Remote Learning – Class 4

Monday 15th November 2021

15.11.21

Maths

Multiply by 10

- Today, in Maths we are looking at multiplying numbers by 10.

- To understand this better, please use the link below and watch the video called ‘Multiply by 10’.

- Link: https://whiterosemaths.com/homelearning/year-4/week-10-number-multiplication-division/

1) Complete the missing numbers.

10 ones are equal to ___ ten

___ hundreds are equal to 1 thousand

___ tens are equal to 3 hundreds

2) $11 \times 10 = \_\_\_ \times 11$

3) $10 = 2 \times \_\_\_\_$

1) Complete the missing numbers.

10 ones are equal to 1 ten

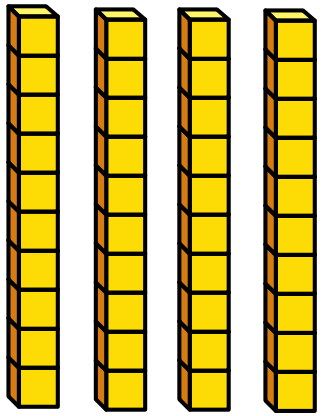
10 hundreds are equal to 1 thousand

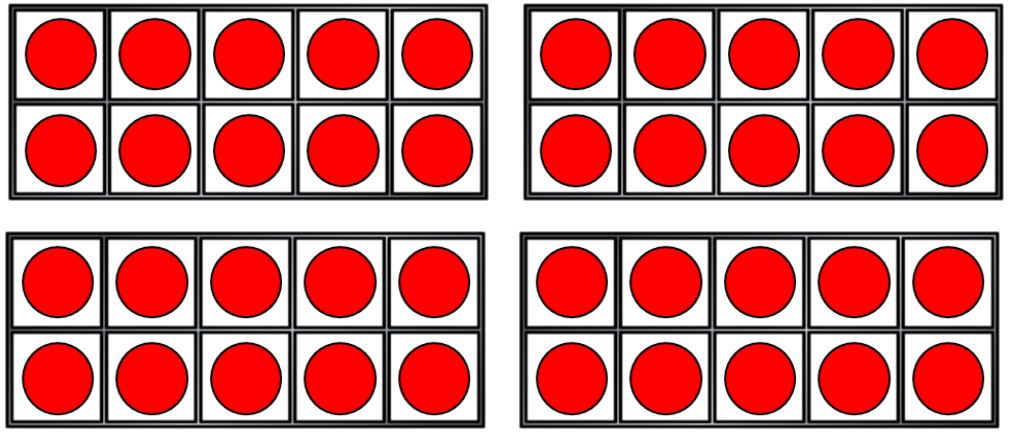
30 tens are equal to 3 hundreds

2) $11 \times 10 = 10 \times 11$

3) $10 = 2 \times 5$

4 groups of 10



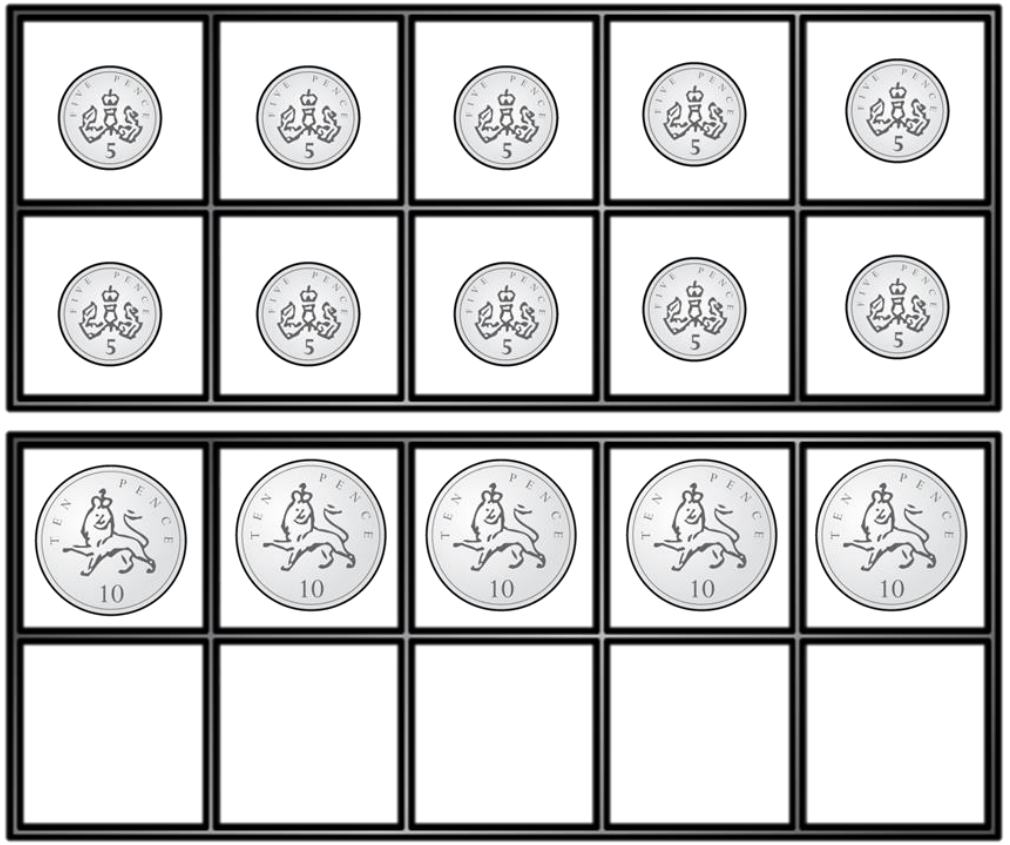


10	10	10	10

$4 \times 1 \text{ ten} = 4 \text{ tens}$

$4 \times 10 = 40$

What's the same?



What's different?

5	5	5	5	5	5	5	5	5	5

10	10	10	10	10

Each row has 2 tens and 1 one.

Each row has 21

There are 10 rows.

The calculation is

$21 \times 10 = 210$

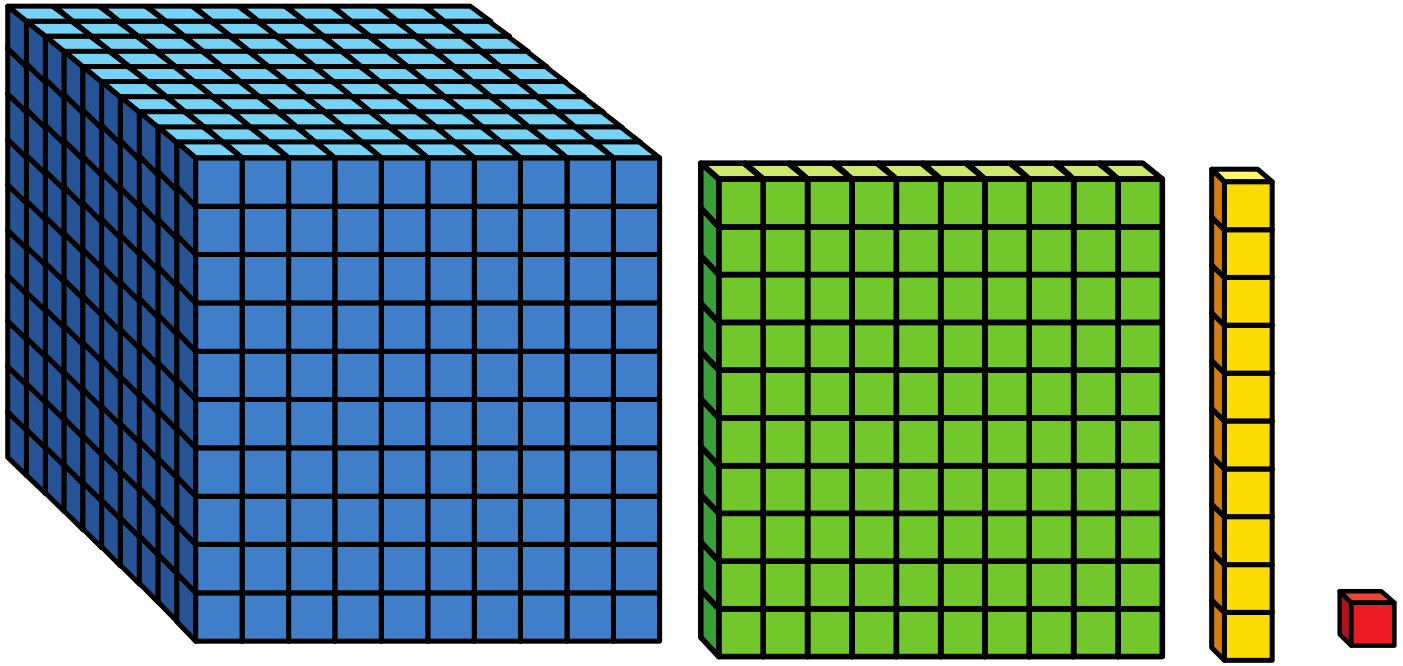
Each row has 3 tens and 2 ones.

Each row has 32

There are 10 rows.

The calculation is

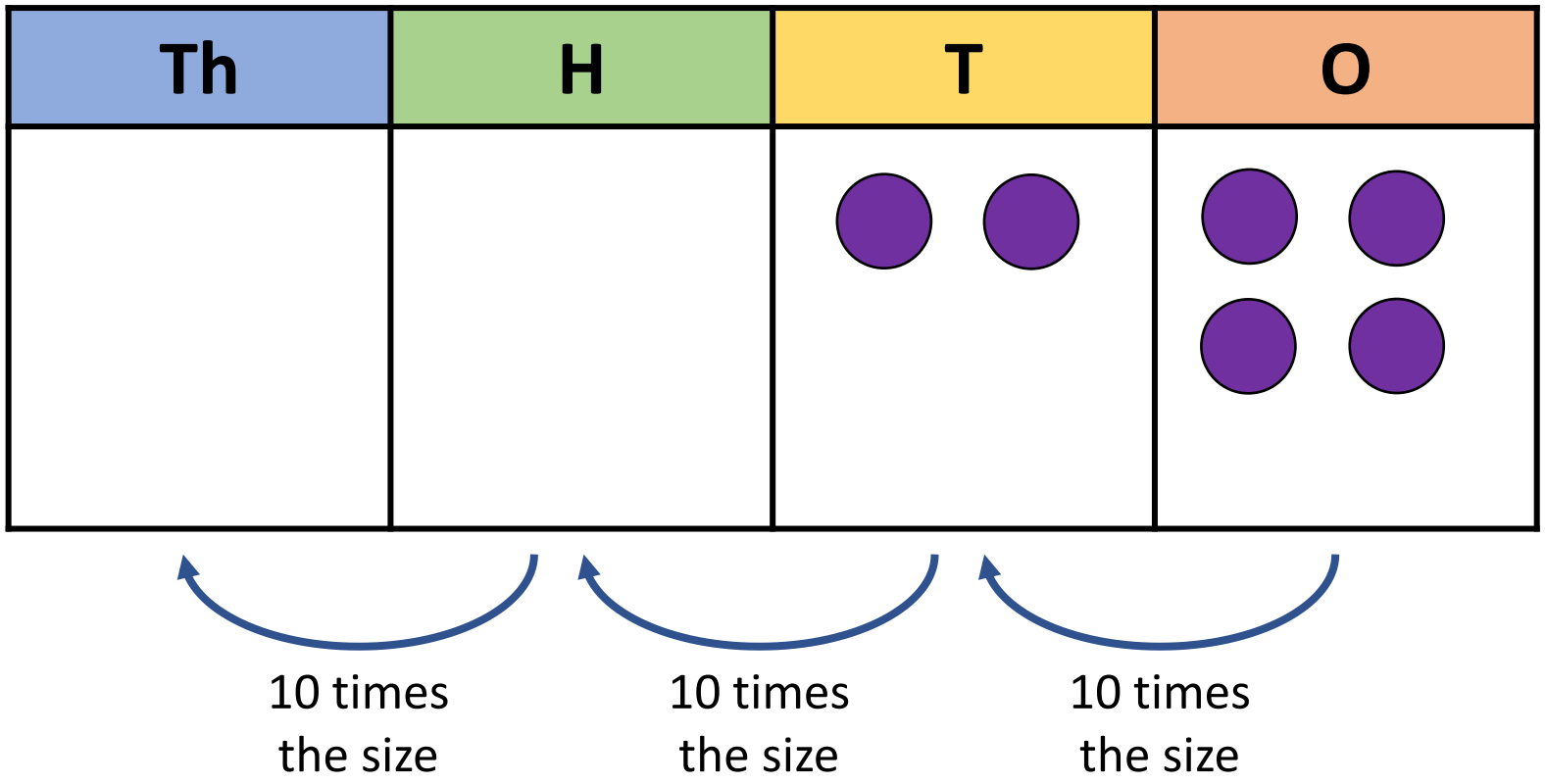
32 × 10 = 320



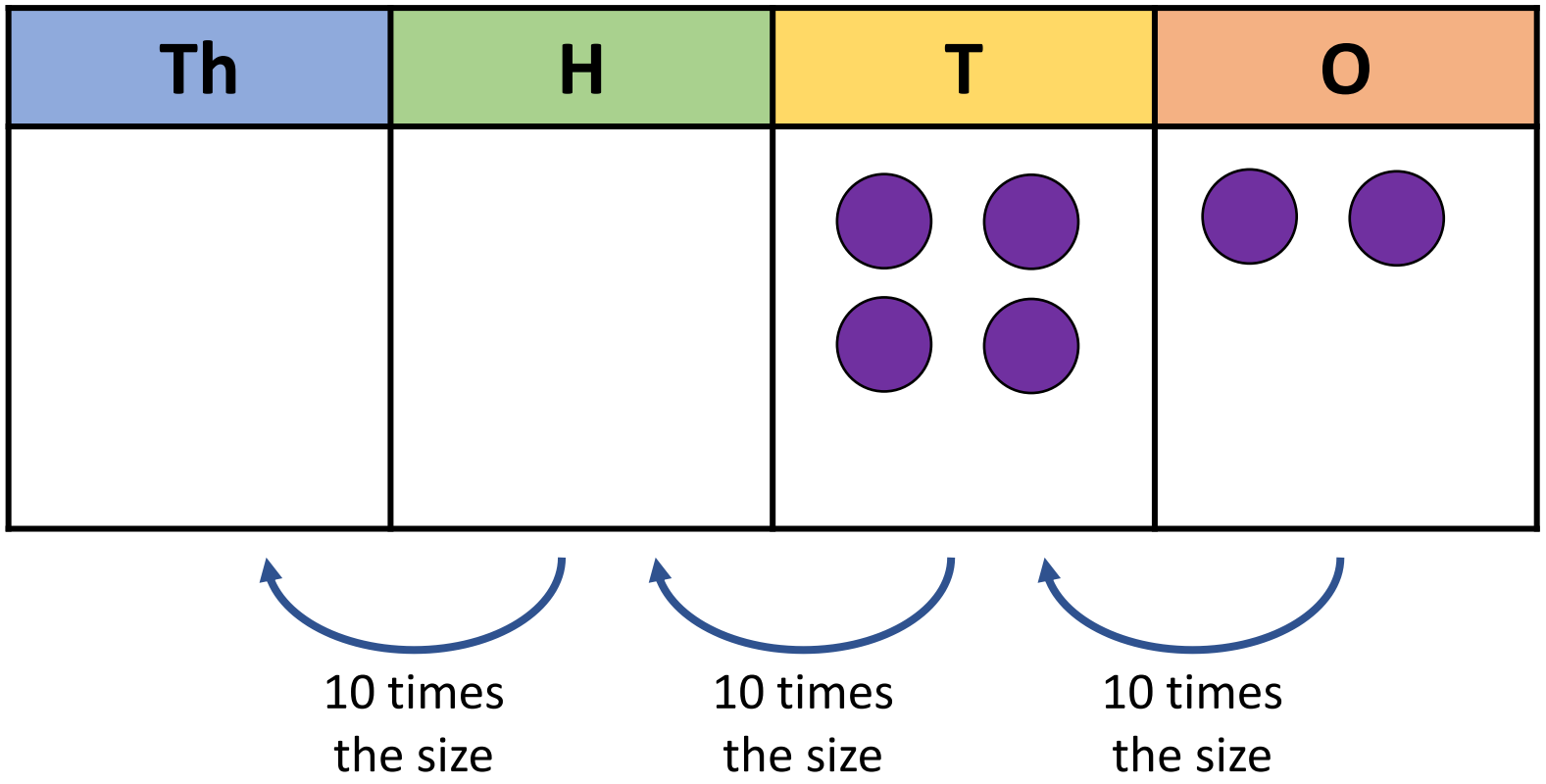
1 ten is 10 times the size of 1 one

1 hundred is 10 times the size of 1 ten

1 thousand is 10 times the size of 1 hundred



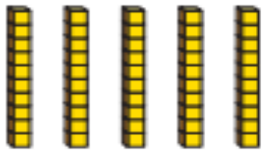
$$24 \times 10 = 240$$



$$42 \times 10 = 420$$

Multiply by 10

1 Complete the calculation shown in base 10



5 × 1 ten = ☐ tens

5 × 10 = ☐

2 Complete the number sentences.

a) 2 × 10 = ☐

b) 4 × 10 = ☐

c) 10 × 8 = ☐

d) 7 × 10 = ☐

e) 10 × 6 = ☐

f) ☐ = 3 × 10

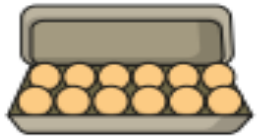
3 Match the bar models to the multiplications.

10 10 10 10 10	5 × 10
6 6 6 6 6 6 6 6 6 6	10 × 9
10 10 10 10 10 10 10 10 10	6 × 10

4 Tom has 10 boxes of eggs.

There are 12 eggs in each box.

How many eggs does he have altogether?



Tom has ☐ eggs.

5 Complete the sentences.

H	T	O
	10	1 1 1
	10	1 1 1
	10	1 1 1
	10	1 1 1
	10	1 1 1
	10	1 1 1
	10	1 1 1
	10	1 1 1
	10	1 1 1
	10	1 1 1

Each row has ☐ ten and ☐ ones.

There are ☐ rows.

The calculation is ☐ × ☐ = ☐

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6 Use counters on a place value chart to work out 23 × 10

23 × 10 = ☐

7 Which of these is the odd one out? Tick your answer.

There are 10 teams with 7 players on each team.	There are 10 red flowers and 7 yellow flowers.	There are 7 ten frames with 10 counters in each.

Talk about it with a partner.

8 Complete the calculations.

a) 45 × 10 = ☐

b) 36 × 10 = ☐

c) ☐ = 10 × 78

d) 31 × ☐ = 310

e) 10 × ☐ = 140

f) ☐ = 40 × 10

g) 32 × 10 = 10 × ☐

h) 670 = 2 × 5 × ☐

9 Eva walks 60 m to school.

Teddy walks 10 times as far as Eva to school.

How far does Teddy walk to school?

Teddy walks ☐ m to school.

10 Amir thinks of a 2-digit number.

He multiplies it by 10

My answer is between 755 and 795

Write all the numbers Amir could be thinking of.

11 Chocolates come in boxes of 8 and 10

Rosie needs to buy 80 chocolates.

a) What boxes could Rosie buy?

b) What is the fewest number of boxes Rosie needs to buy? ☐

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1.	3 x 1 =	21.	3 x 2 =	41.	3 x 3 =
2.	3 x 4 =	22.	3 x 8 =	42.	11 x 3 =
3.	3 x 11 =	23.	3 x 5 =	43.	12 x 3 =
4.	3 x 4 =	24.	3 x 6 =	44.	8 x 3 =
5.	3 x 4 =	25.	3 x 4 =	45.	9 x 3 =
6.	3 x 9 =	26.	3 x 9 =	46.	5 x 3 =
7.	3 x 5 =	27.	3 x 5 =	47.	2 x 3 =
8.	3 x 9 =	28.	3 x 5 =	48.	9 x 3 =
9.	3 x 8 =	29.	3 x 1 =	49.	1 x 3 =
10.	3 x 9 =	30.	3 x 3 =	50.	12 x 3 =
11.	3 x 2 =	31.	3 x 3 =	51.	11 x 3 =
12.	3 x 6 =	32.	1 x 3 =	52.	12 x 3 =
13.	3 x 8 =	33.	10 x 3 =	53.	7 x 3 =
14.	3 x 3 =	34.	3 x 3 =	54.	7 x 3 =
15.	3 x 12 =	35.	11 x 3 =	55.	8 x 3 =
16.	3 x 2 =	36.	12 x 3 =	56.	6 x 3 =
17.	3 x 8 =	37.	12 x 3 =	57.	4 x 3 =
18.	3 x 10 =	38.	11 x 3 =	58.	7 x 3 =
19.	3 x 5 =	39.	7 x 3 =	59.	2 x 3 =
20.	3 x 5 =	40.	12 x 3 =	60.	8 x 3 =

Time taken: (3 minute limit) :

Score: /60

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Literacy

New Writing Genre: Newspaper Writing

Immersion Lesson: Deforestation

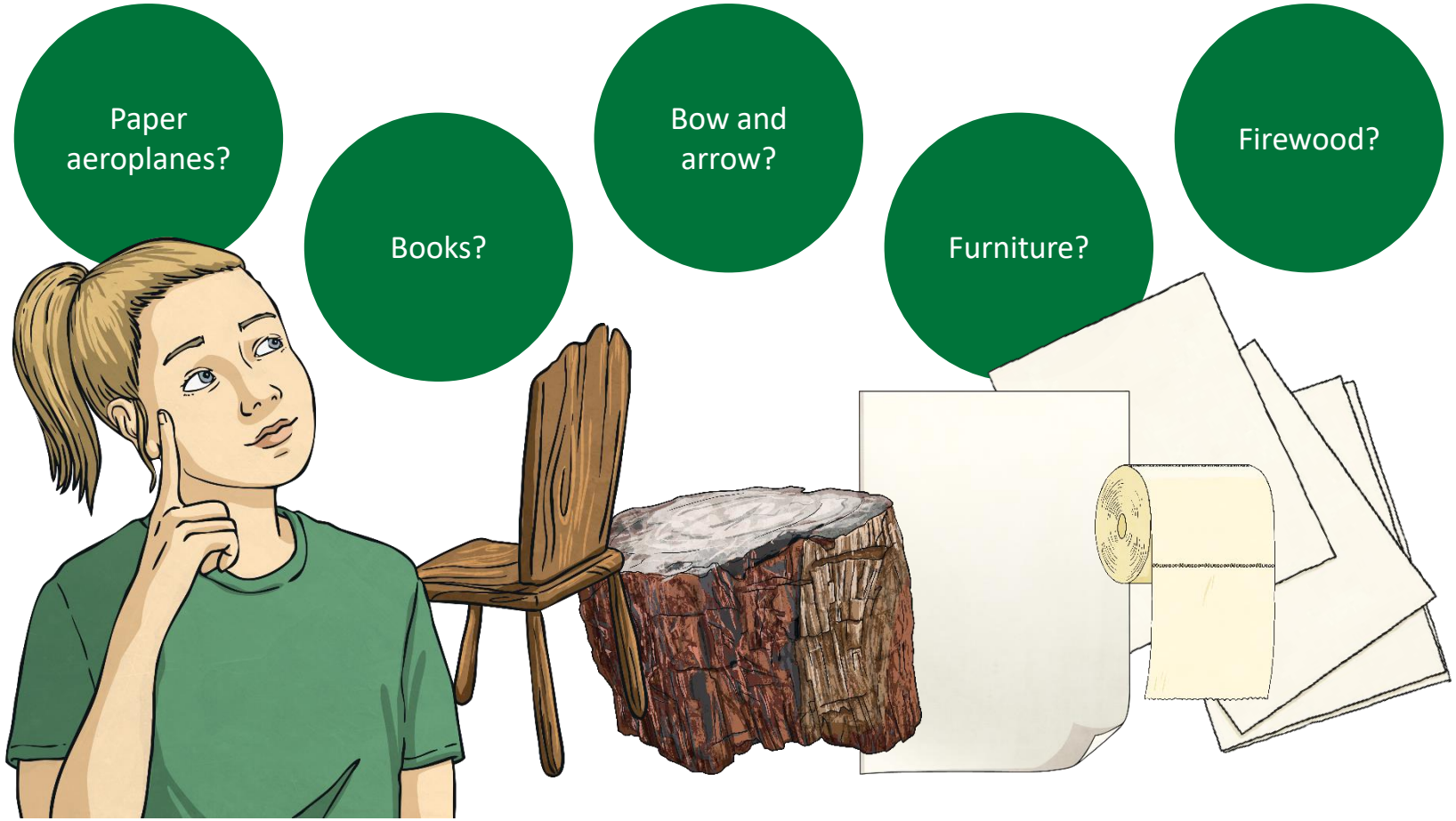
- Over the coming weeks, we will be writing newspaper articles based on a story linked to deforestation.

- Please use the link below to learn more about deforestation.

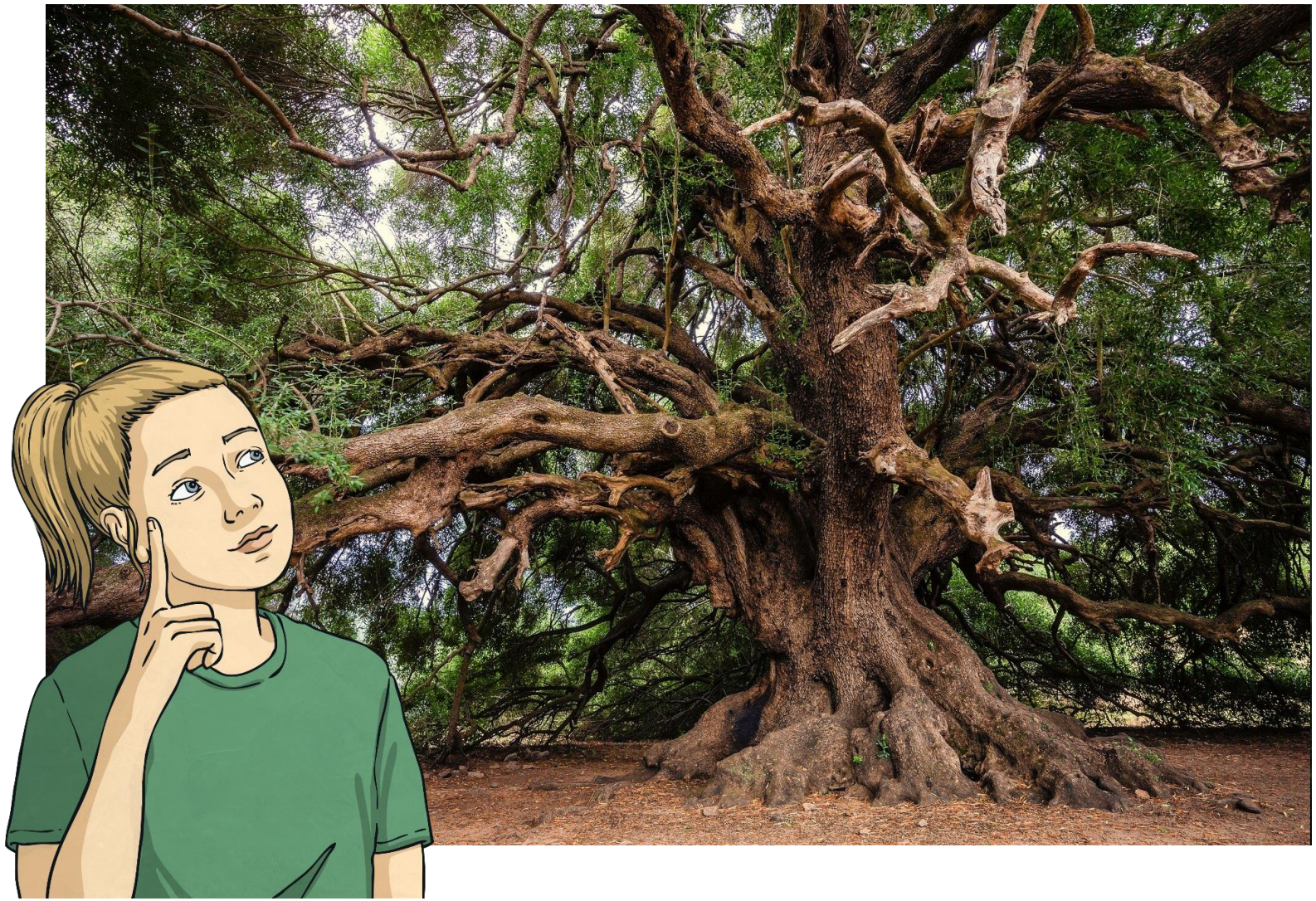
- Link: https://www.youtube.com/watch?v=Ig9Tfc_hNsE

Think About It

What do you think about when you look at these pictures?

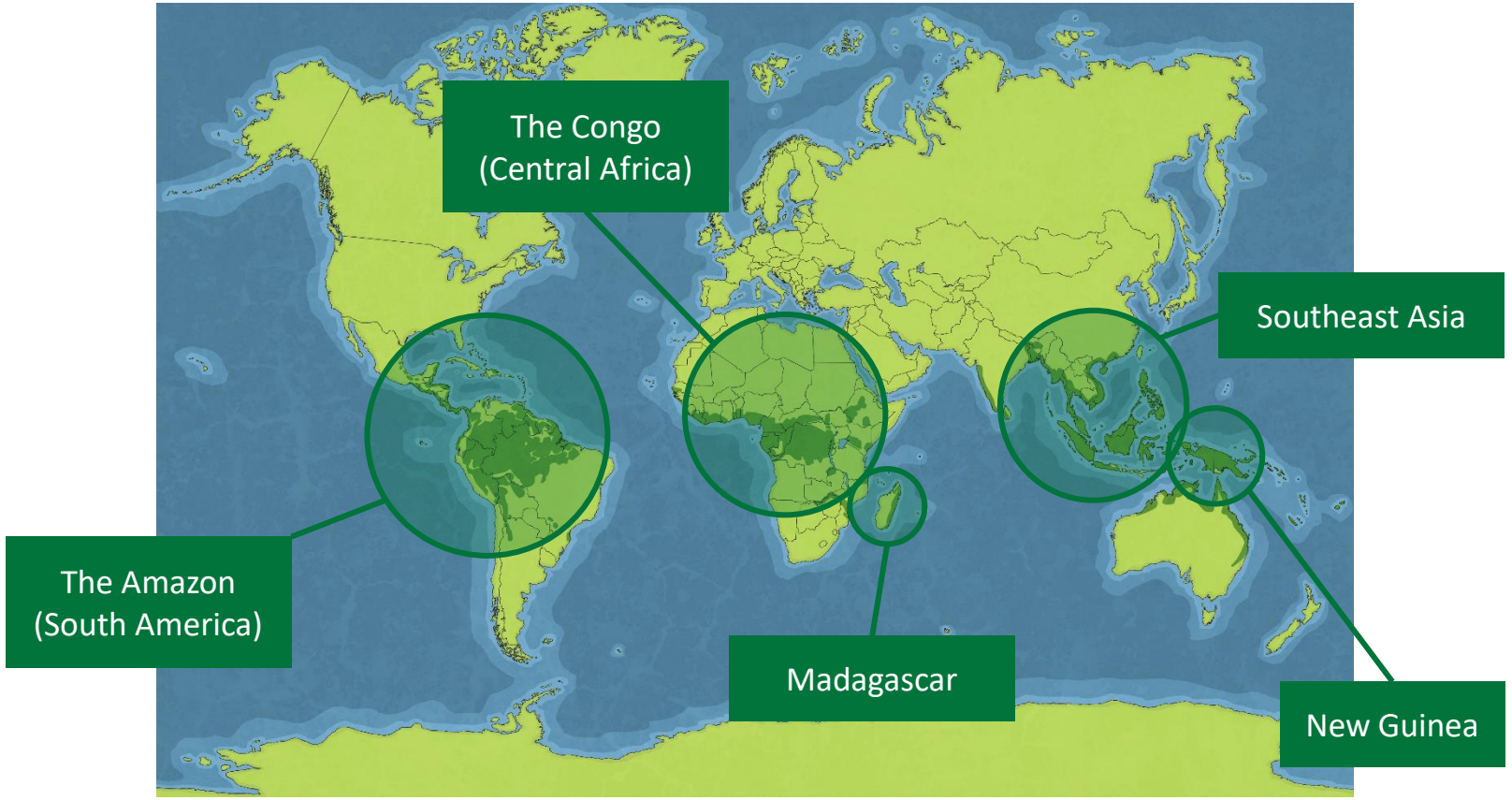


What about a tree or perhaps a forest?



Forest Fact

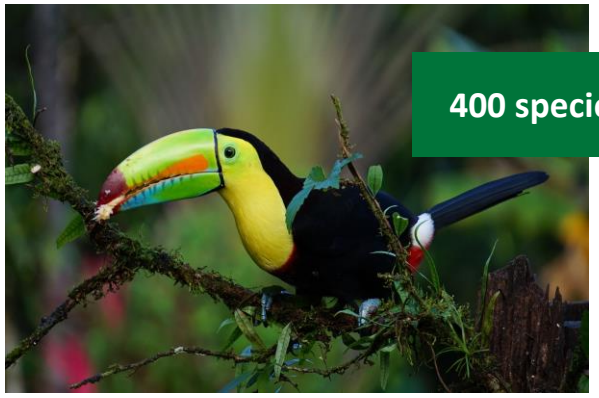
Around 30% of the Earth is covered by trees.



Why Are Rainforests So Important?

Rainforests cover only 6% of the Earth but they are home to 50% of all plant and animal species. In just four square miles, you might find…

1,500 flowering plants



400 species of birds

750 species of trees

150 species of butterflies

...and much more!

Why Are Rainforests So Important?

Rainforests are often known as the ‘lungs of the Earth’. The trees absorb harmful carbon dioxide and produce 20% of the oxygen in Earth’s atmosphere.

Rainforests get their name from the heavy rains that fall almost every day. Trees soak up the water and help prevent erosion. Without them, the soil would wash away.

What Is Deforestation?

Deforestation occurs when trees are cut down across a wide area. This land is then used for another purpose.

Did You Know…?
Every minute, an area of rainforest the size of a football pitch is cut down. If this rate continues, there will be no rainforests in 100 years.

There are over 7 billion people on the planet. This number keeps growing and, by 2100, there could be 11.2 billion people. All of these people need food so land is cleared for farming. Forests are cleared permanently for animal grazing, which provides meat. Land is also used to grow crops, such as sugar cane and palm oil. Huge areas of forest are cut down to grow soya, which is used to feed cattle and pigs.

Why Are the Rainforests Being Cut Down?

Trees are useful and valuable. Among other things, they are used for paper, building and firewood.

The rainforest is home to a unique variety of tree species. Hardwoods, such as teak or mahogany, are strong and so are perfect for building and for making furniture. However, these trees are slow growing and are not easy to replace.

Subsistence Farming

Known as slash and burn, families cut down small parts of the forest and burn it to improve the soil and make room for cattle.

It is small scale and the forest can regenerate but with more people taking more land, this chance of recovery is slower. Up to 48% of all deforestation is caused by subsistence farming.

"Oil palm plantation" by Martin H is licensed under CC BY 2.0

Commercial Farming

This is farming that happens on a large scale. It is led by companies who need to produce on a much bigger scale to provide food and products for the wider world.

Palm Oil

Palm oil comes from the fruit of oil palm trees. Palm oil is edible and is found in lots of food. It is used in a huge range of products, such as toothpaste, deodorant, make-up, shampoo and lipstick. Palm oil can also be used as animal feed and as a biofuel for machines.

Huge areas of rainforest are destroyed in order to grow oil palm trees. This means animals and other plants lose their natural habitats.

Fruit of the oil palm tree

Independent Task

Your task today in Literacy is to design an environmentally friendly classroom. With growing concerns about the rainforests and deforestation your challenge is to design a classroom where no wood has been used.

What other materials could you use?

What will the classroom look like?

What are you going to write on?

What are you going to use instead of books and paper?

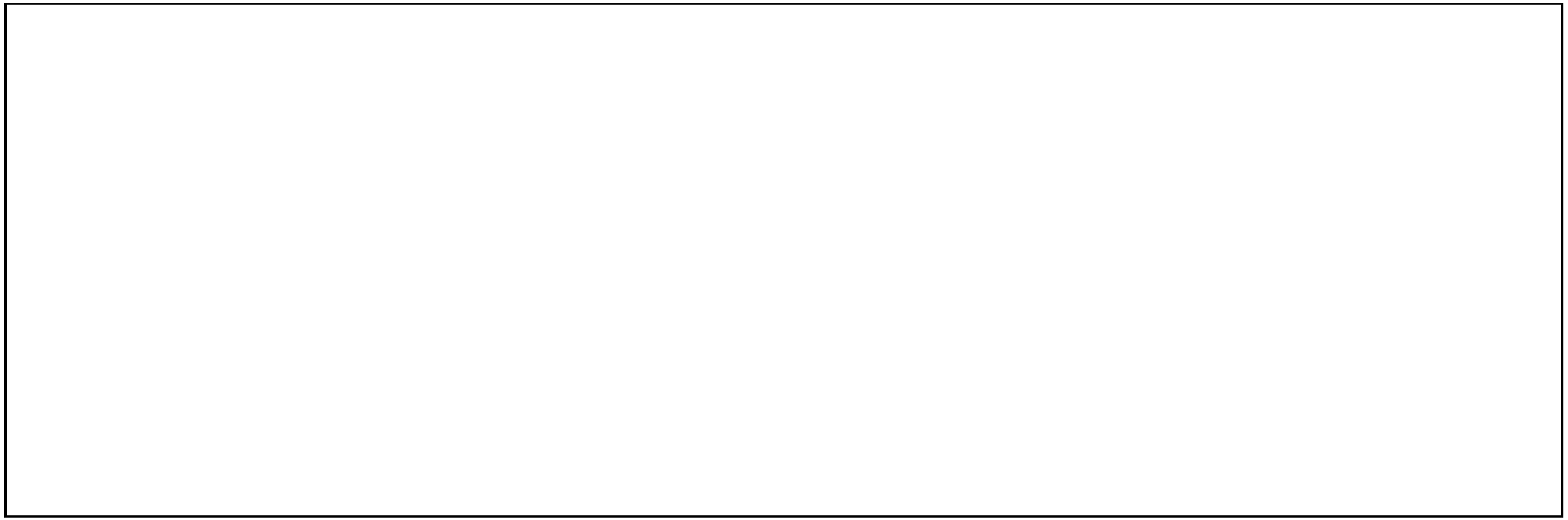
No wood can be used!

Please draw what the classroom would look like and remember to label it too. Your environmentally friendly classroom needs colouring in too.

Monday 15th November 2021

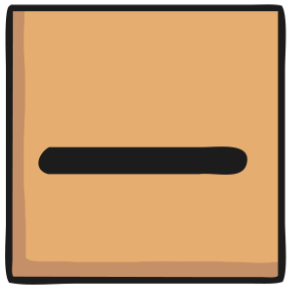
Immersion Lesson: Deforestation

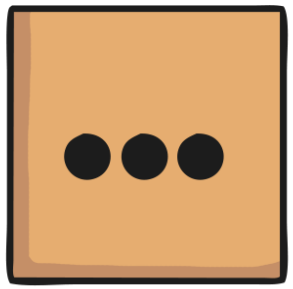
Today in Literacy we have been looking at the concerns surrounding deforestation. With the rainforests beginning to disappear your challenge today is to draw an environmentally friendly classroom where no wood has been used. You need to consider what the classroom would look like and what the objects would be made of instead of wood. Remember to label your classroom and colour it in too.



History

The Maya Civilisation – Number System





The Maya and Numbers

The Maya had a good understanding of numbers and they developed a complex number and counting system which was advanced for their time.

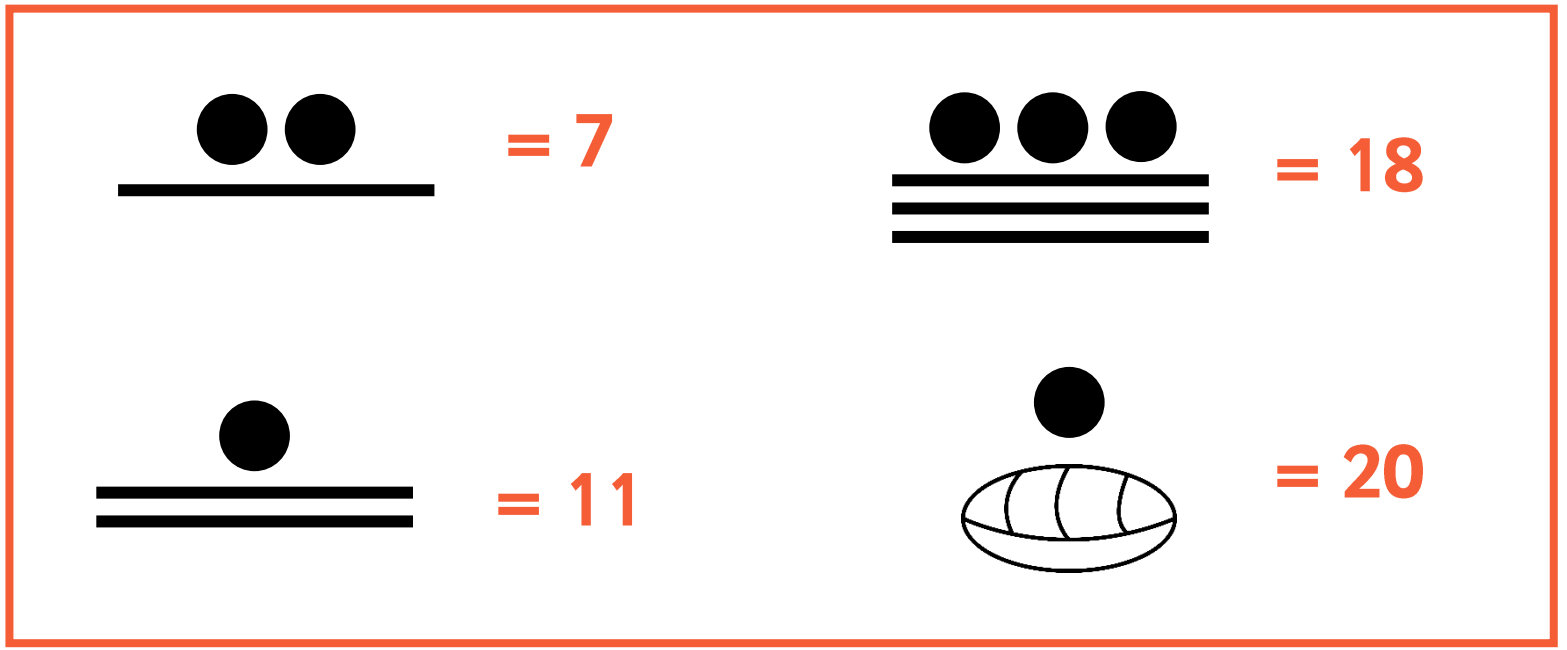
They were one of only two cultures in the world to develop the concept of zero and this allowed them to develop a place value system where a zero could act as a place holder in large numbers. This enabled the Maya people to distinguish between numbers like 23 and 203, where the placement of the zero determines the value of the digit 2 as 200. This is a very important concept which many civilisations did not understand until much later than the Maya.

The Maya people used symbols to represent their numbers. Let’s have a look at how it worked.

Number Symbols

The Maya people used just three symbols in their number system. These are thought to represent items that the Maya people might have first used to count with such as pebbles, sticks and shells.

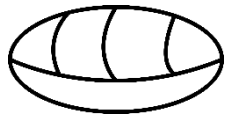
With your partner, look at the following Maya numbers. Can you work out what numbers the symbols represent and how the system works?



Shells, Sticks and Pebbles

Questions

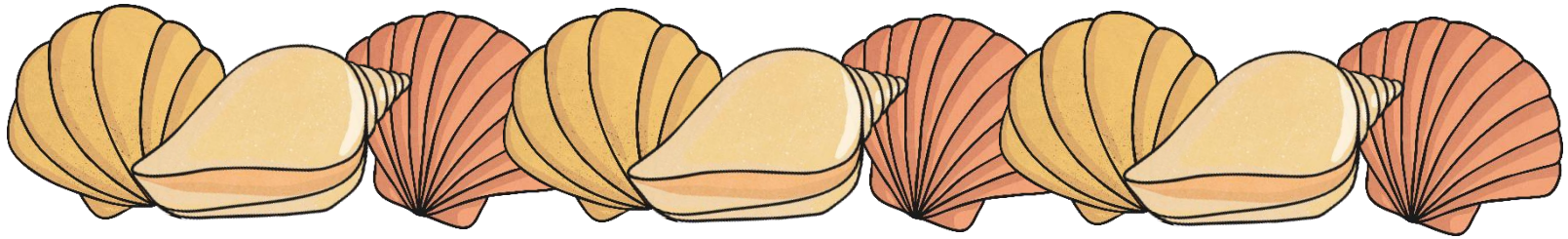
1. Did you figure it out?
2. What have you learnt about the way the numbers are written?
3. What other Maya numbers can you write?
4. How is the Maya number system similar and different to our own?



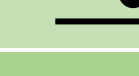
= 0

= 1

= 5

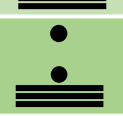
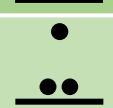
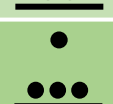
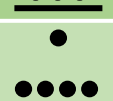
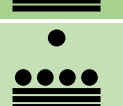


Maya Numbers

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

11	
12	
13	
14	
15	
16	
17	
18	
19	

Maya Numbers

20		30	
21		31	
22		32	
23		33	
24		34	
25		35	
26		36	
27		37	
28		38	
29		39	

The Maya people used a base 20 number system, so after number 19 multiples of 20 were written above the bottom number. This is called a vigesimal positional number system.

0-19 Maya Number System

Can you work out these Maya numbers? Use the key to help you.

●	●●●●	●●
●●●	●●	●
●●●	●	●●●
●	●●●●	●●●●

Add up the value of each symbol.

1 + 1 = 2

5 + 5 + 5 = 15

Then simply combine the two totals!

5 + 5 + 5 + 1 + 1 = ?