This week

- Your maths this week is a little bit different as we will be looking solving problems.
- Each day there will some problems that you can solve with an adult to discuss the different ways in which a problem can be solved and to talk about the efficient methods used.
- You will then have a problem or a set of problems to solve as independently as possible.
- If you need any support please do not hesitate to contact me via Class Dojo.

Problem Solving

04.05.20

Date: 04.05.20

LO: To be able to solve problems

Success Criteria

- ✓ I can use my knowledge of reasoning and problem solving to answer questions in different contexts and on different areas of maths
- ✓ I can use different operations to help me solve problems

Starter

Write down all the things you think are needed to help you to solve problems?

Remember to read the question carefully and make sure you understand the question, think about what you need to do to answer the question, and make sure you check you have worked the question out correctly.

Descriptive teaching

Here are some digit cards.

Mary makes a 2-digit number using two of the cards.

How many different numbers can she make?

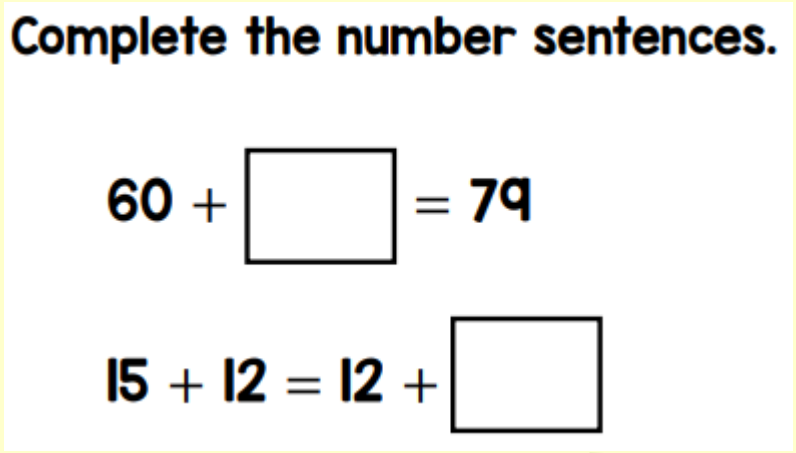
To answer this question I need to find out what its asking me to do.

I need to make a 2 digit number using 2 cards.

I need to use the 3 cards to make as many different 2 digit numbers as I can.

14
15
41
51
45
54

Descriptive doing



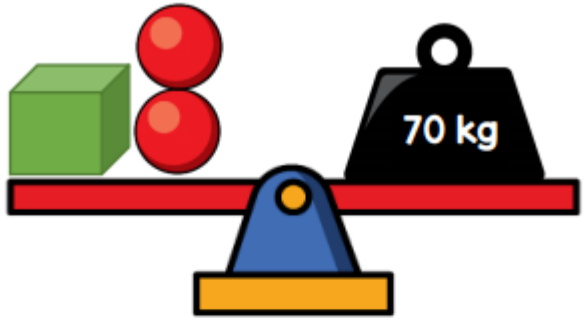
What is the question asking you to do?

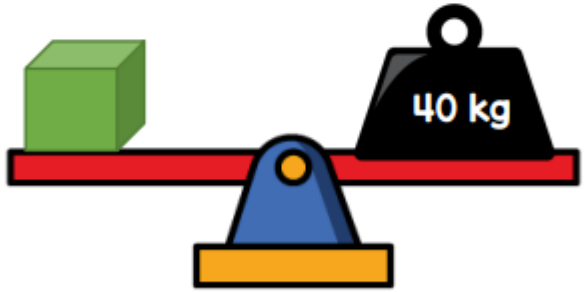
How can you solve the problem?

Try this with a grownup. How did you get the answer?

Reflective teaching

Tom balances some scales.





What is the mass of the sphere?

To answer this question I need to find out what its asking me to do.

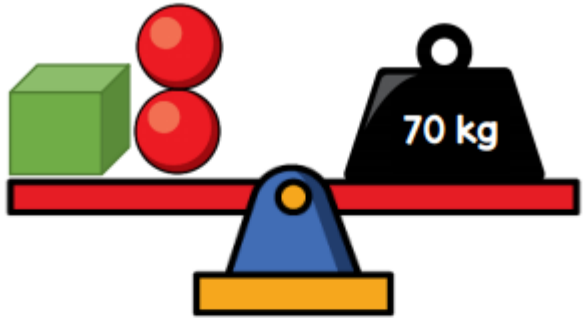
I need to find out how much one sphere weighs.

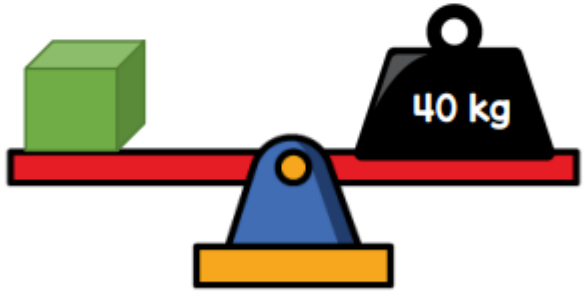
I need to use the 3 cards to find out what 2 spheres weigh first.

I need to half the amount that 2 spheres weigh to find out the weight of one sphere

Reflective doing

Tom balances some scales.





What is the mass of the sphere?

Answer my problem.

Challenges

The following slides have a variety of problems for you to solve, followed by the answers.

You could challenge yourself by completing more than one challenge!

Challenge

5 3 1 4

Place all 4 digit cards below:

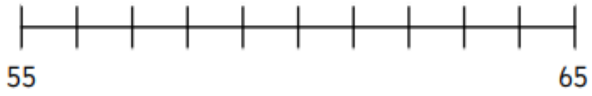
□□ + □□ = ?

What is the largest total you can make?
What is the smallest total you can make?

56 + □ = 61

Complete the calculation above.

Represent the calculation on the number line.



Complete the column addition problems.

		9
+	2	
	7	2
	1	

	3	
+	4	6
		1
	1	

Match the calculation to its equivalent number bond calculation.

38 + 7	38 + 2 + 3
38 + 6	38 + 3 + 4
38 + 5	38 + 1 + 3
38 + 4	38 + 3 + 3

True or false?

Number sentence	True	False
34 + 47 = 81		
38 + 55 = 95		
65 + 27 = 92		
54 + 29 = 85		

Complete the column addition problems.

+		5
	5	9

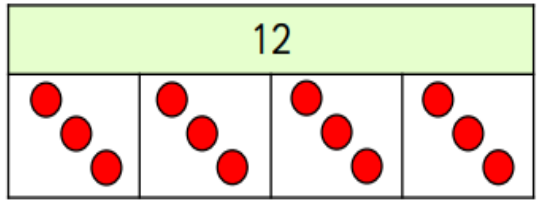
+	4	
	7	8

Create your own for a partner to solve.

Challenge

The bar model represents the number sentence:

$12 \div 3 = 4$



Do you agree? Explain why.

26 marbles are shared equally between 2 jars.

Each jar has 12 marbles in it.

True or false?
Explain your answer.

Sue and Mo have 22p and divide it equally between them.

They get 13p each.

Is this correct?

Explain your answer.

Kat says she has 5 equal groups.

The amount she started with is **greater** than 24 but **less** than 46.

Could Kat have 5 equal groups?
How many different combinations are there?

I can make 3 equal groups from 36?

Is Tam correct?

Prove it.

Matt has 30 apples and shares them equally between 5 friends.

Jess has 30 apples and shares them equally between 10 friends.

Whose friends will receive the most apples?
How do you know?

Challenge- Answers

5 3 1 4

Place all 4 digit cards below:

□□ + □□ = ?

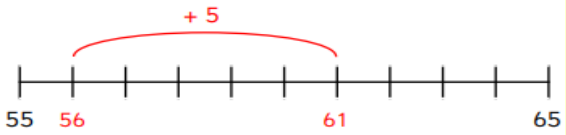
What is the largest total you can make?
What is the smallest total you can make?

Largest total = 53 + 41 = 94
Smallest total = 13 + 45 = 58

56 + 5 = 61

Complete the calculation above.

Represent the calculation on the number line.



Complete the column addition problems.

	4	9			3	5	
+	2	3		+	4	6	
	7	2			8	1	
	1				1		

Match the calculation to its equivalent number bond calculation.

38 + 7	38 + 2 + 3
38 + 6	38 + 3 + 4
38 + 5	38 + 1 + 3
38 + 4	38 + 3 + 3

True or false?

Number sentence	True	False
34 + 47 = 81	✓	
38 + 55 = 95		✓
65 + 27 = 92	✓	
54 + 29 = 85		✓

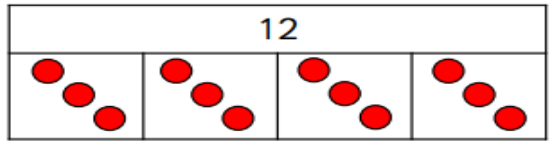
Complete the column addition problems.

	Any total of 5	4			3	Any total of 8	
+		5		+	4		
	5	9			7	8	

Create your own for a partner to solve.

The bar model represents the number sentence:

12 ÷ 3 = 4



Do you agree? Explain why.

No, It represents 12 ÷ 4 = 3.
The bar model represents 12 shared between 4.

26 marbles are shared equally between 2 jars.

Each jar has 12 marbles in it.

True or false?

False

Explain your answer.

Each jar has 13 marbles each (26 ÷ 2 = 13).

Kat and Jack have 28p and divide it equally between them.

They get 13p each.

Is this correct?

No

Explain your answer.

They will get 14p each (28 ÷ 2 = 14).

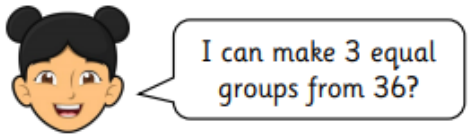
Kat says she has 5 equal groups.

The amount she started with is **greater** than 24 but **less** than 46.

Could Kat have 5 equal groups?
How many different combinations are there?

Yes. Kat could have 5 equal groups:

45 ÷ 5 = 9, 40 ÷ 5 = 8, 35 ÷ 5 = 7,
30 ÷ 5 = 6, 25 ÷ 5 = 5.



Is Tam correct?
Prove it.

Tam is correct.
There will be 3 equal groups of 12 as 36 ÷ 3 = 12

Matt has 30 apples and shares them equally between 5 friends.

Jess has 30 apples and shares them equally between 10 friends.

Whose friends will receive the most apples?
How do you know?

Matt's friends will receive the most with 6 apples each. Whereas, Jess's friends will only receive 3 each.

Problem Solving

05.05.20

Date: 05.05.20

LO: To be able to solve problems

Success Criteria

- ✓ I can use my knowledge of reasoning and problem solving to answer questions in different contexts and on different areas of maths
- ✓ I can use different operations to help me solve problems

Descriptive teaching

Use <, > or = to make these number sentences correct.

5 x 7 ◯ 40

6 x 2 ◯ 7 x 2

10 ÷ 2 ◯ 12 ÷ 2

To answer this question I need to find out what its asking me to do.

I need to know what the signs mean

I need to use my times tables and division facts

< means less than
> means greater than
= means equal to

5x7 = 40
6x2 < 7x2
10÷2 < 12÷2

5x7 is 40
6x2 is 12
7x2 is 14
10÷2 is 5
12÷2 is 6

Descriptive doing

There are 50 children in a school.
15 of the children are girls.
How many more boys than girls are in the school?

What is the question asking you to do?

How can you solve the problem?

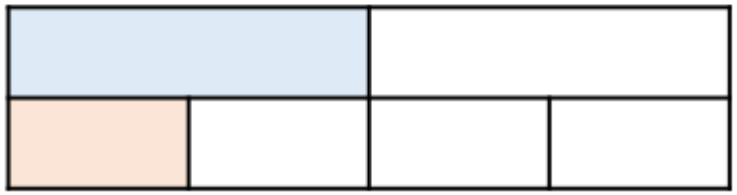
Try this with a grownup. How did you get the answer?

Reflective

Mr Patel writes a number on the board.

- Lee finds $\frac{1}{2}$ of the number.
- Kim finds $\frac{1}{4}$ of the number.
- Lee's answer is 5 more than Kim's.

What is the number Mr Patel started with? This bar model may help you.



How can you solve the problem?

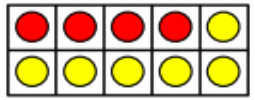
Challenge

Complete the column subtractions problems.

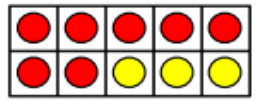
		6		7	
−	2		−		6
	2	5		4	3

Create your own for a partner to solve.

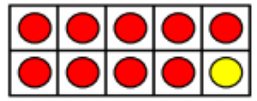
Tick (✓) the number sentence that does **not** match the ten frame. Each counter represents 10.



40 + 60 = 100 ☐



70 + 30 = 100 ☐



10 + 90 = 100 ☐

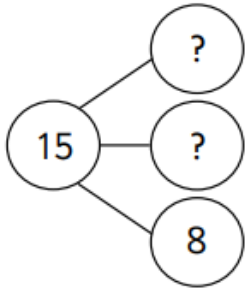
Tick (✓) the statements that are correct.

If I know 3 + 5 = 8,
then I know that 30 + 50 = 80 ☐

If I know 4 + 3 = 7,
then I know that 40 + 30 = 70 ☐

If I know 2 + 4 = 7,
then I know that 20 + 40 = 70 ☐

What could the missing parts be?



List all possibilities:

Use each digit card once to make the comparison true.

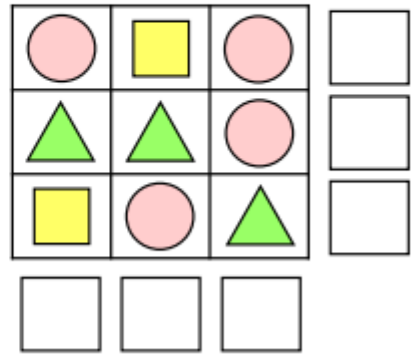
4	3	5

2 + 6 + ___ = ___ + ___ + 2

Can you create your own comparisons using each of the digit cards twice?

△ = 40 ○ = 10 □ = 20

Write the value of each row and column.



Challenge

How many division number sentences can you make from the following numbers?

You may use the cards more than once.

30	5	35	6

List your number sentences then answer them.

Circle the mistake in the table below.

Name	Shape	Vertices
Square		4
Hexagon		7
Octagon		8

Explain how you know.

If I know that 7 x 10 = 70, I also know that 70 ÷ 7 is more than 8.

Is Mo correct?

Explain how you know.

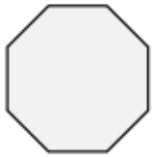
Here are the 2D shapes that you are able to see on a 3D shape.

What is the shape?
Explain how you know.

Use the clues to help you create a tally chart, pictogram and block diagram.

- There are 60 in total.
- There are 10 more apples than bananas.
- There are 6 fewer cherries than apples.
- There are 2 more oranges than cherries.
- There are 10 bananas.

I've drawn a shape with 6 vertices. This is my drawing below...



Is Kat's drawing correct?

If not, what is her mistake?

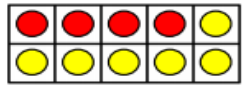
Challenge- Answers

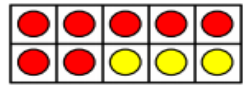
Complete the column subtractions problems.

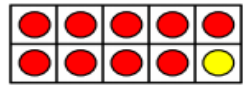
	4	6			7	9
−	2	1		−	3	6
	2	5			4	3

Create your own for a partner to solve.

Tick (✓) the number sentence that does **not** match the ten frame. Each counter represents 10.


40 + 60 = 100 ☐


70 + 30 = 100 ☐


10 + 90 = 100 ✓

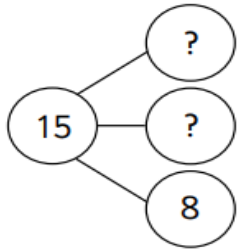
Tick (✓) the statements that are correct.

If I know 3 + 5 = 8,
then I know that 30 + 50 = 80 ✓

If I know 4 + 3 = 7,
then I know that 40 + 30 = 70 ✓

If I know 2 + 4 = 7,
then I know that 20 + 40 = 70 ☐

What could the missing parts be?



List all possibilities:

1 and 6
2 and 5
3 and 4

Use each digit card once to make the comparison true.

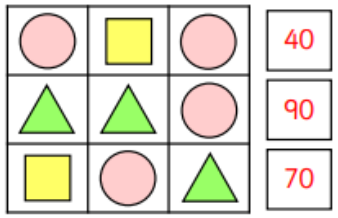
4	3	5

2 + 6 + 3 = 4 + 5 + 2

Can you create your own comparisons using each of the digit cards twice?

▲ = 40 ● = 10 ■ = 20

Write the value of each row and column.



How many division number sentences can you make from the following numbers?

You may use the cards more than once.

30	5	35	6

List your number sentences then answer them.

30 ÷ 5 = 6 30 ÷ 6 = 5 35 ÷ 5 = 7

Circle the mistake in the table below.

Name	Shape	Vertices
Square		4
Hexagon		7
Octagon		8

Explain how you know.

A hexagon has 6 vertices (not 7).

If I know that 7 x 10 = 70, I also know that 70 ÷ 7 is more than 8.

Is Mo correct?
Yes

Explain how you know.
70 ÷ 7 = 10

Here are the 2D shapes that you are able to see on a 3D shape.

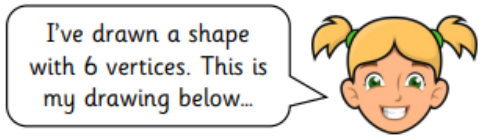
What is the shape? Cylinder
Explain how you know.

A cylinder = 2 circles and 1 rectangle

Use the clues to create a tally chart and pictogram.

There are 60 in total.
There are 10 more apples than bananas.
There are 6 fewer cherries than apples.
There are 2 more oranges than cherries.
There are 10 bananas.

10 bananas, 20 apples, 14 cherries, 16 oranges.



Is Kat's drawing correct?
No.
If not, what is her mistake?
Kat has drawn an octagon (8 vertices) instead of a hexagon.

Problem Solving

06.05.20

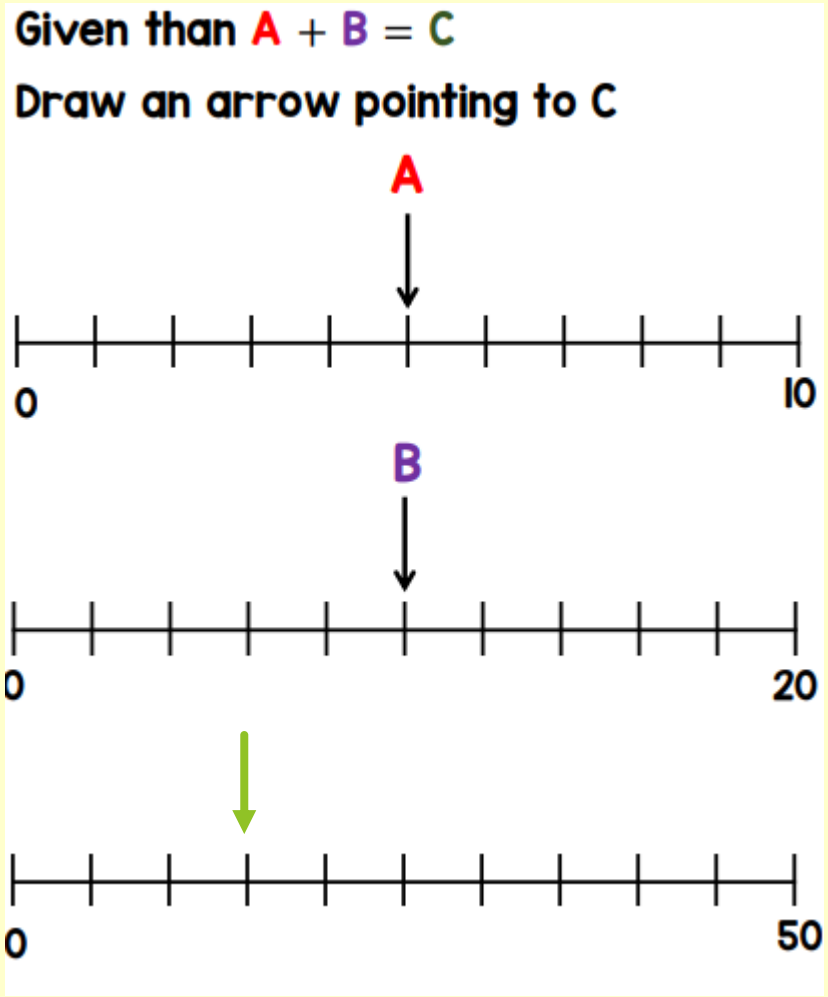
Date: 06.05.20

LO: To be able to solve problems

Success Criteria

- ✓ I can use my knowledge of reasoning and problem solving to answer questions in different contexts and on different areas of maths
- ✓ I can use different operations to help me solve problems

Descriptive teaching



To answer this question I need to find out what its asking me to do.

I need to know what A is

I need to know what B is

A=5
B=10

5+10=15
C=15
The last number line is going up in 5's.
I need to put my arrow at 15

Descriptive doing

Amir has a box of 50 counters.
12 of the counters are red.
17 of the counters are blue.
The rest of the counters are yellow.
Which coloured counter are there more of?

What is the question asking you to do?

How can you solve the problem?

Try this with a grownup. How did you get the answer?

Reflective

How can you solve the problem?

Challenge

Sue is counting backwards in 5s from 73.

Each number Mo says will be odd.

Always, sometimes or never?
Explain your answer.

6 3 5 7

Place each number in the comparison to make it true. How many ways can you find?

□ □ < □ □

What number could go in the box to make the comparison true?

9 + 6 10 + ?

List all possibilities.

True or false?

	True	False
Ten less than 43 is 34.		
28... 38... 48... The next number is 68.		
Ten more than 62 is ten less than 82.		
Ten more than 27 is 10 less than 47.		

7 tens and 2 ones is less than ____ which is less than 79.

Complete the comparison above using only odd numbers.

List all possibilities below.

Cross (x) the number sentences that are incorrect.

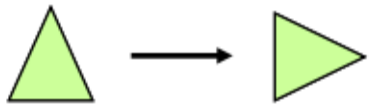
a 14 + 5 = 12 + 7 □

b 10 + 7 > 11 + 6 □

c 18 – 6 < 16 – 4 □

d 17 – 8 > 3 + 4 □

Challenge



I have rotated the shape three quarter turns clockwise.

What mistake has Jess made?

Draw what is should look like after three quarter turns clockwise?

Draw the missing half of the shape that would be reflected in the line of symmetry.

What is the 2D shape you have completed?

Explain how you know.

Four lots of 5m $>$ $\frac{1}{4}$ of 100m

True

False

Explain how you know.

The ribbon below measures 12cm in length.

If we stretch the ribbon it will still measure 12cm in length.

True

False

Explain your answer.

The triangle is to the left of the circle.
The pentagon is to the right of the circle.

Is Rob correct?
Explain how you know.

Order the ribbons from **shortest** to **longest**.

A is double 23 cm.

B is half of 80 cm.

C is less than 43cm but more than 41cm.

Shortest B C A Longest

Challenge- Answers

Sue is counting backwards in 5s from 73.

Each number Mo says will be odd.

Always, sometimes or never?
Explain your answer.

Sometimes.
Each number will end in either 3 or 8 so is a mixture of odd and even numbers.

6 3 5 7

Place each number in the comparison to make it true. How many ways can you find?

□□ > □□

Any valid comparison, e.g. 75 > 63

What number could go in the box to make the comparison true?

9 + 6 > 10 + ?

List all possibilities.

4, 3, 2, 1 and 0.

True or false?

	True	False
Ten less than 43 is 34.		✓
28... 38... 48... The next number is 68.		✓
Ten more than 62 is ten less than 82.	✓	
Ten more than 27 is 10 less than 57.		✓

7 tens and 2 ones is less than ____ which is less than 79.

Complete the comparison above using only odd numbers.

List all possibilities below.

73, 75, 77.

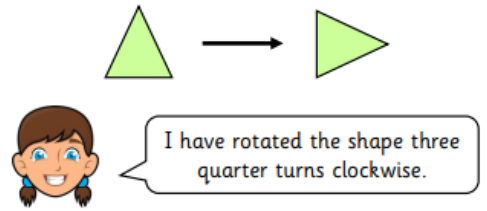
Cross (x) the number sentences that are incorrect.

a) 14 + 5 = 12 + 7 ☐

b) 10 + 7 > 11 + 6 X

c) 18 – 6 < 16 – 4 X

d) 17 – 8 > 3 + 4 ☐

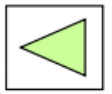


I have rotated the shape three quarter turns clockwise.

What mistake has Jess made?

Jess has rotated the shape a quarter turn clockwise or three quarter turns anticlockwise.

Draw what is should look like after three quarter turns clockwise?



Four lots of 5m > $\frac{1}{4}$ of 100m

True ☐

False ☐

Explain how you know.

Four lots of 5m = 20m
$\frac{1}{4}$ of 100m = 25m.
Therefore four lots of 5m < $\frac{1}{4}$ of 100m (not >).

The triangle is to the left of the circle. The pentagon is to the right of the circle.

Is Rob correct?
Explain how you know.

No. The triangle is to the **right** of the circle and the pentagon is to the **left** of the circle.

Draw the missing half of the shape that would be reflected in the line of symmetry.

What is the 2D shape you have completed?
Explain how you know.

Pentagon as it has 5 sides and 5 vertices.

The ribbon below measures 12cm in length.

If we stretch the ribbon it will still measure 12cm in length.

True ☐ False ✓

Explain your answer.

If stretched out it will measure **more** than 12cm as it will be longer.

Order the ribbons from **shortest** to **longest**.

A is double 23cm. (46cm)

B is half of 80cm. (40cm)

C is less than 43cm but more than 41cm. (42cm)

Shortest | B | C | A | Longest

Problem Solving

07.05.20

Date: 07.05.20

LO: To be able to solve problems

Success Criteria

- ✓ I can use my knowledge of reasoning and problem solving to answer questions in different contexts and on different areas of maths
- ✓ I can use different operations to help me solve problems

Descriptive teaching

Sam has £50

He buys this cap and jumper with his money.

How much money does he have left?

To answer this question I need to find out what its asking me to do.

I know how much money Sam has to start with.

I know how much each object costs

I need to know how much he spends by adding the 2 amounts together.
£19+£15= £34
10+10= 20
9+5=14
20+14= 34

Now I need to see how much he has left by subtracting they money he spent from the total.
£50-£34= £16
50-30=20
20-4=16

Descriptive doing

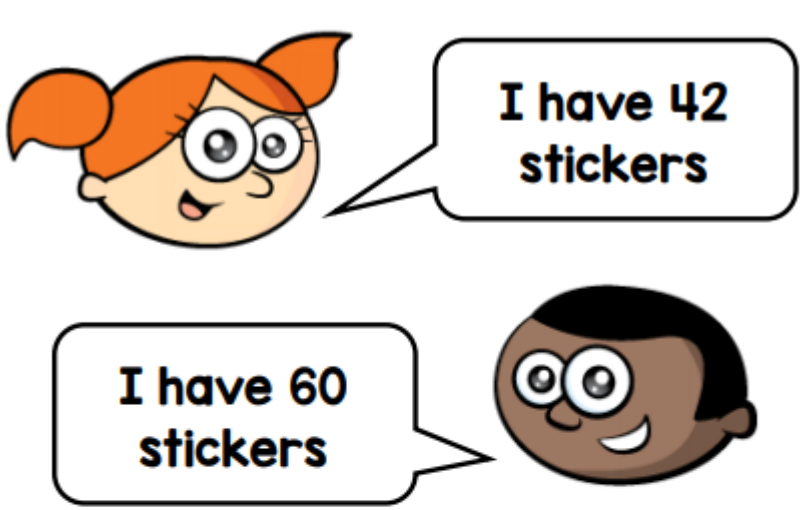
One half of a number is 6
What is double the number?

What is the question asking you to do?

How can you solve the problem?

Try this with a grownup. How did you get the answer?

Reflective



Mo gives Alex some stickers.
They now have the same number of stickers.

How many stickers does Mo give Alex?

How can you solve the problem?

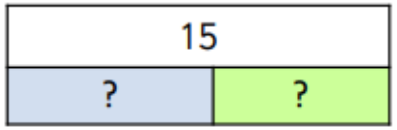
Challenge

Colour the mistake in each number track.

31	33	34	37	39	41
93	91	89	88	85	83
65	60	55	50	45	35

Rewrite each number track correctly.

Create your own fact families. How many different ways can it be completed?



___ + ___ = ___ ___ − ___ = ___

___ + ___ = ___ ___ − ___ = ___

___ = ___ + ___ ___ = ___ − ___

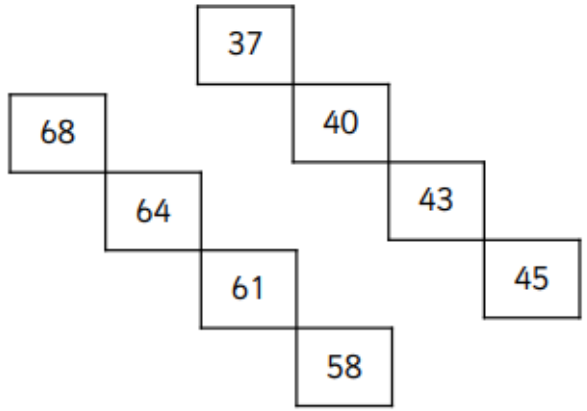
___ = ___ + ___ ___ = ___ − ___

Mo has 7 sweets. He gives 4 away.
Asha has 70 sweets. She gives _____ away.
Asha has 30 sweets left.

True or false?

	True	False
Tam has 40 sweets left.		
Dom gave 4 sweets away.		
Tam has 5 sweets left.		
Dom gave 40 sweets away.		

Colour the mistake in each number sequence.



Sue makes 2-digit numbers using the number cards below.
She can only use each card once per number.

Which 2-digit numbers can Sue make:

a) Counting in 2s from 8?
b) Counting in 5s from 15?
c) Counting in 10s from 30?

The 9th number on the number track below would be 45.

27	30	33	36	39

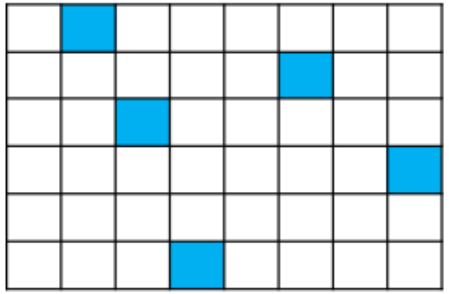
True or false?
Explain how you know.

Continue the pattern up to 60.

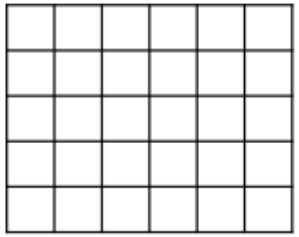
Challenge

Part of a shape has been shaded.

Continue to shade the shape to show $\frac{1}{4}$.



Jess says to show $\frac{1}{3}$ she needs to shade 3 columns.



Is Jess correct?
Prove it by shading.

Use >, < or = to compare each statement.

1) Half of 28 ____ 12

2) 7 ____ $\frac{1}{2}$ of 18

3) 7+ 8 ____ Half of 30

4) $\frac{1}{2}$ of 50 ____ 31 – 8

5) Half of 48 ____ double 24


Sue

I have $\frac{1}{4}$ of £40.


Che

I have a half of £24.

Who has the most?
Explain how you know.

Calculate each total then order who has most to least.


Mo

My total is half of 5 x 8.


Kat

My total is $\frac{1}{2}$ of 36.


Gina

My total is half forty-four.

$\frac{3}{4}$ is cut from each piece of ribbon.

$\frac{3}{4}$ of ribbon A is 12cm

$\frac{3}{4}$ of ribbon B is 15cm

How long was each piece of ribbon before being cut?

Which piece of ribbon was the shortest and by how much?

Challenge- Answers

Colour the mistake in each number track.

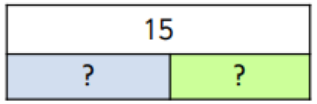
31	33	35	37	39	41

93	91	89	87	85	83

65	60	55	50	45	40

Rewrite each number track correctly.

Create your own fact families. How many different ways can it be completed?
Any valid answer.



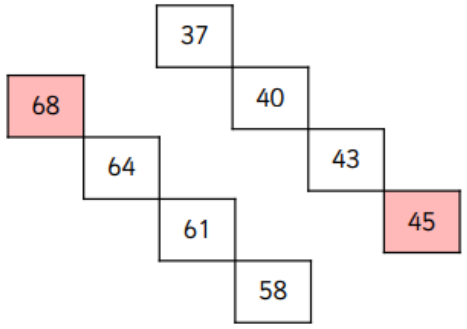
___ + ___ = ___ ___ − ___ = ___
___ + ___ = ___ ___ − ___ = ___
___ = ___ + ___ ___ = ___ − ___
___ = ___ + ___ ___ = ___ − ___

Tam has 9 sweets. She gives 4 away.
Dom has 90 sweets. He gives _____ away.
Dom has 50 sweets left.

True or false?

	True	False
Tam has 40 sweets left.		✓
Dom gave 4 sweets away.		✓
Tam has 5 sweets left.	✓	
Dom gave 40 sweets away.	✓	

Colour the mistake in each number sequence.



Sue makes 2-digit numbers using the number cards below.
She can only use each card once per number.

3	5	0

Which 2-digit numbers can Sue make:

a) Counting in 2s from 6? 30, 50
b) Counting in 5s from 20? 30, 35, 50
c) Counting in 10s from 10? 30, 50

The 9th number on the number track below would be 45.

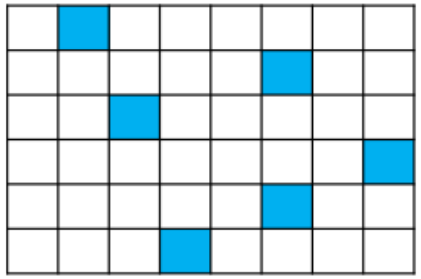
27	30	33	36	39

True or false? Explain how you know.

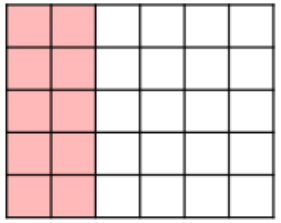
False as it would be: 42, 45, 48, 51.
51 is the 9th number.

Continue the pattern up to 60.
42, 45, 48, 51, 54, 57, 60.

Part of a shape has been shaded.
Continue to shade the shape to show $\frac{1}{4}$.
48 squares in total. $\frac{1}{4}$ of 48 = 12.
Children will shade 6 more squares.



Jess says to show $\frac{1}{3}$ she needs to shade 3 columns.



Is Jess correct?
No Jess needs to shade 2 columns.
Prove it by shading.

Calculate each total then order who has most to least. Gina (22), Mo (20), Kat (18).


Mo: My total is half of 5 x 8. 20


Kat: My total is $\frac{1}{2}$ of 36. 18


Gina: My total is half forty-four. 22

Use >, < or = to compare each statement.

1) Half of 28 **>** 12
2) 7 **<** $\frac{1}{2}$ of 18
3) 7+ 8 **=** Half of 30
4) $\frac{1}{2}$ of 50 **>** 31 – 8
5) Half of 48 **=** double 24


Sue: I have $\frac{1}{4}$ of £40.


Che: I have a half of £24.

Who has the most?
Explain how you know.

Che has the most with £12. Sue only has £10.

$\frac{3}{4}$ is cut from each piece of ribbon.

$\frac{3}{4}$ of ribbon A is 12cm

$\frac{3}{4}$ of ribbon B is 15cm

How long was each piece of ribbon before being cut? Ribbon A = 16cm and Ribbon B = 20cm
(Children may draw a bar model to help them.)
Which piece of ribbon was the shortest and by how much?
Ribbon A was shorter by 4cm.

Length and Height

08.05.20

Date: 07.05.20

LO: To be able to solve problems

Success Criteria

- ✓ I can use my knowledge of reasoning and problem solving to answer questions in different contexts and on different areas of maths
- ✓ I can use different operations to help me solve problems

Descriptive teaching

Tommy thinks of a two-digit number.

My number ends in a 5

Does Tommy's number have to be odd? Explain your answer.

To answer this question I need to find out what its asking me to do.

I know Tommy's number is 2 digits.

I know his number ends in a 5

I need to know my odd and even numbers.

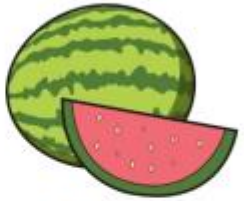
I know that even numbers are in the 2 times tables: 0,2,4,6,8,10

Now I know my odd numbers must be: 1,3,5,7,9

I know that Tommy's number is odd.
I know this because 5 is an odd number and his number ends in a 5.

Descriptive doing

The cost of a pineapple is twice the cost of a melon.



£4 each

How much do the pineapple and melon cost altogether?

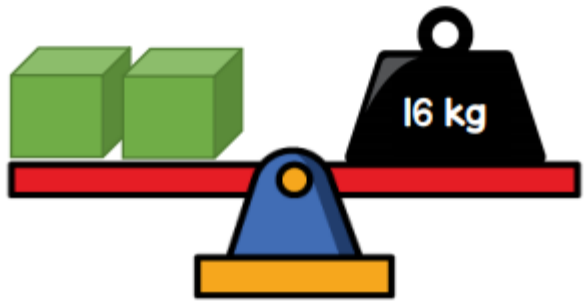
What is the question asking you to do?

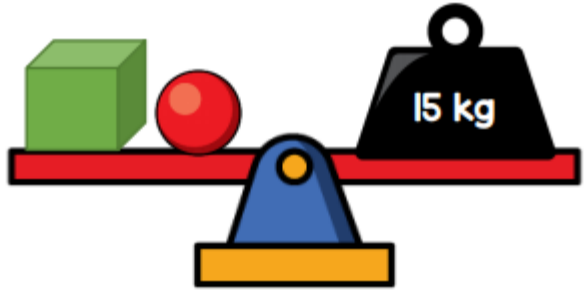
How can you solve the problem?

Try this with a grownup. How did you get the answer?

Reflective

Gina balances some scales.





What is the mass of the sphere?

How can you solve the problem?

Challenge

Match the calculation to its equivalent number bond calculation.

47 – 8	47 – 8 – 1
47 – 7	47 – 4 – 2
47 – 9	47 – 5 – 3
47 – 6	47 – 4 – 3

Complete the column subtraction problems.

	□	6		5	□		
–	2	□	–	□	3		
	6	2		2	6		

Create your own for a partner to solve.

Beth has 15 sweets.
Ben has 25 sweets.
Che has 37 sweets.

Express your answers as number sentences:

a) How many more sweets does Che have than Beth?

b) How many more sweets does Ben have than Beth?

c) How many sweets do Che and Ben have in total?

The missing number of ones is less than 5:

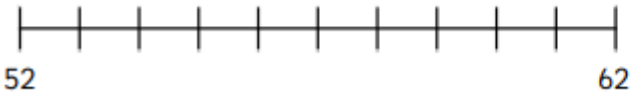
8 tens + 7 ones – 3 tens + __ ones =

What is the largest total you can make?

What is the smallest total you can make?

My answer is 54.
I counted back from 61.
How many steps did I count back? _____

Show this on the number line below.



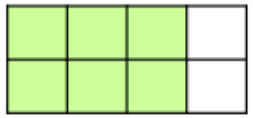
Complete the column subtraction problems.

	4	□		5	2		
–	□	9	–	□	□		
	1	4		1	5		

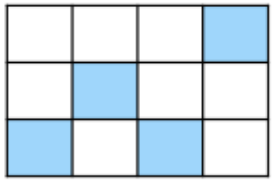
Create your own for a partner to solve.

Challenge

I have shaded $\frac{3}{4}$ of the shape.



Is Rob correct?
Explain your answer.



The shape above shows $\frac{1}{4}$.

True or false?

Explain your answer.

Complete the number track.

$2\frac{3}{4}$	3	$3\frac{1}{4}$			

Describe the pattern.

What would be the 10th number?

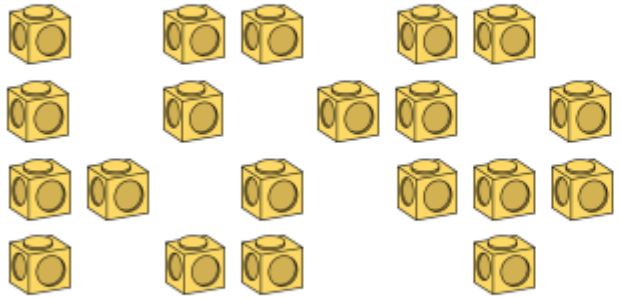
Matt shows $\frac{1}{4}$ of his ribbon.

Rob shows $\frac{1}{2}$ of his ribbon.

Asha shows $\frac{1}{3}$ of her ribbon.

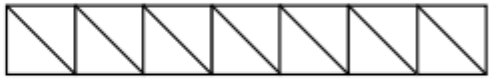
Whose whole ribbon is:
a) the longest?
b) the shortest?
Explain how you know.

How many cubes need to be circled to represent one quarter?



Show this.

To show one half, I should shade in 6 triangles.



Is Mo correct?
Explain how you know and colour one half.

Challenge- Answers

Match the calculation to its equivalent number bond calculation.

47 – 8	47 – 8 – 1
47 – 7	47 – 4 – 2
47 – 9	47 – 5 – 3
47 – 6	47 – 4 – 3

Complete the column subtraction problems.

	8	6			5	9	
–	2	4		–	3	3	
	6	2			2	6	

Create your own for a partner to solve.

Beth has 15 sweets.
Ben has 25 sweets.
Che has 37 sweets.

Express your answers as number sentences:

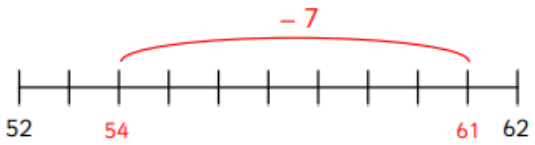
a) How many more sweets does Che have than Beth? 37 – 15 = 22

b) How many more sweets does Ben have than Beth? 25 – 15 = 10

c) How many sweets do Che and Ben have in total? 37 + 25 = 62

My answer is 54.
I counted back from 61.
How many steps did I count back? 7

Show this on the number line below.



The missing number of ones is less than 5:

8 tens + 7 ones – 3 tens + __ ones =

What is the largest total you can make?

What is the smallest total you can make?

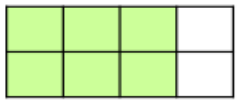
Largest total: 57 as 87 – 30.
Smallest total: 53 as 87 – 34.

Complete the column subtraction problems.

	$^{3}\not{4}$	$^{1}3$			$^{4}\not{5}$	$^{1}2$	
–	2	9		–	3	7	
	1	4			1	5	

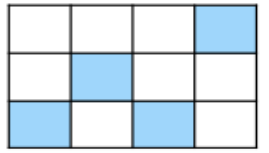
Create your own for a partner to solve.

I have shaded $\frac{3}{4}$ of the shape.



Is Rob correct?
Explain how you know.

Yes as $\frac{3}{4}$ of 8 is 6.



The shape above shows $\frac{1}{4}$.

True or false?
False

Explain your answer.
There are 12 squares in total, 3 should be shaded to show a quarter.

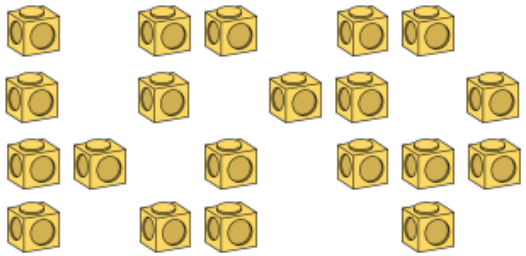
Complete the number track.

$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{2}{4}$	$3\frac{3}{4}$	4

Describe the pattern.
It goes up in quarters each time.

What would be the 10th number? 5

How many cubes need to be circled to represent one quarter? 5 cubes



Show this. (Children will circle 5 cubes.)

Matt shows $\frac{1}{4}$ of his ribbon.

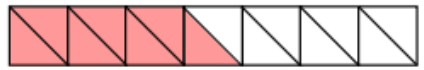
Rob shows $\frac{1}{2}$ of his ribbon.

Asha shows $\frac{1}{3}$ of her ribbon.

Whose whole ribbon is:
a) the longest? b) the shortest?
Explain how you know.

Matt's is the longest as he will have 4 parts altogether so four times the length. Rob's is the shortest as he only has 2 parts altogether.

To show one half, I should shade in 6 triangles.



Is Mo correct?
Explain how you know and colour one half.

7 triangles would need to be shaded to show one half.