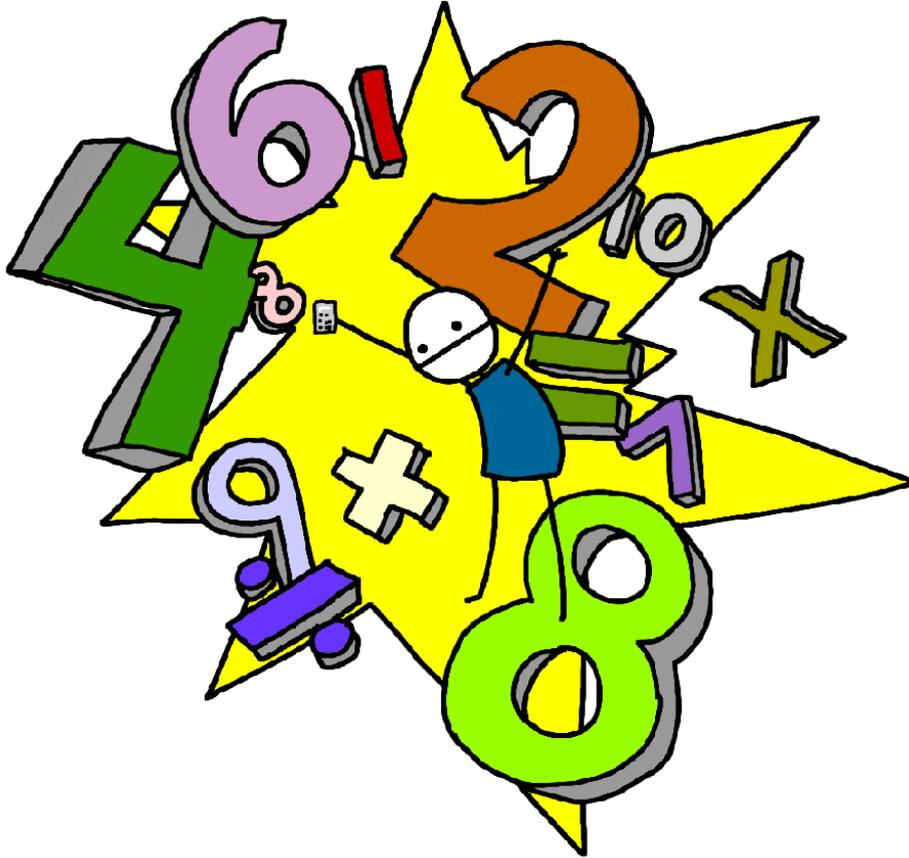


Year 5 and 6 Maths



Week 5

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What is two-thirds of one hundred and fifty? _____

Multiply three by eight, then subtract nine. _____

What must be added to eight squared to make one hundred? _____

Add the five numbers together.

30, 40, 50, 60, 70

Add together 90, 110 and 120

Add together 6 and 66

Multiply 91 by 2

What is thirty-two multiplied by eight?

Look at your answer sheet.

Put a ring around the **two** prime numbers in the list.

31 33 35 37 39

Double 150 and then double your answer

What number is exactly half way between 50 and 80?

A bowl holds 8.5 litres of water. If I spill 3.7 litres, how many litres are left?

If the bowl is only half full, how many litres does it hold?

How many litres are in 3 bowls?



Main Maths Activity

Which measurement will you use?

Kilometres, metres, centimetres or millimetres...

	kilometres	metres	centimetres	millimetres
				
				
				
				
				
				
				
				

Can you remember how many millimetres there are in centimetre? _____

How many centimetres are there in a metre? _____

How many metres are there in a kilometre? _____

What is the meaning of 'centi' and 'milli'? _____

23 mm	2.3 cm
19 mm	cm
36 mm	cm
50 mm	cm
67 mm	cm
71 mm	cm
184mm	cm
298mm	cm
1104mm	cm
2617mm	cm

129 cm	1.29 m
246 cm	m
309 cm	m
127 cm	m
237 cm	m
147 cm	m
257 cm	m
678 cm	m
2460 cm	m
10653 cm	m

345 m	0.345 km
890 m	km
763 m	km
1021 m	km
3458 m	km
9002 m	km
12763 m	km
17825 m	km
33404 m	km
45784 m	km

How would you convert millimetres to kilometres?

Kilometres to centimetres?

Metres to millimetres?

Can you write some success criteria to do these?

Mental Maths Warm Up**DAY TWO**

Add together 40, 120 and 190. _____

Multiply 91 by 2. _____

What is forty nine multiplied by seven? _____

What is the next odd number after 999? _____

Take away 95 from 110. _____

Add together 9, 19 and 29. _____

What is 120 add 80? _____

How many 7s are there in 630? _____

Multiply 75 by 20. _____

Subtract 0.1 from 2. _____

What is one fifth of 1000? _____

Multiply 8 by 4 then add 50. _____

Jake has 49 crayons. Harry has 28. What is the difference?

How many crayons do they have altogether?

Jake loses 16 crayons. How many do they now have altogether?



The farmer's chickens lay 5 eggs a day. How many eggs will he have in a fortnight?

How many eggs will he have after 13 weeks?

How many eggs will the chickens lay in 4 months?



Main Maths Activity**Mean**

Mean is another word for average, and is found by adding a set of values and dividing the total by the number of values in the set.

For example, the mean of 2, 4, 5, 7 and 12 is 6 because $(2 + 4 + 5 + 7 + 12 = 30 \div 5 = 6)$

Find the mean of the following sets of data:

(Add them all up and divide by how many there are)

A. 8, 3, 52, 48, 7, 78

B. 8, 9, 12, 15, 21, 22

C. 24, 27, 21, 25, 28

D. 150, 155, 157, 163, 170

Misconception

Jess thinks that the mean average of these numbers is 7. Do you agree or disagree with her? Show your reasoning.

5, 12, 8, 3, 2, 4, 1

What had Jess done incorrectly to get an answer of 7?

Problem Solving

6, 2, 8, 10, 5, ____

Here as a set of five numbers with one missing. What would the last number need to be to give a mean of:

A. 6?

B. 7?

Reasoning

Josie and her brothers and sisters measured their heights and found the mean average. The mean was 150cm. Josie forgot her height. Can you work out the missing height?

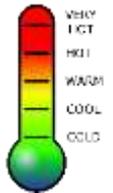
150cm, 170cm, 140cm, 155cm, _____

The mean number of goals scored in 6 football matches was 4. Use this information to calculate how many goals were scored in the 6th match:

Match Number	Number of Goals
1	8
2	4
3	6
4	2
5	1
6	

The temperature for UK on a holiday website is found by taking the mean average from 8 different parts of the country. What should they put up if the temperature in the 8 locations are:

12°C 18°C 9°C 12°C 15°C 20°C 21°C 13°C



4 people have the following number of counters: 4, 6, 3, 7.

If we were to share the counters equally between them, how many would they get each?



Tickets to the cinema cost £6 each.

5 friends go to a see a film and they have the following amounts of money each:

£3 £8 £6 £4 £3

Do they have enough money between them to go to the cinema?



Mental Maths Warm Up**DAY THREE**

How many sixes are there in 36? _____

Add 308 to 402. _____

What is 3×150 ? _____

Add together 8 and 7 then multiply the result by 4. _____

How many twos are there in 440? _____

What is 6 multiplied by 20 divided by 4? _____

Write the multiple of 8 that is between 100 and 110. _____

Add together two and a half and three and a half and four and a half. _____

What is the remainder when 27 is divided by 5? _____

Complete this multiplication grid!

x	12	15	20	50
5				
6				
7				
8				
9				

Georgia cuts 27 cm off a piece of ribbon. It is now 188 cm long.
What did it measure at the start?

She then cuts it in half.
What does each half measure?

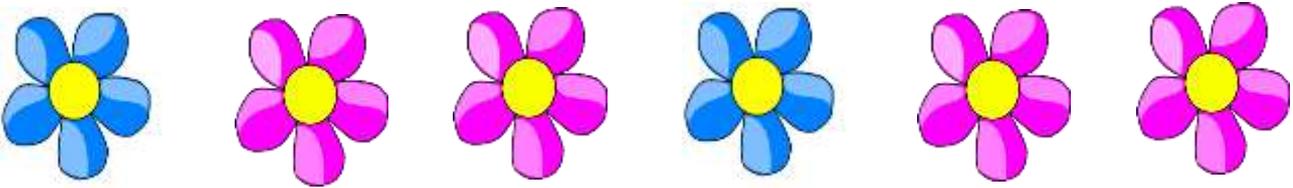
She wants a piece that is 35cm long.
What must she trim off to get this?



Main Maths Activity**Ratio**

A ratio is used to compare values, showing the relative value of one to another. It is taught using real-life examples, such as comparing the number of boys to girls in class. For example, the ratio of boys to girls was 2:1, meaning there are two boys for every one girl.

Complete the sentences.



For every two blue flowers there are ____ pink flowers.

For every blue flower there are _____ pink flowers.

How would your sentences change if there were 2 more blue flowers?

How would your sentences change if there were 10 more pink flowers?

Can you write a "For every..." sentence for the number of boys and girls in your class?

How many "For every..." sentences can you write to describe these counters?



Example- Two people share £350 in the ratio 1:6.

Calculate each share.

£350

£50	£50	£50	£50	£50	£50	£50
-----	-----	-----	-----	-----	-----	-----

£50	
-----	--

Now you have a go!

Divide 32 in the ratio 5:3.

32

--	--	--	--	--	--	--	--

The ratio of the number of boys to the number of girls in a school is 4:5

There are 95 girls in the school.

Work out the total number of students in the school.

--	--	--	--	--	--	--	--	--

--

Mental Maths Warm Up**DAY FOUR**

How many sevens are there in 84? _____

Add 809 to 389. _____

What is 4×175 ? _____

Add together 4 and 11 then multiply the result by 4.

How many threes are there in 666?

What is 7 multiplied by 15 divided by 5?

Write the multiple of 9 that is between 100 and 110

Add together two and a quarter and four and three-quarters and one and a half.

What is the remainder when 38 is divided by 6? _____

Farmer John has a field that measures 53 m long and 25 m wide. Farmer Fran has a field that measures 52 m long and 26 m wide.

Helen thinks that they will have the same area

because the numbers have only changed by one digit each.

Do you agree? Prove it.



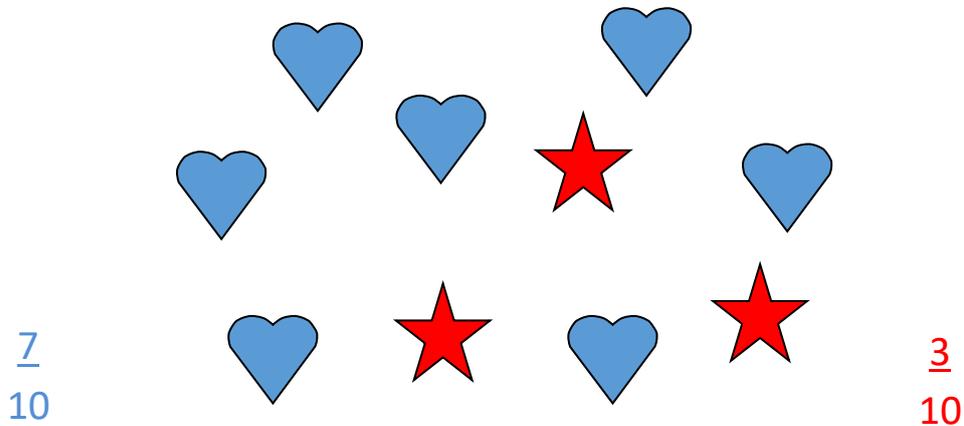
$22 \times 111 = 2442$
$23 \times 111 = 2553$
$24 \times 111 = 2664$

What do you think the answer to 25×111 will be?

What do you notice? Does this always work?

Main Maths Activity**Proportion**

A proportion is a portion or part of a whole. It is usually shown as a fraction.



7 blue hearts

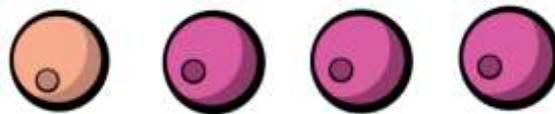
3 red stars

Danni is making bracelets to sell.
She adds beads to them.



She uses one pink bead for every three purple beads.

$\frac{1}{4}$ pink and $\frac{3}{4}$ purple.



She makes a bracelet with 28 beads.

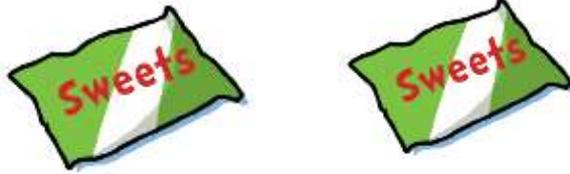
The cost of the band for the beads is £2.75

The cost of a pink bead is £1.05

The cost of a purple bead is £1.60

How much does it cost to make the bracelet?

Harry buys two bags of sweets.



In the first packet – for every three strawberry sweets there are five lime ones.

In the second packet – for every three strawberry sweets there is one lime sweet.

Each packet contains the same number of sweets.

In the second packet there are 12 strawberry sweets.

How many strawberry sweets are in the first packet?

Fill in the table at the bottom of the page with the different counter proportions.

<p>4/10 red 6/10 green</p>		



What is double 34? _____

Subtract 21 from 100. _____

What is 4 multiplied by 9? _____

Add together 23 and 48. _____

Add together 0.2, 0.4 and 0.6. _____

6 times a number is 3000. What is the number? _____

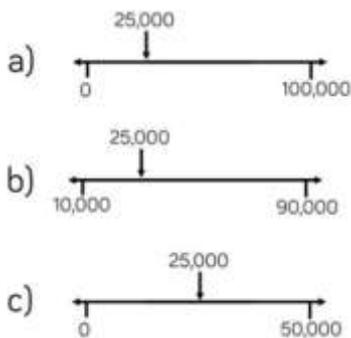
What is $30 \times 40 \times 10$? _____

Write the number that is exactly half way between 1.1 and 1.2. _____

5 times a number is 200. What is the number? _____

What is 7.5 divided by 100? _____

Which estimate is accurate?



Explain how
you know.

I'm thinking of a number.

After I add 5,241 and subtract 352, my
number is 9,485.

What was my original number?

Main Maths Activity

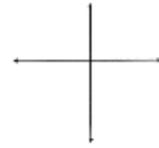
Parallel

A parallel line is a straight line that always stays the same distance from another line and never meets. Shapes are often used to teach parallel lines. For example, a square has two pairs of parallel lines.

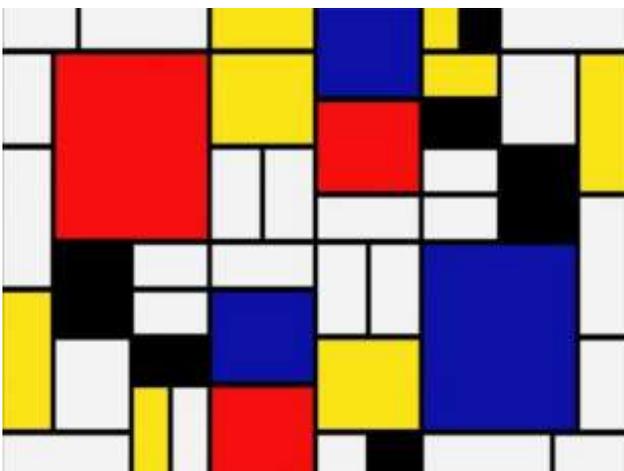


Perpendicular

Perpendicular lines are two lines that meet to create a right angle, often seen in shapes.



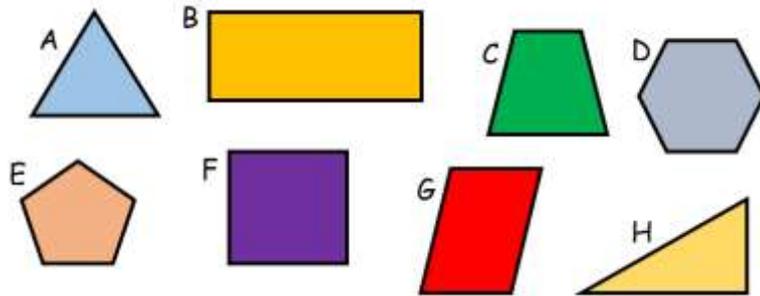
Which of these shapes is parallel, perpendicular or neither?



Piet Mondrian was an abstract artist. Can you see the parallel and perpendicular lines in this painting?

Parallel and Perpendicular lines in real life!

			
Parallel: Perpendicular:	Parallel: Perpendicular:	Parallel: Perpendicular:	Parallel: Perpendicular:
			
Parallel: Perpendicular:	Parallel: Perpendicular:	Parallel: Perpendicular:	Parallel: Perpendicular:



- Which shapes have 2 or more horizontal lines? _____
- Which shapes have only 1 vertical line? _____
- How many sets of parallel lines does Shape C have? _____
- Do any shapes have no parallel lines? _____
- Which shapes have more than 1 set of parallel lines? _____
- How many sets of perpendicular lines does Shape F have? _____
- Which shapes have no perpendicular or parallel lines? _____
- Which shape has 2 horizontal lines and 2 sets of parallel lines? _____
- Which shapes have no perpendicular lines? _____
- Which shapes have 4 sets of perpendicular lines? _____
- Do all of the quadrilateral shapes have 2 sets of parallel lines? Explain your answer. _____

- Which shape has 3 sets of parallel lines? _____