Thursday 25thJanuary 2024

Year 1& 2 Parent Maths workshop

Welcome!

We hope to provide you with as much information as we can so you have a good understanding of the Mathematics Expectations by the end of Year 2.

If you have any questions after reading through this presentation, please email your questions to rmiah@Gascoigne.co.uk

Thank you,

Mrs Miah

Maths Lead

Year 1 – N.C End of Year Expectations

Year 1 Maths

Number and place value

Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.

Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.

Given a number, identify one more and one less.

Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.

Read and write numbers from 1 to 20 in numerals and words.

Number – addition and subtraction

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.

Represent and use number bonds and related subtraction facts within 20.

Add and subtract one-digit and two-digit numbers to 20, including zero.

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.

Number – multiplication and division

Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Number fractions

Recognise, find and name a half as one of two equal parts of an object, shape or quantity.

Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

Measurement

Compare, describe and solve practical problems for:

- **lengths and heights** [for example, long/short, longer/shorter, tall/short, double/half]
- **mass/weight** [for example, heavy/light, heavier than, lighter than]
- **capacity and volume** [for example, full/empty, more than, less than, half, half full, quarter]
- **time** [for example, quicker, slower, earlier, later]

Measurement continued

Measure and begin to record the following:

- lengths and heights
- mass/weight
- capacity and volume
- time (hours, minutes, seconds)

Recognise and know the value of different denominations of coins and notes.

Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].

Recognise and use language relating to dates, including days of the week, weeks, months and years.

Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Geometry – properties of shapes

Recognise and name common shapes, including:

- **2-D shapes** [for example, rectangles (including squares), circles and triangles]
- **3-D shapes** [for example, cuboids (including cubes), pyramids and spheres]

Geometry – position and direction

Describe position, direction and movement, including whole, half, quarter and three-quarter turns.

Year 2 – N.C End of Year Expectations

Year 2 Maths

Number and place value

Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.

Recognise the place value of each digit in a two-digit number (tens, ones).

Identify, represent and estimate numbers using different representations, including the number line.

Compare and order numbers from 0 up to 100; use <, > and = signs.

Read and write numbers to at least 100 in numerals and in words.

Use place value and number facts to solve problems.

Number – addition and subtraction

Solve problems with addition and subtraction:

- **using concrete objects and pictorial representations, including those involving numbers, quantities and measures**
- **applying their increasing knowledge of mental and written methods**

Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:

- a two-digit number and ones
- a two-digit number and tens
- two two-digit numbers
- adding three one-digit numbers

Number – multiplication and division

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.

Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Number – Fractions

Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity.

Write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½

Measurement

Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.

Compare and order lengths, mass, volume/capacity and record the results using >, < and =.

Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.

Find different combinations of coins that equal the same amounts of money.

Measurement continued

Compare and sequence intervals of time.

Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.

Know the number of minutes in an hour and the number of hours in a day.

Geometry – properties of shapes

Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.

Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.
Identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid].

Compare and sort common 2-D and 3-D shapes and everyday objects.

Geometry – position and direction

Order and arrange combinations of mathematical objects in patterns and sequences.

Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

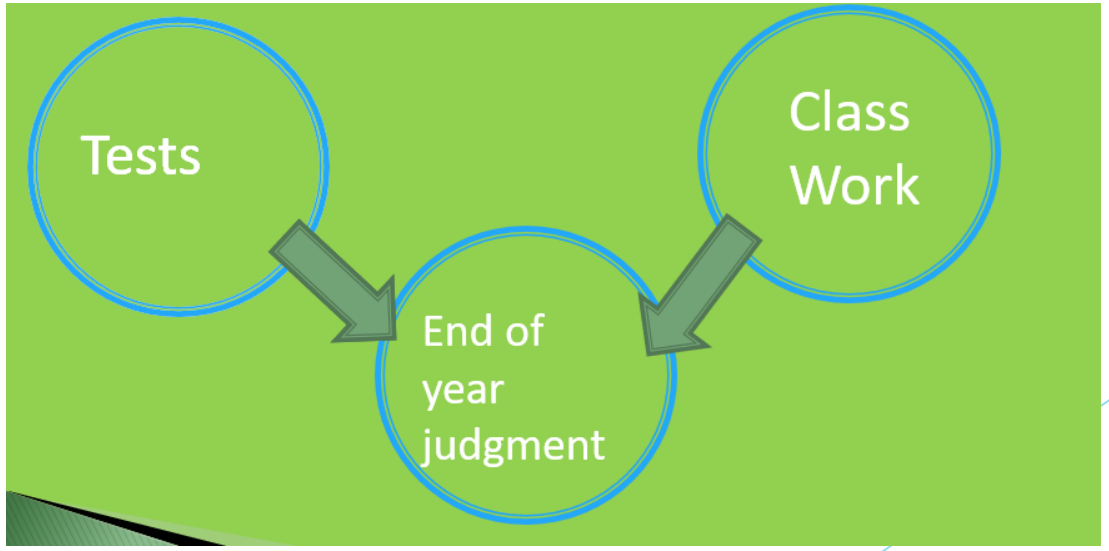
Statistics

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.

Preparing for End of KS1 SATs

Teacher Assessment

- At the end of Year 2, we are required to provide an individual judgement of each child, ahead of their transition to Key Stage Two.
- **This judgement is made based on a combination of in-class work and SATs test papers.**
- This allows us to take in to account work we have seen across the year, rather than a child's performance in one test.



The Tests

- At the end of Year 2, children will take assessments in:

- Reading

- Maths

- The statutory optional tests are due to take place in June of this academic year over a period of 1-2 weeks.

- There is no paper for writing as this is assessed against a list of criteria throughout the year.

Preparing for the Tests

- As a class, the children will take part in a practice paper at the end of the Autumn and Spring term to help them learn about:

- The types of questions they will see
- Test techniques
- Expectations during a test

- Throughout the year, within lessons, we will cover all the content that the children will need.

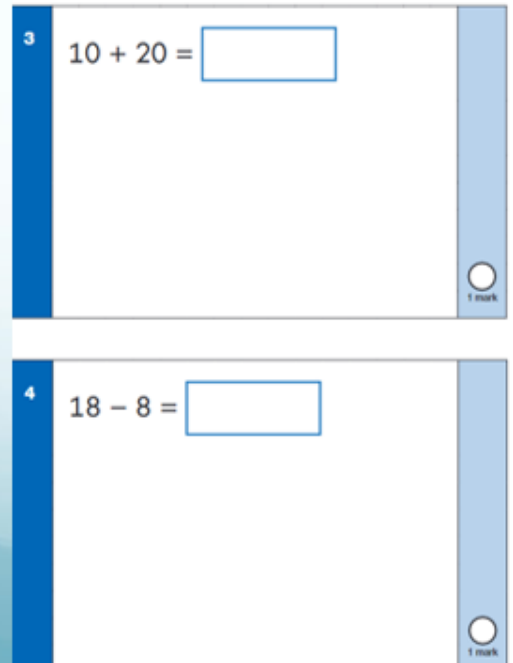
- Our aim is to provide a calm environment that encourages children to try their best without feeling pressured.

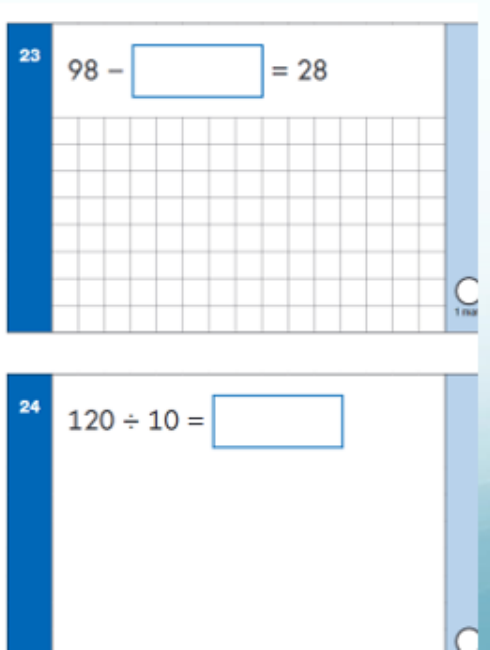
Maths

How can we help support children to achieve end of KS1 Expectations in Maths?

Maths paper 1 - Arithmetic

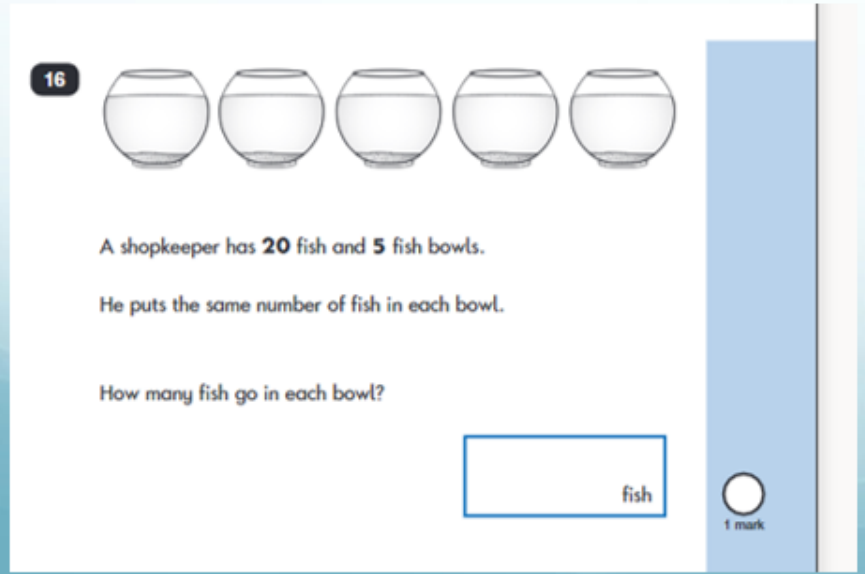
In this paper children will need to use their mental and written methods to solve addition, subtraction , multiplication and division questions. They have space to show their working out and will need to use a suitable method to get their answer. Children need to be able to work with large numbers and recall simple facts. There are 25 questions, and the children will have 30 minutes to answer.





Maths paper 2 - Reasoning

In this paper pupils will need to use their knowledge of number along with problem solving skills. The pupils are allowed to have the questions read to them by a teacher, however teachers will not be allowed to read out any mathematical symbols. There are 32 questions to complete however the pupils will be given a beak in between to allow them to refocus.


16

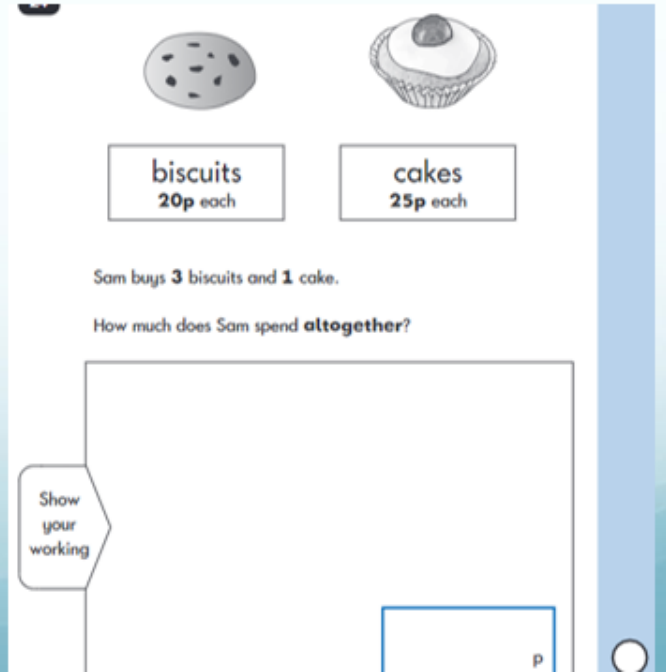
A shopkeeper has **20** fish and **5** fish bowls.

He puts the same number of fish in each bowl.

How many fish go in each bowl?

fish

1 mark


biscuits
20p each

cakes
25p each

Sam buys **3** biscuits and **1** cake.

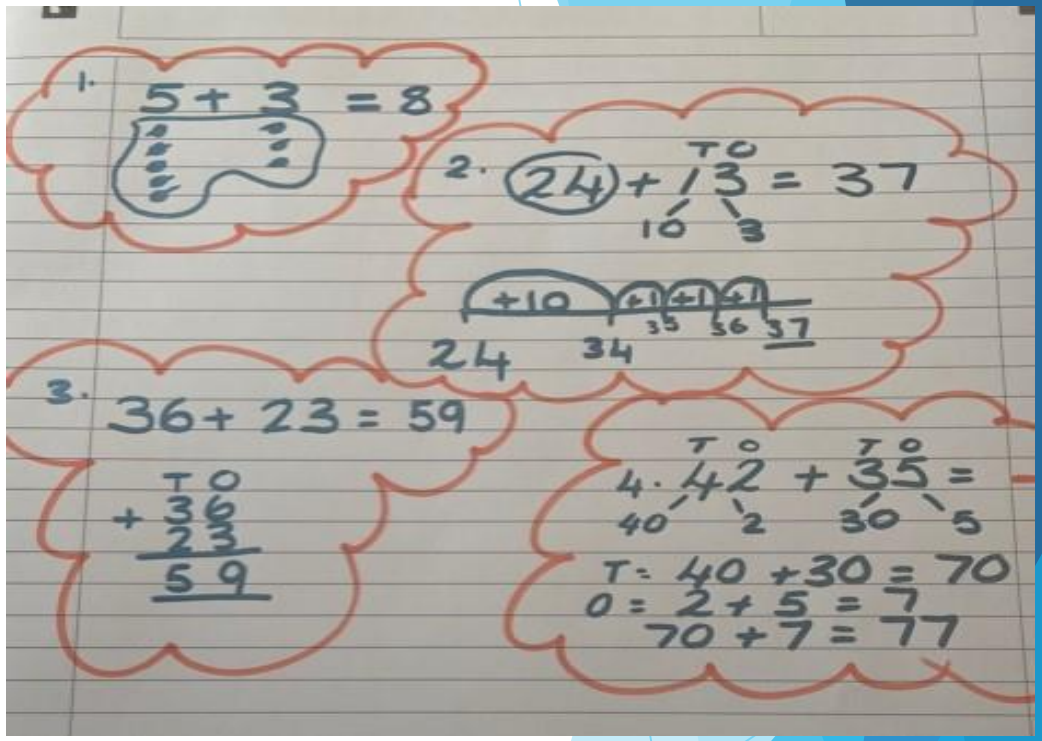
How much does Sam spend **altogether**?

Show your working

p

Methods to support your children Addition

- Pictorial methods
- Number lines
- Column methods
- Partitioning



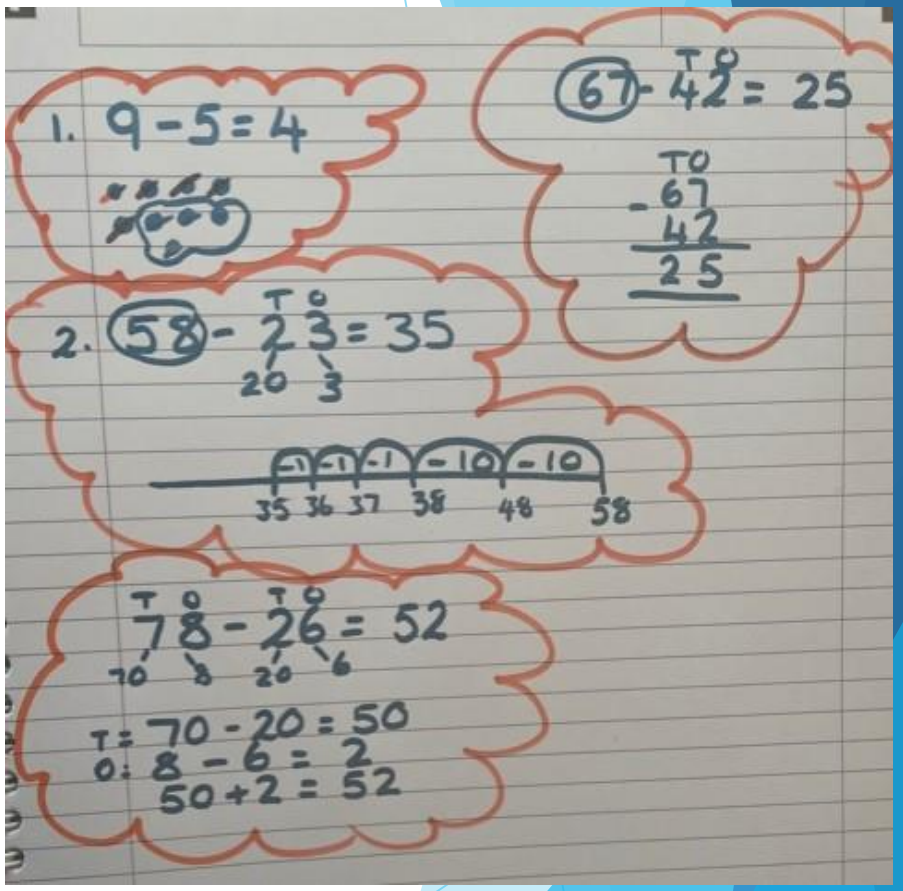
Have a go!

Questions 1, 11 & 14 Q 3 & 18

Whats the same? Whats different? What methods?

Methods to support your children Subtraction

- Pictorial methods
- Number lines
- Column methods
- Partitioning

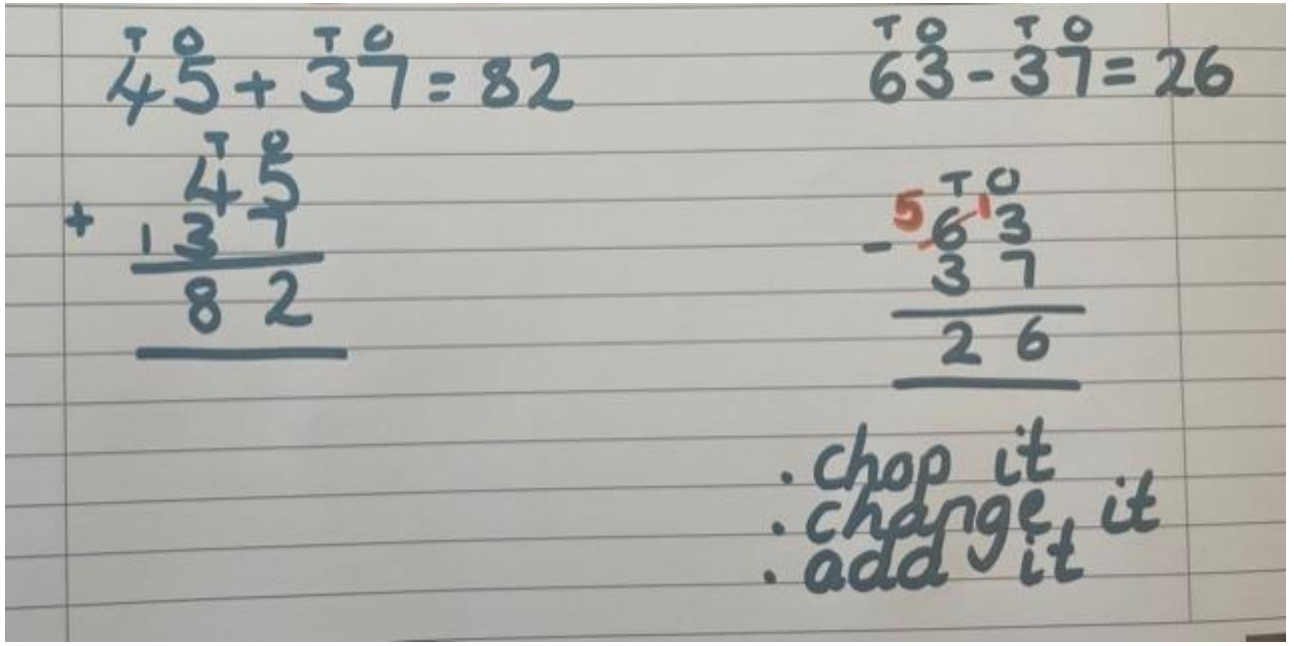


Have a go!

Questions 4, 5 & 20 Q10 & 17

Whats the same? Whats different? What methods?

Crossing tens boundaries

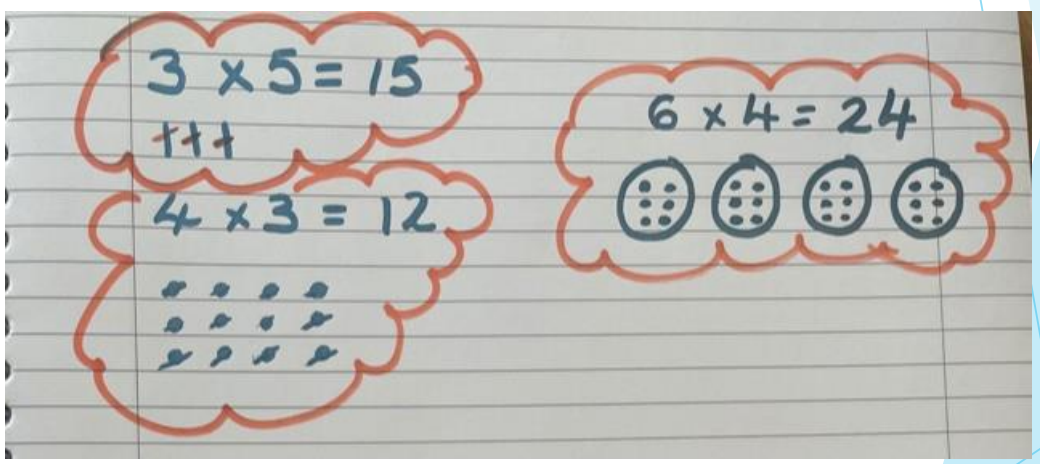


Have a go!

Questions Q 2 & 19 and Q16 & 25

Methods to support your children Multiplication

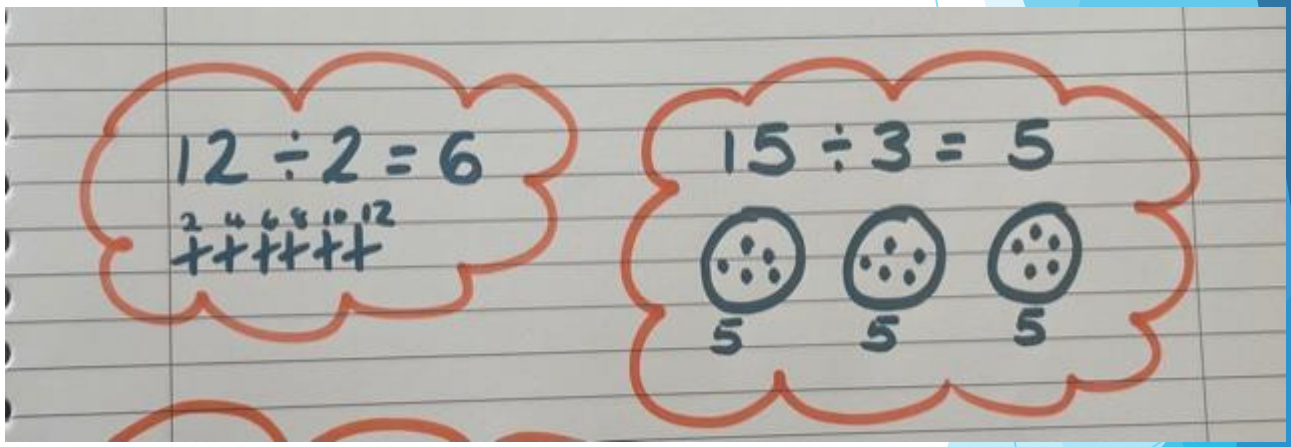
- Known multiplication facts
- Arrays
- Pictorial



Have a go!
Questions 6 & 9 and Q12
Whats the same? Whats different? What methods?

Methods to support your children Division

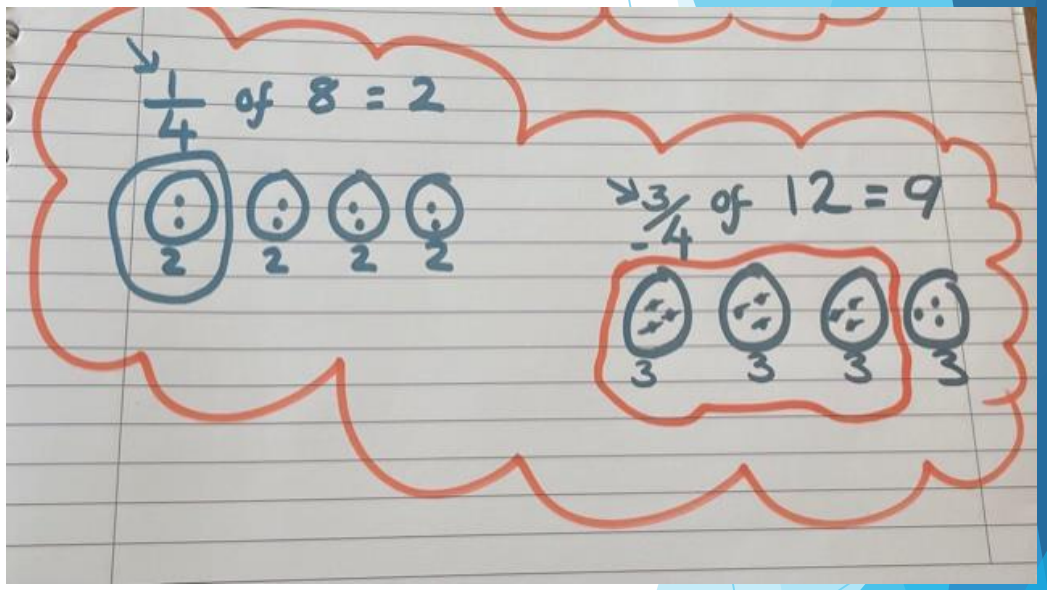
- Known facts
- Inverse
- Sharing circles
- Pictorial



Have a go!
Questions 15 & 24.
Whats the same? Whats different? What methods?

Methods to support your children Fractions

- Known number facts
- Division
- Pictorial



Have a go!
Questions 7 & 22.
Whats the same? Whats different? What methods?

Missing Number Questions

13 $\square + 8 = 20$

23 $98 - \square = 28$

1 mark

Helpful Websites

https://www.gascoigneprimaryschool.co.uk/mathematics

https://www.gascoigneprimaryschool.co.uk/maths-parent-support/

https://ttrockstars.com/

https://numbots.com/

https://home.oxfordowl.co.uk/kids-activities/fun-maths-games-and-activities/

Series 1 Overview

stories and mathematics

Numbers to 5

Episode	Name	Storyline	Mathematics
1	One	A little block falls out of the sky, meets her numberling and discovers one wonderful world, singing and counting to one.	• Meet *One* • Counting to 1
		One discovers it's tricky to play ten-	

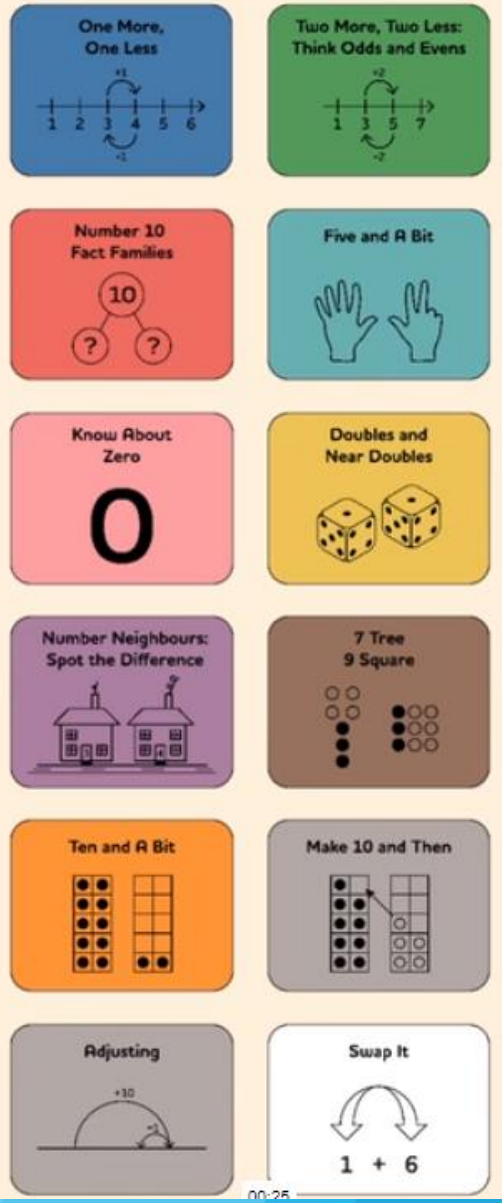
Addition Grid Facts

+	0	1	2	3	4	5	6	7	8	9	10
0	0+0	0+1	0+2	0+3	0+4	0+5	0+6	0+7	0+8	0+9	0+10
1	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10
2	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8	2+9	2+10
3	3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7	3+8	3+9	3+10
4	4+0	4+1	4+2	4+3	4+4	4+5	4+6	4+7	4+8	4+9	4+10
5	5+0	5+1	5+2	5+3	5+4	5+5	5+6	5+7	5+8	5+9	5+10
6	6+0	6+1	6+2	6+3	6+4	6+5	6+6	6+7	6+8	6+9	6+10
7	7+0	7+1	7+2	7+3	7+4	7+5	7+6	7+7	7+8	7+9	7+10
8	8+0	8+1	8+2	8+3	8+4	8+5	8+6	8+7	8+8	8+9	8+10
9	9+0	9+1	9+2	9+3	9+4	9+5	9+6	9+7	9+8	9+9	9+10
10	10+0	10+1	10+2	10+3	10+4	10+5	10+6	10+7	10+8	10+9	10+10

Subtraction Grid Facts

–	0	1	2	3	4	5	6	7	8	9	10
0	0 – 0										
1	1 – 0	1 – 1									
2	2 – 0	2 – 1	2 – 2								
3	3 – 0	3 – 1	3 – 2	3 – 3							
4	4 – 0	4 – 1	4 – 2	4 – 3	4 – 4						
5	5 – 0	5 – 1	5 – 2	5 – 3	5 – 4	5 – 5					
6	6 – 0	6 – 1	6 – 2	6 – 3	6 – 4	6 – 5	6 – 6				
7	7 – 0	7 – 1	7 – 2	7 – 3	7 – 4	7 – 5	7 – 6	7 – 7			
8	8 – 0	8 – 1	8 – 2	8 – 3	8 – 4	8 – 5	8 – 6	8 – 7	8 – 8		
9	9 – 0	9 – 1	9 – 2	9 – 3	9 – 4	9 – 5	9 – 6	9 – 7	9 – 8	9 – 9	
10	10 – 0	10 – 1	10 – 2	10 – 3	10 – 4	10 – 5	10 – 6	10 – 7	10 – 8	10 – 9	10 – 10
11		11 – 1	11 – 2	11 – 3	11 – 4	11 – 5	11 – 6	11 – 7	11 – 8	11 – 9	11 – 10
12			12 – 2	12 – 3	12 – 4	12 – 5	12 – 6	12 – 7	12 – 8	12 – 9	12 – 10
13				13 – 3	13 – 4	13 – 5	13 – 6	13 – 7	13 – 8	13 – 9	13 – 10
14					14 – 4	14 – 5	14 – 6	14 – 7	14 – 8	14 – 9	14 – 10
15						15 – 5	15 – 6	15 – 7	15 – 8	15 – 9	15 – 10
16							16 – 6	16 – 7	16 – 8	16 – 9	16 – 10
17								17 – 7	17 – 8	17 – 9	17 – 10
18									18 – 8	18 - 9	18 – 10
19										19 - 9	19 - 10
20											20 - 10

Calculation Strategies



Thank you for attending!

Any Questions?

Next Year 1& 2 Session: 9th March

Fluency of Facts