Maths Week 6

Lesson 1 - Name and describe 3D shapes - Activity to Upload
Lesson 2 - Guess my shape - Activity to Upload
Lesson 3 - Comparing shapes
Lesson 4 - Mental Maths - To calculate multiplication facts (2x 5x 10x)

Lesson 1 - Name and Describe 3D Shapes

In this lesson the children will be naming 3D shapes and then describing them using the correct vocabulary.
We have included a 3D shape properties sheet in the pack for reference.

Activity to Upload: Sort the shapes into different sets using the templates provided. If you have 3D shapes at home you can use them but if not try to use the shapes shown throughout this lesson.
There is a challenge question that you might like your child to try.

Flashback 4

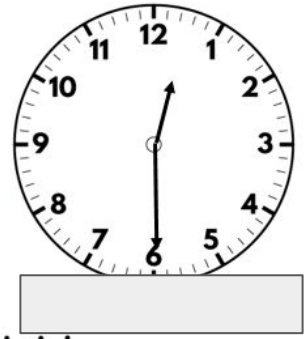
Year 2 | | Day 1

1) How many children cycled on Monday?

Day	Children cycling to school
Monday	
Tuesday	

Key

= 2 children



2) What number does the tally show?

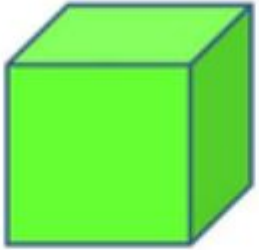
𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸

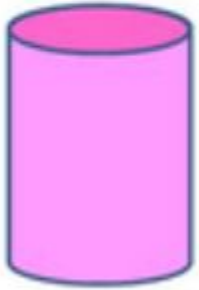
3) How many sides do 5 triangles have?

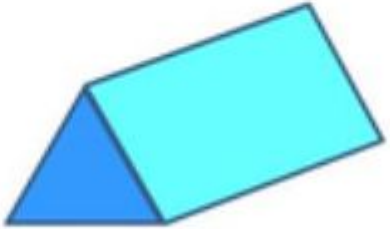
4) How many tens are there in 85?

White Rose Maths

Do you recognise these shapes?
Can you name them?

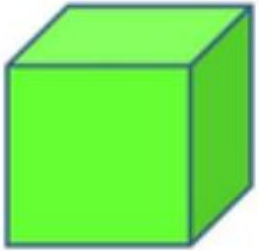






What is different about these shapes compared to the ones we looked at last week?

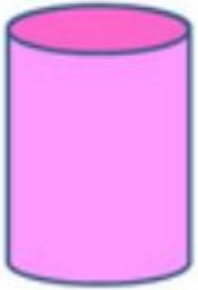
sphere



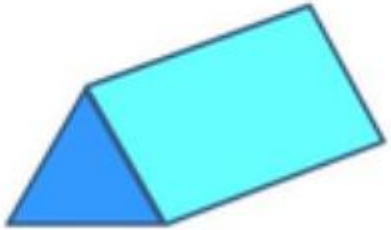
cube

cuboid

square pyramid



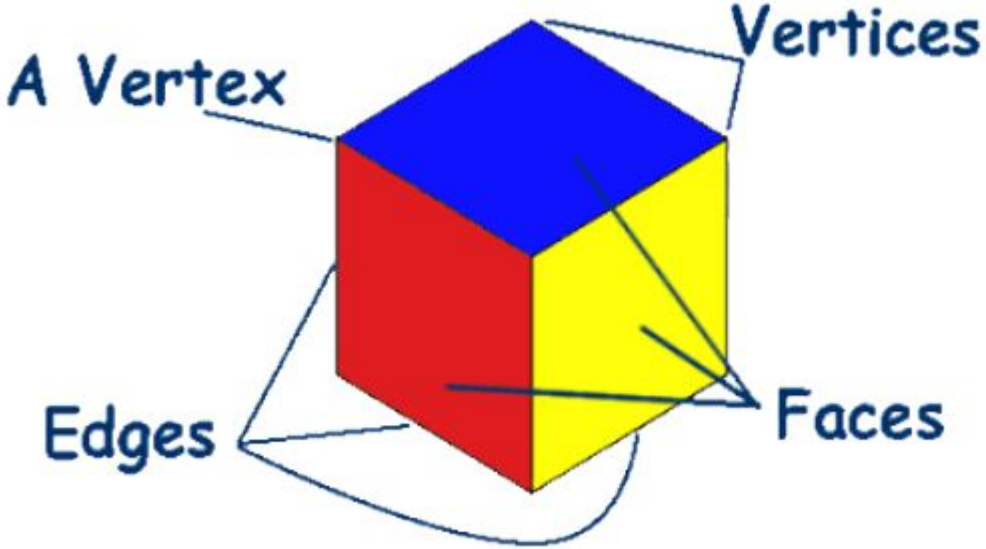
cylinder



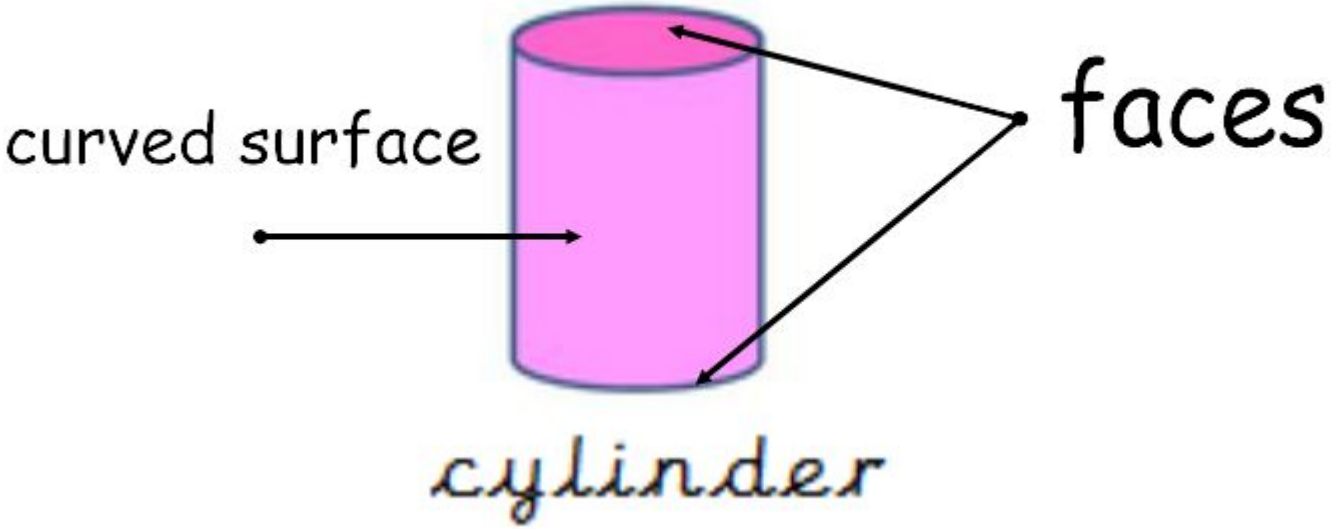
triangular prism

cone

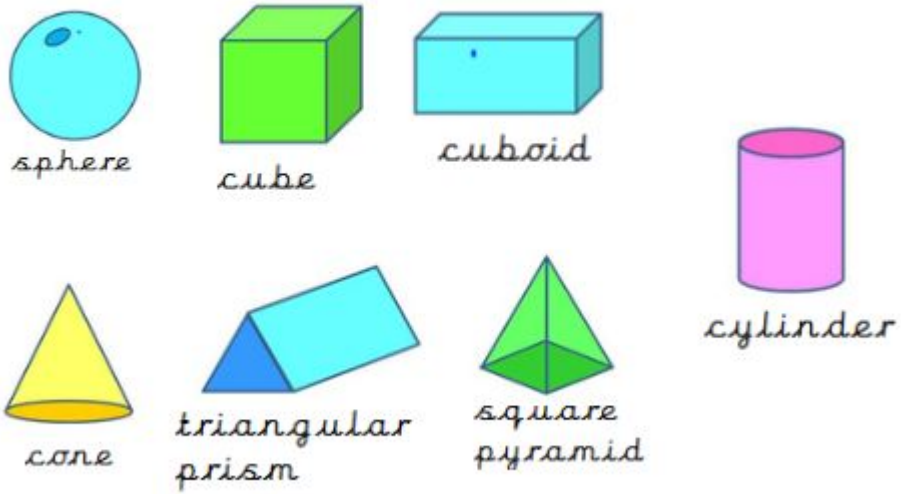
This week we are learning about 3D shapes.
When we are describing 3D shapes we say edges instead of sides.



Watch Mr Johnson describe a cube below.

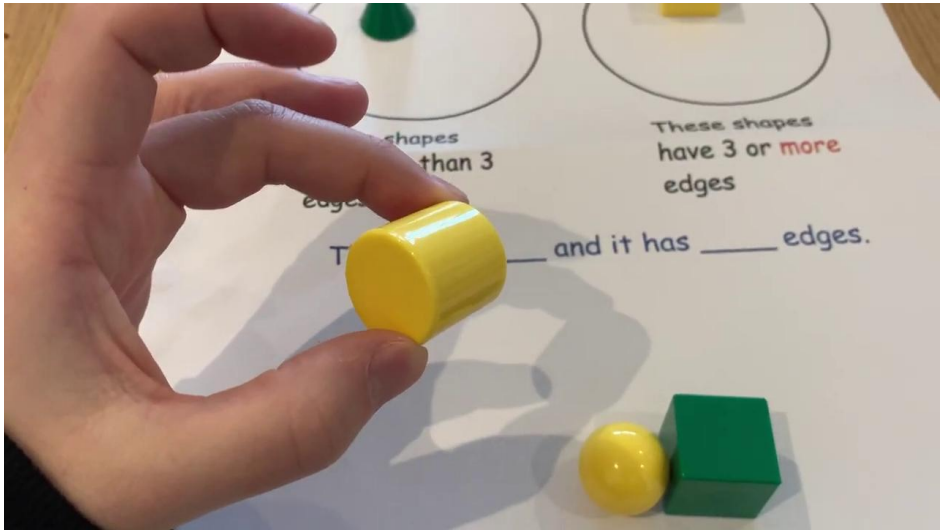


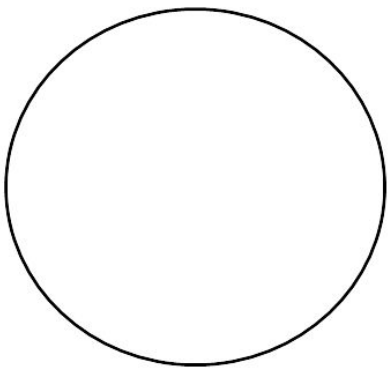
This is a cylinder.
It has 2 faces and 1 curved surface.
It has no vertices.



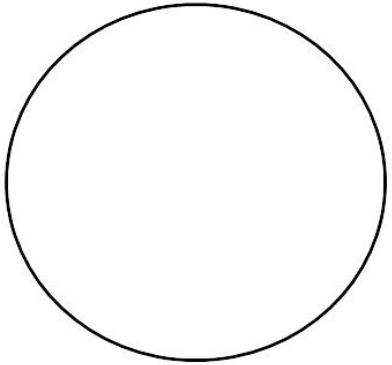
Can you describe a shape?
This is a _____ it has _____ faces and ___ curved surfaces.
This is a _____ it has _____ vertices.

We're going to see if we can classify some shapes now!
Watch below to see Mr Johnson give an example of this.
You can use shapes from the slides or if you have some at home you can use them too.





These shapes have less than 3 edges

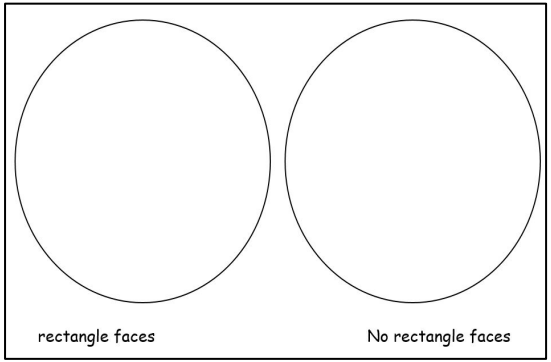


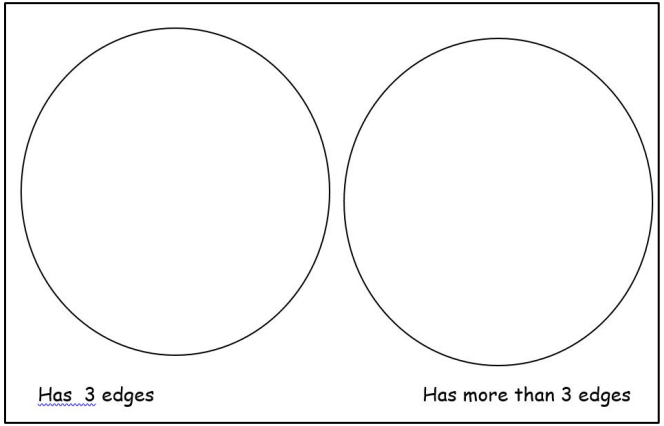
These shapes have 3 or more edges

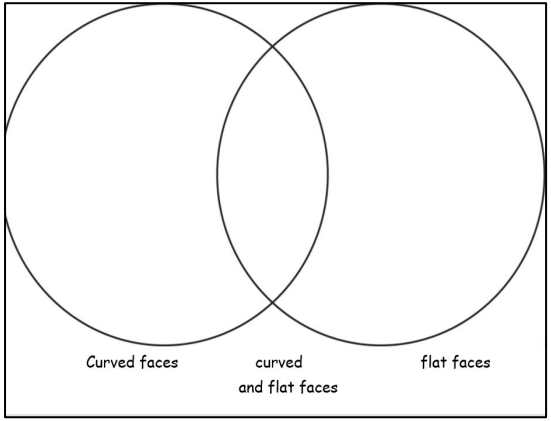
This is a _____ and it has _____ edges.

Activity to Upload:

Sort the shapes into different sets using the templates provided. If you have 3D shapes at home you can use them but if not try to use the shapes shown throughout this lesson.



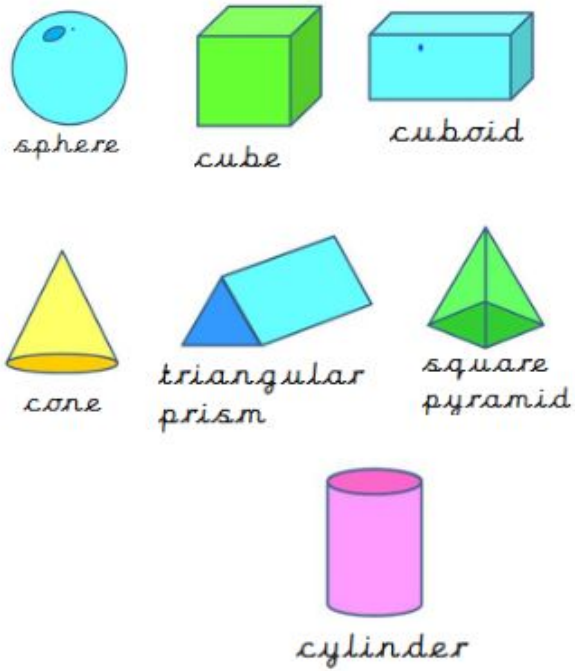




Vocabulary:

faces
vertices/vertex
edges
curved surface

Challenge: What 2D shapes will I need to make these 3D shapes?



Lesson 2 - Guess My Shape / Shape booklet

In this lesson we start by playing 'Guess the Shape' before moving on to creating a booklet describing shapes for children in Reception to guess.

Activity to upload: Guess my Shape booklet. On one side the children name the shape and the other they describe it. A template for this has been provided.

Flashback 4

Year 2 | | Day 2

1) How many children cycled on Thursday?

Day	Children cycling to school
Wednesday	
Thursday	

Key

 = 2 children

2) Draw tally marks to represent 16

3) How many 2p coins are the same as 20p?

4) What is 13 + 8?

White Rose Maths

Guess my shape!

My shape has 6 faces.

It has 8 vertices.

It has 12 edges

Every face is a square shape.

Guess my shape!

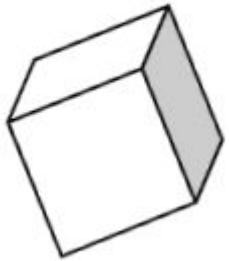
My shape has 6 faces.

It has 8 vertices.

It has 12 edges

Every face is a square shape.

Well done!
My shape is a cube.



Guess my shape!

My shape has 5 faces.

My shape has 5 vertices.

My shape has 8 edges.

One face is square and 4 faces are a triangle shape.

Guess my shape!

My shape has 5 faces.

My shape has 5 vertices.

My shape has 8 edges.

One face is square and 4 faces are a triangle shape.

Well done!
My shape is a square-based pyramid.

Guess my shape!

My shape has 12 edges.

It has 8 vertices.

It has 6 faces.

2 faces are squares and 4 faces are rectangle shapes.

Guess my shape!

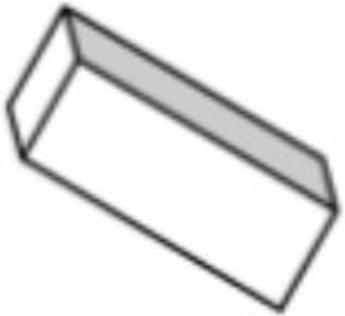
My shape has 12 edges.

It has 8 vertices.

It has 6 faces.

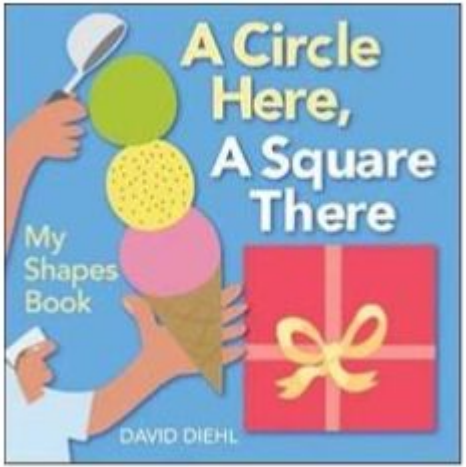
2 faces are squares and 4 faces are rectangle shapes.

Well done!
My shape is a cuboid.



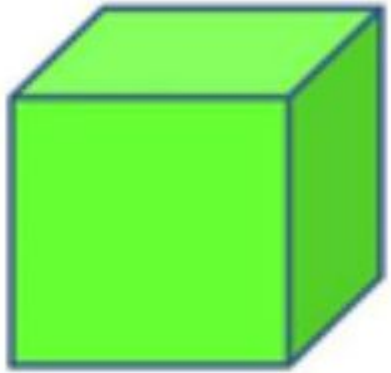
Books really help children learn.

Reception have used this book and now they know 2D shapes.



Our mission today is to create a book that will help the Reception children learn about 3D shapes.

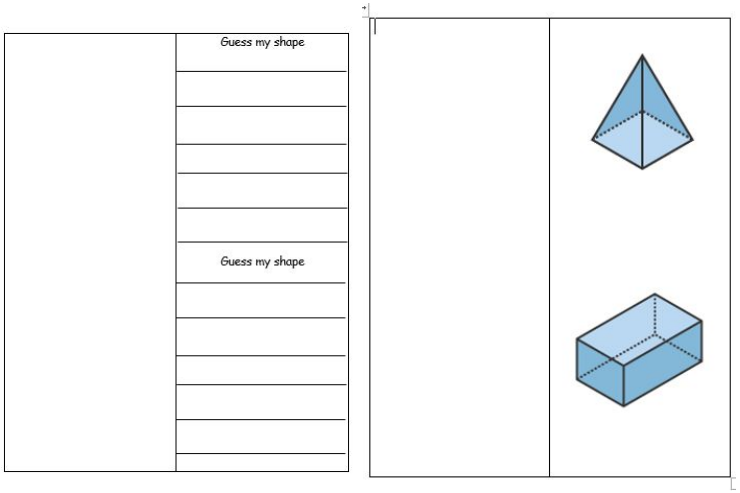
<u>Activity</u>: Job 1 - Pick a shape and name it.



This is a cube.

We have included a booklet template for this activity. When printed double sided it will create a small booklet.

You might want to quiz someone at home to see if they can figure out the shapes!



Job 2 - Describe your shape.

My shape has 6 faces.

It has 8 vertices.

It has 12 edges

Every face is a square shape.

Words you might need

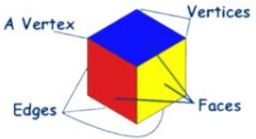
cube cuboid pyramid sphere

cone triangular prism

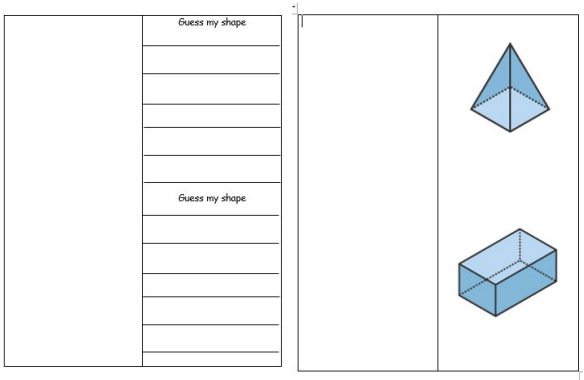
face vertex/vertices edge

curved surface

square rectangle circle triangle



<u>Activity to upload</u>: Guess my Shape booklet. On one side the children name the shape and the other they describe it. A template for this has been provided.



Lesson 3 - Comparing shapes

In this lesson the children will compare 3D shapes. Please encourage them to use the correct vocabulary including: vertices, edges, faces.

Flashback 4

Year 2 | | Day 3

1) How many animals are there altogether?

Animals	Number in shop
Cats	■ ■ ■ ■
Dogs	■ ■
Hamsters	■ ■ ■

Key

■ = 5 animals

2) Divide 18 by 2

3) Which coin are four 5 p coins equal to?

4) Find the difference between 17 and 9

White Rose Maths

Today we are going to be comparing 3D shapes.
To get us warmed up for this we are going to play guess the shape!

I have 5 faces and 5 vertices.
I have 8 edges?
What shape am I?

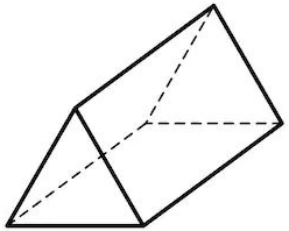
I have 1 curved surface.

I have 12 edges.
2 faces are square.
4 faces are rectangles.
There are 8 vertices.

Go to the next page for the answers ->

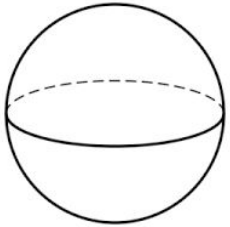
Today we are going to be comparing 3D shapes.
To get us warmed up for this we are going to play guess the shape!

I have 5 faces and 5 vertices.
I have 8 edges?
What shape am I?



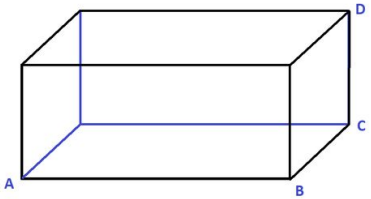
Triangular prism

I have 1 curved surface.



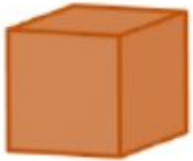
Sphere

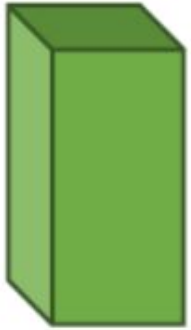
I have 12 edges.
2 faces are square.
4 faces are rectangles.
There are 8 vertices.



Cuboid

What is the same about these 2 shapes?





What is different about these 2 shapes? Talk about faces, edges and vertices in your answer.

Words you might need

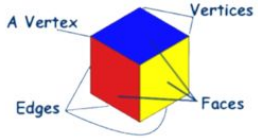
cube cuboid pyramid sphere

cone triangular prism

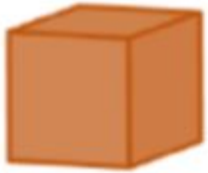
face vertex/vertices edge

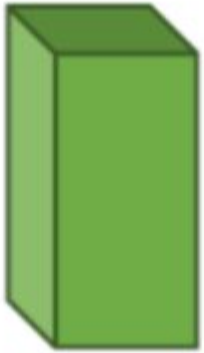
curved surface

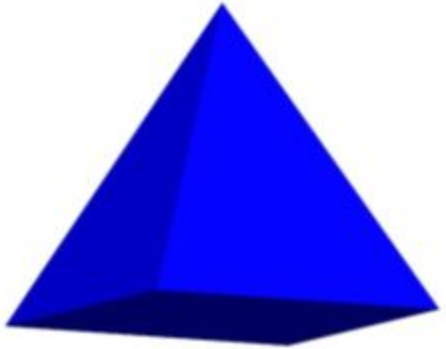
square rectangle circle triangle



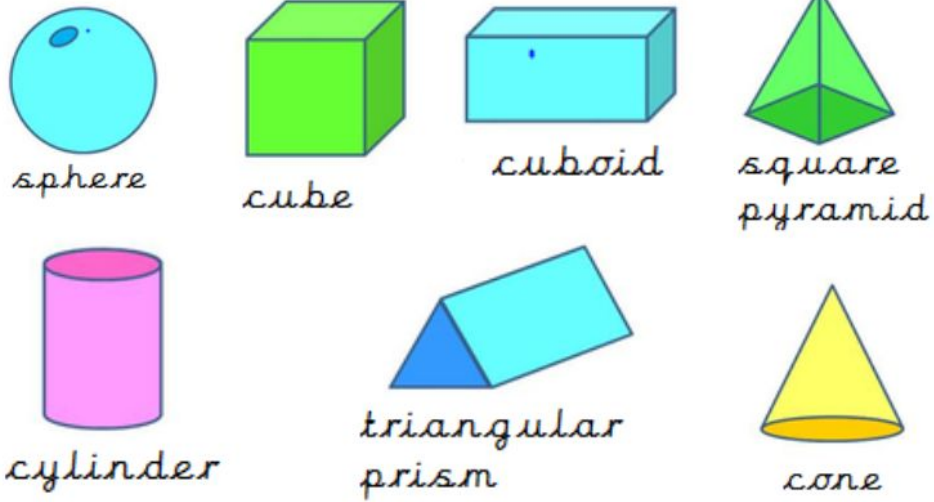
What is the same about these shapes?
What is different?







Now it is your turn!
Choose 2 or 3 shapes and explain what is the same and what is different about them.
You can decide if you would like to talk about it or write it down.
You could also look back at last weeks maths homework - can you add any more similarities and differences?



Words you might need

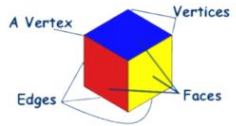
cube cuboid pyramid sphere

cone triangular prism

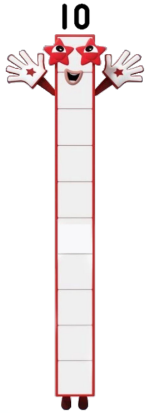
face vertex/vertices edge

curved surface

square rectangle circle triangle



Lesson 4 - Mental Maths - Calculating Multiplication Facts (2x 5x 10x)



Focus:

To calculate multiplication facts (2x 5x 10x)

Teaching Point:

Counting in 2s, 5s and 3s is a precursor to learning times tables.

There are differentiated challenges. Please choose the one that suits your child best or your child may choose to work through them from the mildest to the hottest!

Flashback 4

Year 2 | | Day 4

1) How many more cones are there than balls?

Equipment	Number in cupboard
Cones	
Balls	

Key

= 10

more cones

2) Draw tally marks to represent 8

3) Use $<$, $>$ or $=$ to compare.

2×5 ◯ 5×2

4) Find the sum of 20 and 80

2 Times Table Activities!

Count in 2s and colour in the grid:

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

Work out these answers:

a) 1 x 2 = _____

b) 3 x 2 = _____

c) 5 x 2 = _____

d) 7 x 2 = _____

e) 9 x 2 = _____

f) 11 x 2 = _____

g) 2 x 2 = _____

h) 4 x 2 = _____

i) 6 x 2 = _____

j) 8 x 2 = _____

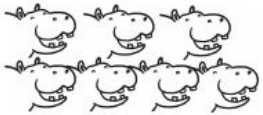
k) 10 x 2 = _____

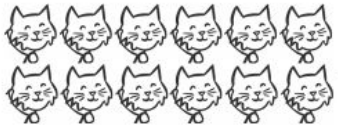
l) 12 x 2 = _____

How many ears are there?

a)  _____ x _____ = _____

b)  _____ x _____ = _____

c)  _____ x _____ = _____

d)  _____ x _____ = _____

The 2 Times Table

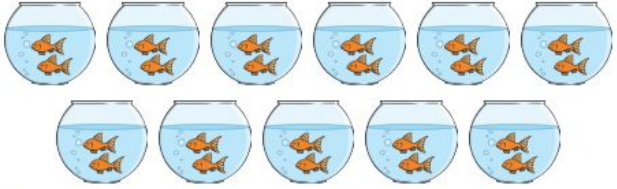
Count in twos to complete the sentences.

2 × ___ = ___ and ___ × 2 = ___

There are ___ socks in total.

2 × ___ = ___ and ___ × 2 = ___

There are ___ footballs in total.



2 × ___ = ___ and ___ × 2 = ___

There are ___ fish in total.

Adult Prompt Questions:

How many pairs of socks are there?

What are the missing numbers in the calculations?

How many socks are there in total?

Can you count in twos to help you?

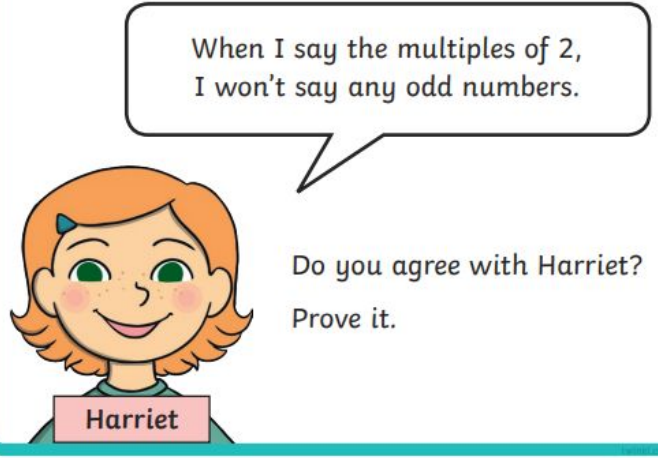
The 2 Times Table

Harpritt has filled in the blanks on this number track.

2	3	6	8	10	11	14	16	17	20

What mistake has Harpritt made?
Explain your answer.

What should he have written?



Do you agree with Harriet?

Prove it.

Adult Prompt Questions:

What do you notice about the number track?

Is it counting in ones?

How do you know?

Look at the numbers Harpritt has written. What has he done wrong?

What numbers should he have written?

How can you check you are correct?

What are the odd numbers?

What do they end in?

What are the numbers that are not odd called?

What do even numbers end in?

Do you think multiples of two are all odd, all even or a mixture?

Can you prove it?

The 2 Times Table

Find all the possible calculations using the clues.

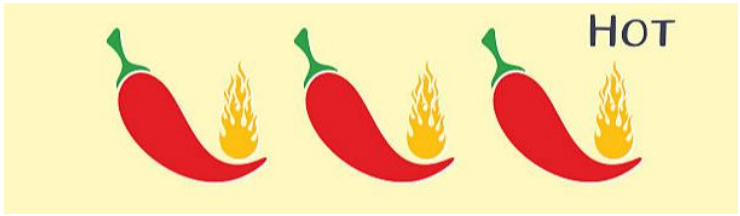
$2 \times \bigcirc = \square$

The number in the circle is greater than 3.

The number in the square is less than 24.

Both numbers are even.

The number in the square is a 2-digit number.



Adult Prompt Questions:

What shall we do first?

Can you read all the clues?

What does 'even' mean?

What is a 'two-digit number'?

What is the smallest number that could go in the circle?

What would the number in the square be in that case?

We know that 2 × 4 = 8. Could 8 be in the square? Why not?

What could you try next?

How many different possibilities have you found?

5 Times Table Activities!

Count in 5s and colour in the grid:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Work out these answers:

a) 2 x 5 = _____

b) 4 x 5 = _____

c) 5 x 5 = _____

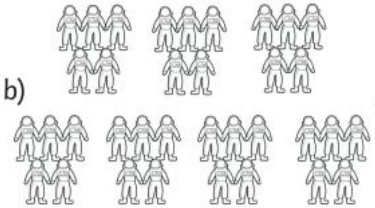
d) 6 x 5 = _____

e) 7 x 5 = _____

f) 12 x 5 = _____

How many are there?

a)  _____ x _____ = _____

b)  _____ x _____ = _____

c)  _____ x _____ = _____

The 5 Times Table

Complete the number track.

5		15		25	30			45	

How many marshmallows are on the 7 cakes?

Write the multiplication calculation:

How much money is shown here in total?

Write the multiplication calculation:

Alice has 50p. How many 5ps is that?
Use the calculation to help.

50p = _____ × 5p

MILD

Adult Prompt Questions:

Which numbers are missing from the number track?

How do you know?

What do you notice about the ones digit in these numbers?

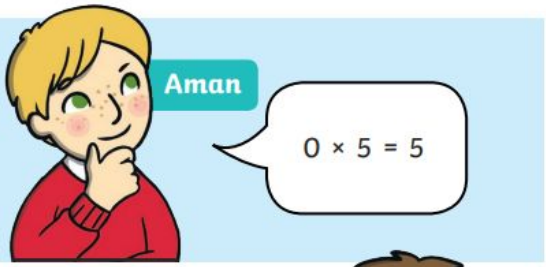
Can you count in fives to find out how many marshmallows there are?

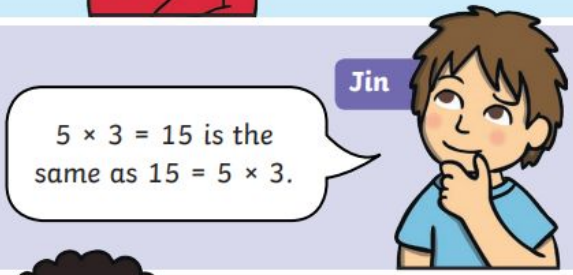
Why will counting in fives help you to count the amount of money?

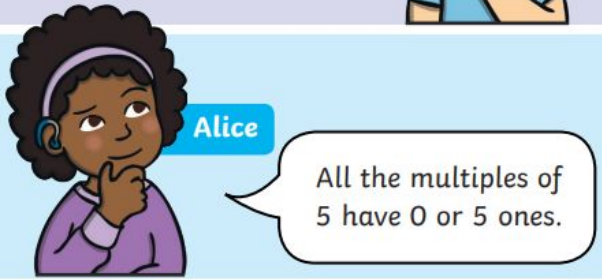
How will you use counting in fives to help you find how many 5p coins are in 50p?

Can you think of any other amounts that could be made using only 5p coins?

The 5 Times Table







Do you agree with the children?
Explain your answer.

Adult Prompt Questions:

What is 0 × 5?

Is the answer always the same when multiplying by zero? Why?

Is Aman correct?

Does it matter which way round we write the calculation?

What does the = symbol mean?

Does this calculation make sense both ways?

Is Jin correct?

Can you list all the multiples of five up to 60?

What do you notice about the ones column?

Do you think this will always be true?

Why?

Is Alice correct?

The 5 Times Table

At the café, all hot chocolate toppings are 5p.

Alice chose cream, a flake and strawberry sauce.

Aman asked for marshmallows, fudge, cream and nuts.

Jin had all the toppings.

Write a calculation for each child to show how much each of them spent.

Alice's mum spent 25p on toppings.

Aman's dad spent 30p on toppings.

Jin's Grandma spent 10p on toppings.

How many toppings did they each have? Write a calculation for each adult.

What toppings would you have? Work out the cost.

Adult Prompt Questions:

How many toppings has (child's name) chosen?

How much is each topping?

How can we find out the total cost?

Can you write an addition calculation?

Can you write a multiplication calculation?

Can you count in fives to help you?

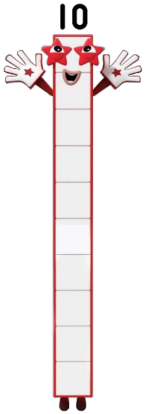
If you know how much the adult spent, can you work out how many toppings they had?

How?

Which toppings would you choose?

How much would that cost?

Can you write a calculation to show this?



10 Times Table Activities!

Count in 10s and colour in the grid:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

Work out these answers:

a) 2 x 10 = _____

b) 10 x 10 = _____

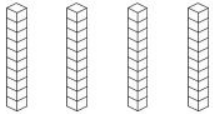
c) 5 x 10 = _____

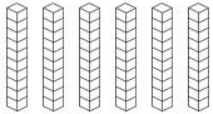
d) 6 x 10 = _____

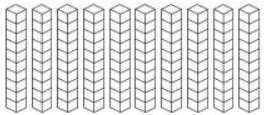
e) 12 x 10 = _____

f) 9 x 10 = _____

How many cubes are there? There are 10 cubes per stack.

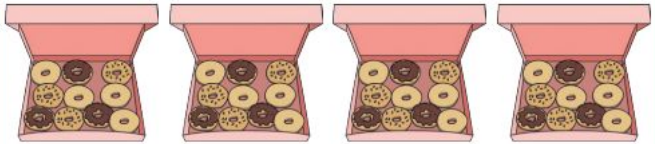
a)  _____ x _____ = _____

b)  _____ x _____ = _____

c)  _____ x _____ = _____

The 10 Times Table

Complete the statements.



10 × _____ = _____

There are _____ doughnuts altogether.

_____ = 10 × _____

There are _____ candles in total.

_____ × £10 = £ _____

There is £ _____ altogether.

Adult Prompt Questions:

How many doughnuts are in each box?

How many boxes are there?

What calculation could we write?

Why do we use the symbol ×?

How many doughnuts are there altogether?

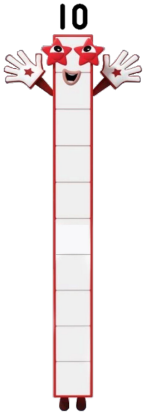
Can you count in tens?

What does 'in total' mean?

What is different about this calculation?

What does each note represent?

What does the symbol £ mean?



The 10 Times Table

True or false?

a)	2 × 10	>	5 × 10
b)	10 × 3	=	10 + 10 + 10
c)	10 + 10	=	10 × 1
d)	100	<	10 × 10
e)	10 × 0	<	10 × 8

Choose from the numbers 1 to 9 to make these statements correct.

f)	10 × _____	>	10 × _____
g)	10 × _____	=	10 + 10
h)	10 × _____	<	10 × 9
i)	10 × 7	=	_____ × 10

Adult Prompt Questions:

What do these symbols mean?

How can we find out if the statements are true?

How can we work out the answers?

Can you count in tens to help you?

Is that the correct symbol?

What symbols should have been used?

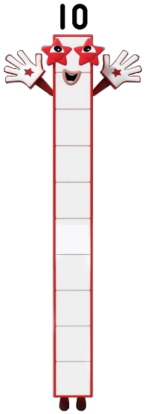
What number could go here to make this statement correct?

Can I write 10 × 4 > 10 × 5?

Why not?

How many groups of ten is 10 + 10?

Is 10 ×7 the same as 7 ×10? Why?



The 10 Times Table

Solve these problems.

a) There are 10 sweets in a packet. I buy 8 packets. How many sweets do I have?

b) Football cards come in packs of 10. Luisa collected 5 packs. James collected 8 packs. Who had the most cards? How many cards did they have?

c) Pavel had 10 children at his birthday party. He wanted to put 6 toys in each party bag. How many toys did he have to buy?

d) Lucas and Moses have 30 marbles altogether. They can put 10 in a pot. How many pots will they need?

Adult Prompt Questions:

What do we know?

What is the important information?

What calculation can you write?

Why do we use the × symbol?

What method will you use to find the answer?

Could you use equipment?

Could you draw a jotting?