live on Earth? Well, Earth is the only planet in our solar system that has all the things we need to live: oxygen in the air to breathe, water to drink and all at just the right temperature warmed by the Sun.

The Blue Planet

Earth, the third planet from the Sun after Mercury and Venus, is referred to as 'The Blue Planet' because of how it looks from space. This is because over $\frac{2}{3}$ of the Earth's surface is covered in water.



Did you know?

- Age: approximately 4.54 billion years
- Diameter: 13,000 km
- Distance to Sun: 150,000,000 km
- Surface Temperature: 15°C
- Highest point: Mount Everest 8.8 km
- Lowest point: Challenger Deep 10.9 km below sea level

I'm Spinning Around

The Earth spins on its axis once every 24 hours – that's what gives us day and night as we spin to face the Sun and then away from it again. You wouldn't notice but the Earth's spin is actually slowing down by 17 milliseconds per hundred years. Eventually this will lengthen our days but it will take around 140 million years before our day will have increased from 24 to 25 hours. I wonder if children 140 million years from now will have an extra hour at school.

Whilst it is spinning, the Earth is also orbiting the Sun, which takes $365\frac{1}{4}$ days to do one full circuit. This gives us the length of our years. Our seasons are also dependent on the orbit of the Earth as our planet is tilted at an angle. This means that around one side of the Sun we are tilted towards it – giving us warmer temperatures and longer days...our summer. However, around the other side of the Sun we are tilted away from it giving us less light and cooler temperatures – so this is our winter. All in all, it's a pretty amazing planet and I, for one, am glad to call it home.

Reading – Challenge 1 Questions

Questions

1. How high is the highest mountain on Earth?

2. How long does it take the Earth to spin once on its axis?

3. Will the Earth always spin at this speed? If not, how will it change?

4. How many planets are between us and the Sun and can you name them?

5. Why do we experience summer around one side of the Sun?

6. Why is Earth also called 'The Blue Planet'?

7. What 3 things make it possible for us to survive on Earth?

8. Why do we need to add an extra day to our year every 4 years?

9. Which fact or piece of information has amazed you the most and why?

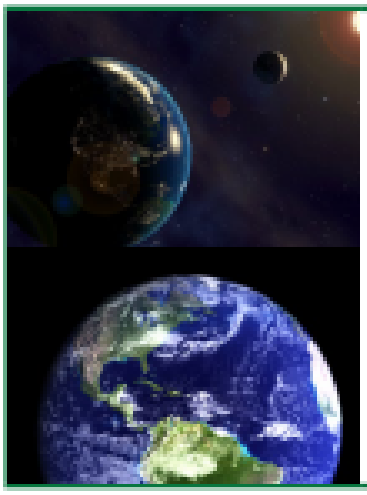
Reading – Challenge 2 Text

Planet Earth

We all live on Earth...why? Well, Earth is the only planet in our solar system that has all the things we need to survive: 21% oxygen in the air to breathe, water to drink and all at just the right temperature warmed by the Sun. Its name comes from the Old English word 'ertha' and the Anglo-Saxon word 'erda' which means ground or soil.

The Blue Planet

Earth, the third planet from the Sun after Mercury and Venus, is referred to as 'The Blue Planet' because of how it looks from space. This is due to the fact that over $\frac{2}{3}$ of the Earth's surface is covered in water.



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Whilst it is spinning, the Earth is also orbiting The Sun, which takes 365 $\frac{1}{4}$ days to do one full circuit. This gives us the length of our years. Our seasons are also dependent on the orbit of the Earth as our planet is tilted at an angle. This means that around one side of the Sun we are tilted towards it – giving us warmer temperatures and longer days...our summer. However, around the other side of the Sun we are tilted away from it giving us less light and cooler temperatures – this is our winter. All in all, it's a pretty amazing planet and I, for one, am glad to call it home.

Reading – Challenge 2 Questions

1. What percentage of Oxygen is in the air we breathe?

2. What is the highest thing on Earth?

3. How long does it take the Earth to spin once on its axis?

4. Will the Earth always spin at this speed? If not, how will it change?

5. How many planets are between us and the Sun and can you name them?

6. Why do we experience summer around one side of the Sun?

7. Why is Earth also called 'The Blue Planet'?

8. What 3 things make it possible for us to survive on Earth?

9. Why do we need to add an extra day to our year every 4 years?

10. Which fact or piece of information has amazed you the most and why?

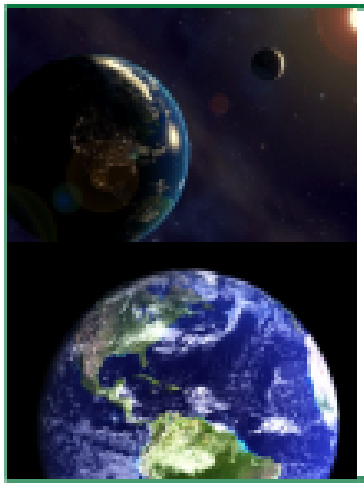
Reading – Challenge 3 Text

Planet Earth

Have you ever wondered why humans live on Earth and not the other planets in our Solar System? Well, Earth is the only planet in our solar system that has all the things we need to survive: 21% oxygen in the air to breathe, water to drink and all at just the right temperature warmed by the Sun. Scientists call this the 'Goldilocks Zone' because everything is 'just right'...not too hot, not too cold. Its name is derived from the Old English word 'ertha' and the Anglo-Saxon word 'erda' which means ground or soil.

The Blue Planet

Earth, the third planet from the Sun after Mercury and Venus, is referred to as 'The Blue Planet' because of how it looks from space. This is due to the fact that over $\frac{2}{3}$ of the Earth's surface is covered in oceans and seas.



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Reading – Challenge 3 Questions

1. What percentage of the air we breathe is not Oxygen?

2. What is the difference between the highest and lowest points on Earth?

3. How long does it take the Earth to spin once on its axis?

4. Will the Earth always spin at this speed? If not, how will it change?

5. How many planets are between us and the Sun and can you name them?

6. Why do we experience summer around one side of the Sun?

7. In the Fact File section the author has written 'approx.', what is the reason for the full stop in this word?

8. In the 'I'm Spinning Around' section, the author writes:
   You wouldn't notice but the Earth's spin is actually slowing down by 17 milliseconds per hundred years'
   Why does the author say we wouldn't notice?

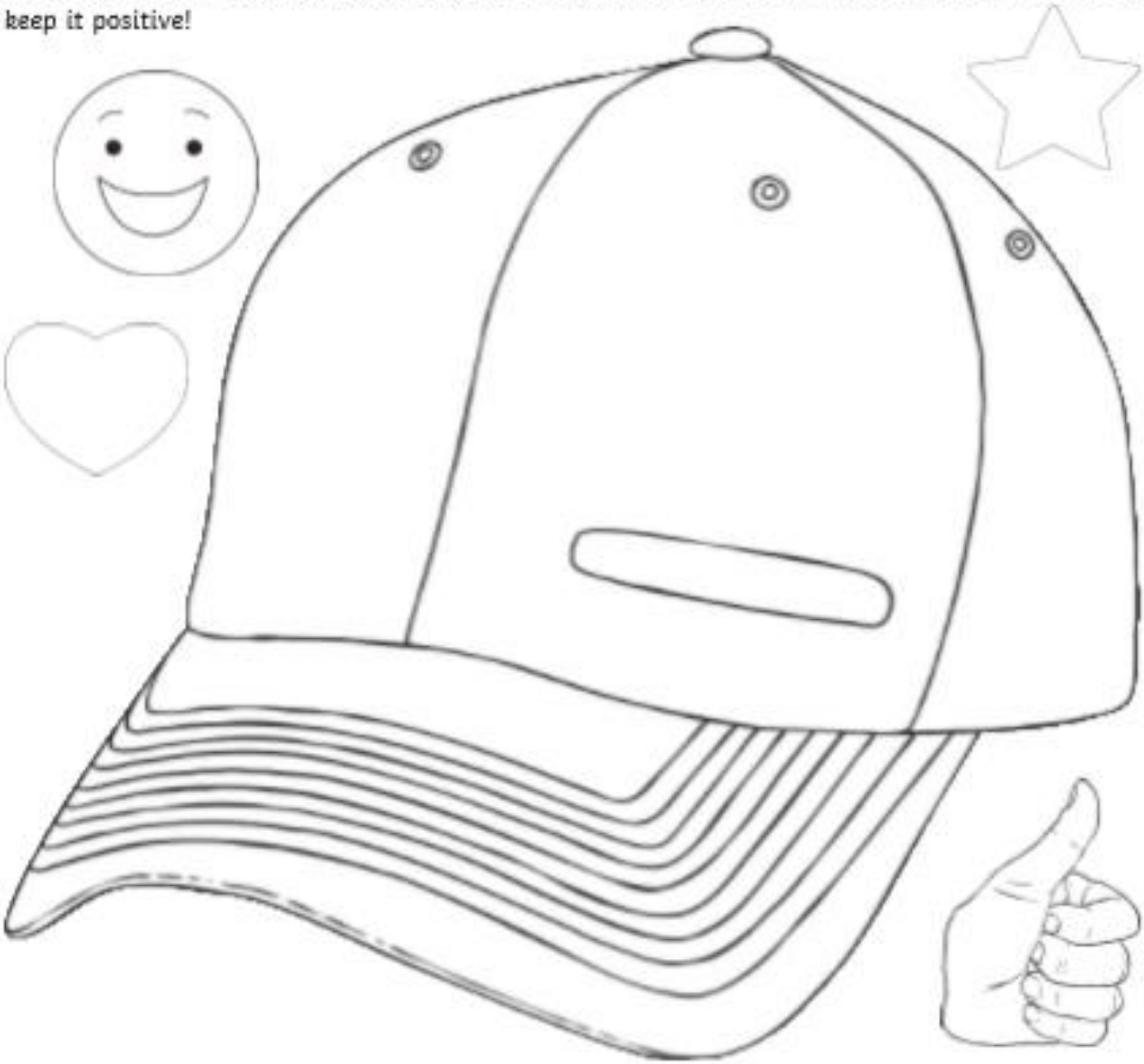
9. Why do we need to add an extra day to our year every 4 years?

10. Which fact or piece of information has amazed you the most and why?

PSHE

Think Positive
Design a Positive Thinking Cap

Using the outline below, design a cool cap, with colourful messages about positive thinking. You can do bubble writing, graffiti-style writing, symbols and illustrations. Just remember to keep it positive!



You can do it!	This is great!	determined	happy
Go for it!	challenge	goal	practise
Keep going!	persevere	Reach for the stars!	Stick at it!
I can do this!	resilience	OK	Super me!