Maths at Mitchell Brook

Parent Workshop

- Introductions
- Teaching for Mastery
- Overview of the curriculum
- Interactive session
- Maths at home
- Q&A

Introductions

The Maths Team

Vince Buffini

Assistant Headteacher

Primary Maths Specialist

Hind Mrimou

Primary Maths Specialist

Ava Murad

Reception Lead

Oak Class Teacher

Hibaq Omar

Year 5 Juniper Class Teacher

Monitor the teaching of Maths

Model high quality teaching

Support staff with planning

Lead on aspects of Maths

Train and develop all classroom staff

Teaching for Mastery

- Teach less but teach it better
- Teach slower
- Build deep understanding and firm foundation – depth is simplicity, not complexity
- Whole class teaching – to maximise teacher input

Teaching for Mastery

Children will:

- have a **secure** and **deep** understanding of mathematics
- use mathematical vocabulary
- **reason** and **explain** their mathematical thinking
- problem solve by applying **skills** and making **connections**
- become **fluent** in calculations to support their understanding.

How do we teach Maths?

Curriculum overviews

Mathematics

Home >> Key Information >> Curriculum >> Subject Information >> Mathematics

Intent

Pupils receive a high-quality mathematical education which equips them with tools that they can use in everyday life to help them understand the world. We aim to build a culture of curiosity and enjoyment around the subject, as children are challenged to become more fluent and confident in mathematics through a Teaching for Mastery approach.

Implementation: Teaching for Mastery (TfM)

The National Centre of Excellence for Teaching Mathematics (NCETM) breaks down the TfM approach into Five Big Ideas: coherence, representation and structure, fluency, mathematical thinking and variation. Teachers plan for children to experience these ideas in lessons through teacher-student and student-student interactions to develop a deep mathematical understanding.

At Mitchell Brook, teachers advance children's mathematical understanding through systematic direct teaching of appropriate learning objectives where children aim to master mathematical skills, knowledge and a quick recall of basic facts. Children are taught to be confident using a range of efficient mental and written calculation strategies for all four operations. They are encouraged to use Maths as an effective tool in a wide range of problem solving activities within school. We work to grow positive attitudes towards Maths in which all children can be successful, as they develop an ability to express themselves fluently using correct mathematical language and vocabulary.

EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6

	Unit	Unit name
Autumn 1	1	Numbers 10 to 100
	2	Calculations within 20
Autumn 2	3	Fluently add and subtract within 10
	4	Addition and subtraction of two-digit numbers (1)
	5	Introduction to multiplication
Spring 1	6	Introduction to division structures
	7	Shape
Spring 2	8	Addition and subtraction of two-digit numbers (2)
	9	Money
	10	Fractions
Summer 1	11	Time
	12	Position and direction
	13	Multiplication and division – doubling, halving, quotitive and partitive division
Summer 2	14	Sense of measure – capacity, volume, mass

- Number and place value
- Number facts
- Addition and subtraction
- Multiplication and division
- Geometry
- Other

Year 2

Curriculum map

NCETM
NATIONAL CENTRE FOR EXCELLENCE IN THE TEACHING OF MATHEMATICS

June 2021

How do we teach Maths?

- Year 1 & 2 have 4 or 5 Maths lessons per week
- 4 Mastering Number sessions per week
- Teachers use a range of strategies, representations and resources
- Children are encouraged to explore and discover

Mastering Number

Over 8,000 primary schools involved

Organisations should offer Mastering Number to all schools as an example of good practice in early mathematics.

(OFSTED, 2023)

It's had a positive impact on all pupils, and especially those who were previously less confident in maths.

Assistant Headteacher
Mayfield Primary

They are developing their fluency and confidence with number facts. Lesson structure of Mastering Number has improved their engagement over the years.

Priya Kononov
Year 1 Lead Mitchell Brook

The use of mathematical language is so impressive. Parents are amazed!

Lead Mastering Number teacher

Children will:

- develop and demonstrate good number sense
- leave Key Stage 1 with fluency in calculation and a confidence with number.
- develop their vocabulary to aid their reasoning skills

How do we teach Maths?

Teacher questioning and modelling

Independent task

Group discussion

Partner talk

Generalisations

Mixed ability grouping

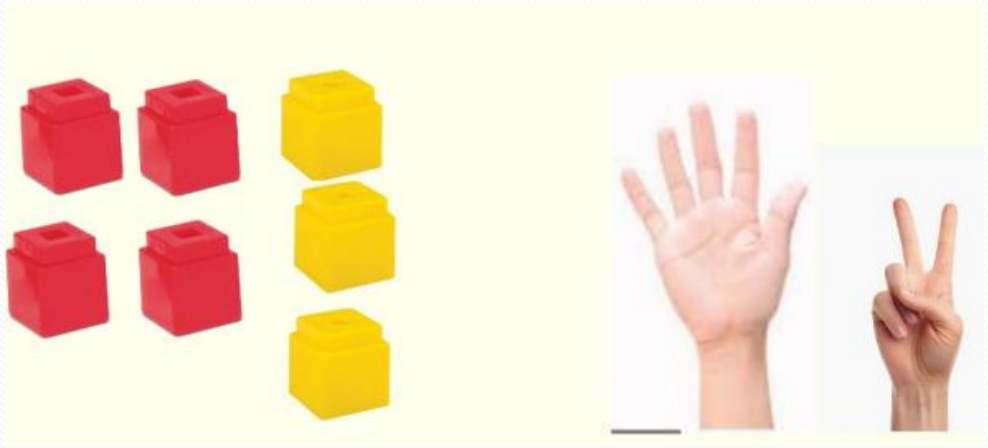
How do we teach Maths?

Concrete *Pictorial* *Abstract*

If children play with mathematical objects purposefully before learning new concepts or problem solving, they are more successful and creative.

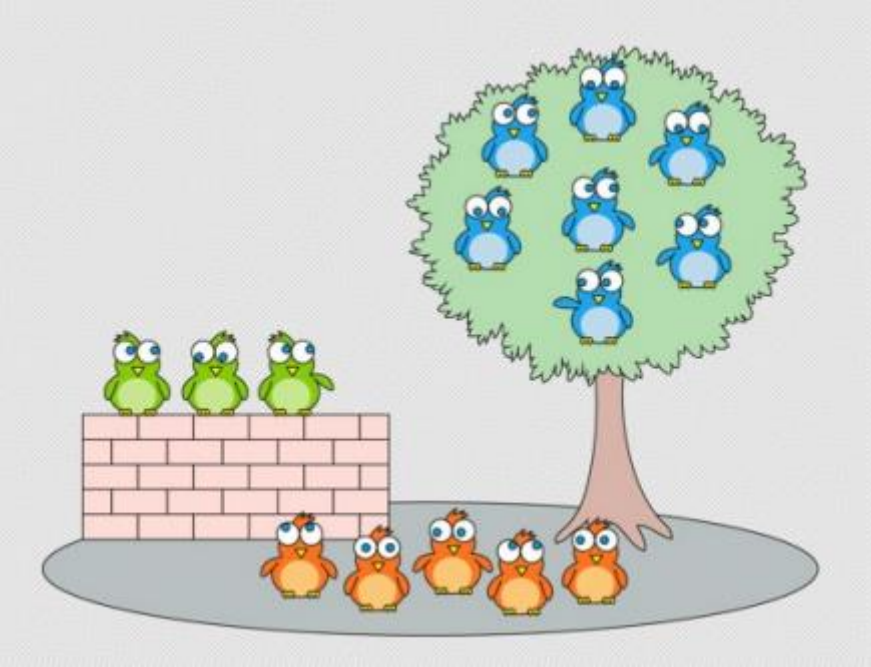
How do we teach Maths?

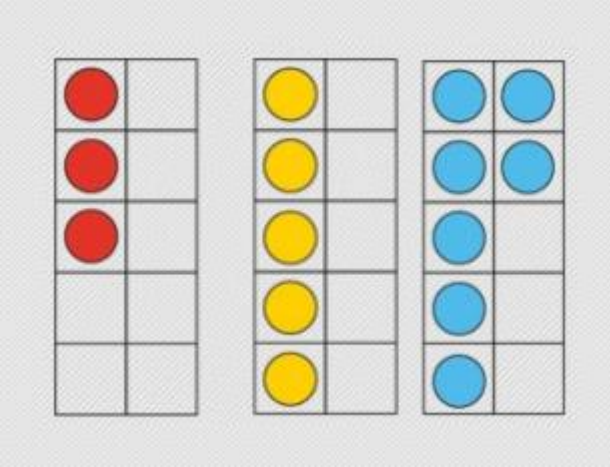
Concrete



How do we teach Maths?

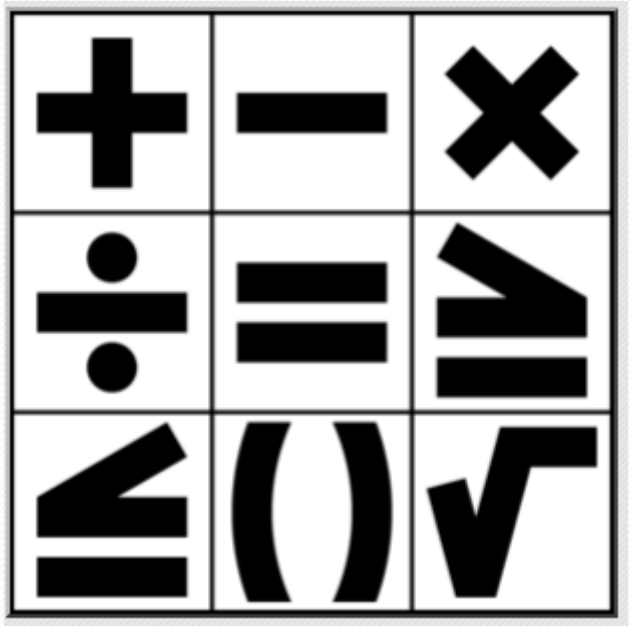
Pictorial





How do we teach Maths?

Abstract

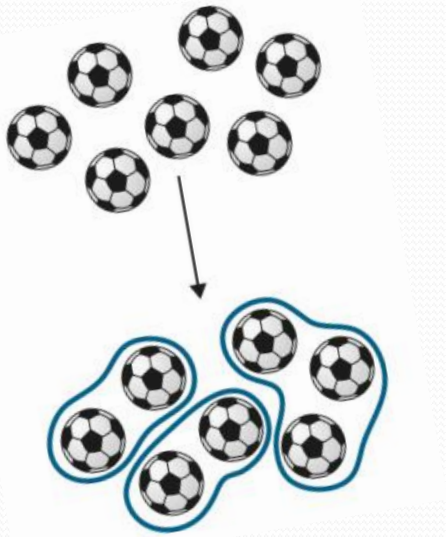


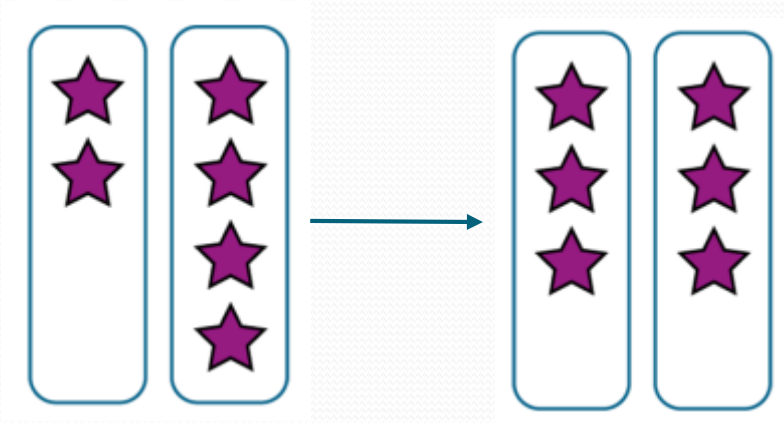
3 + 5 + 7

Interactive session

Multiplication in Year 2

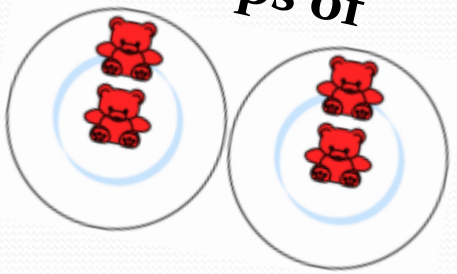
Grouping



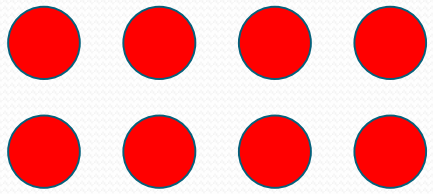


Unequal **Equal**

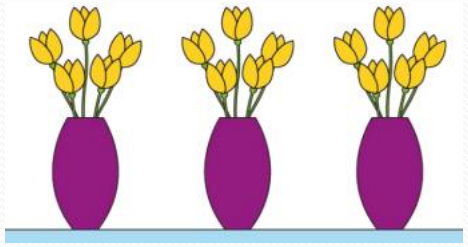
Groups of



Arrays



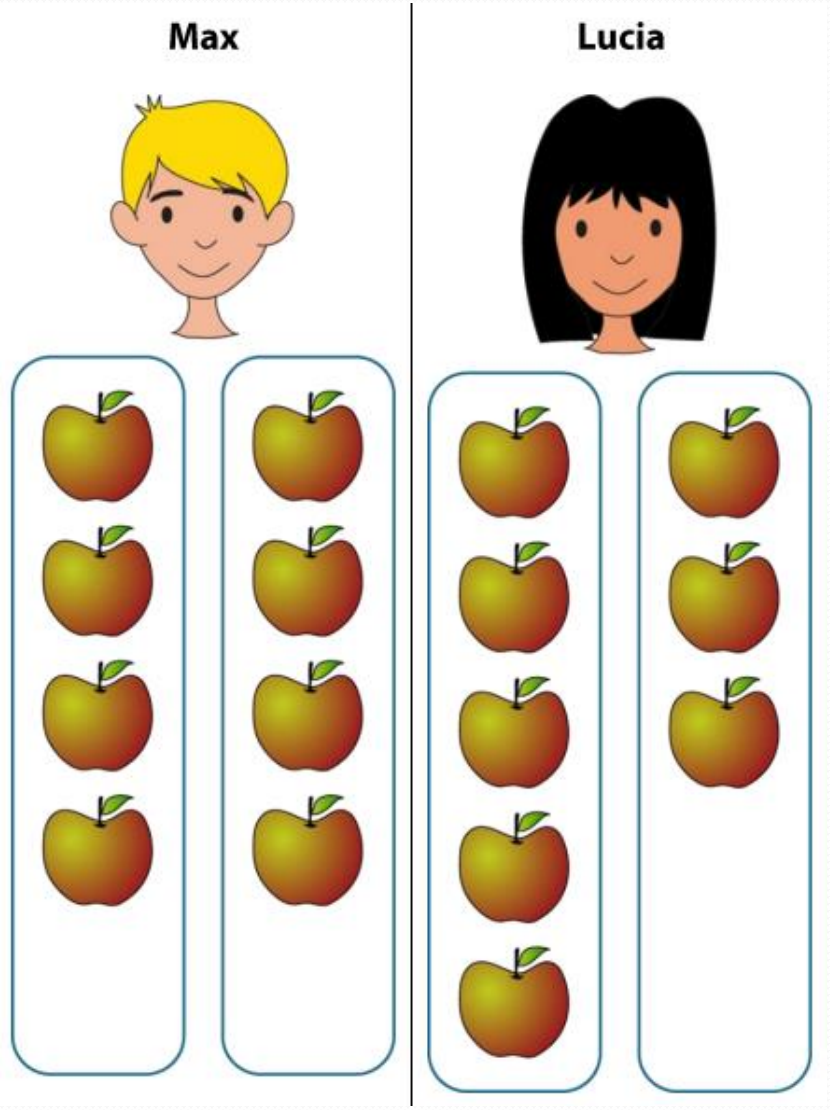
3 x 5



Multiplication Expression

5 + 5 + 5

Repeated Addition



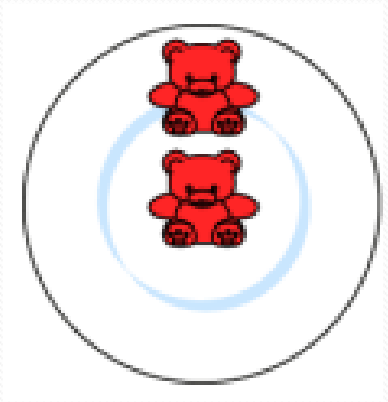
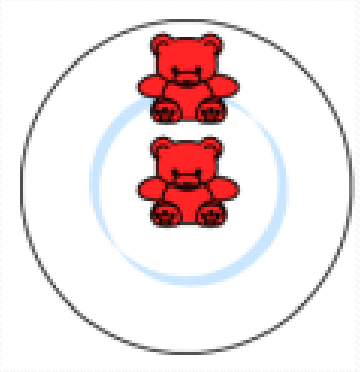
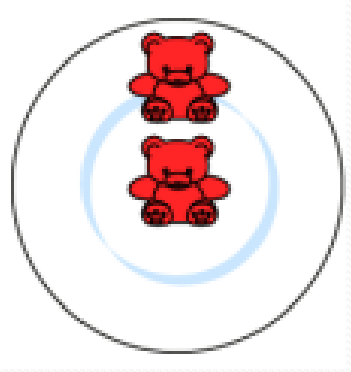
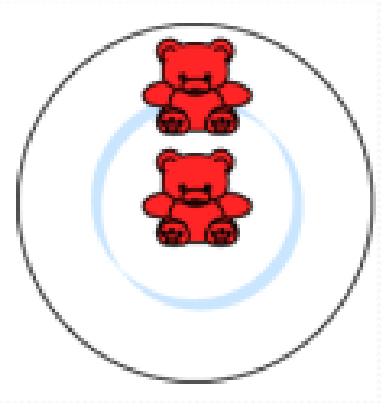
What do you notice about Max and Lucia's apples?

*What is the same?

*What is different?

Max's groups are ____ because there are the same number of apples in each group.

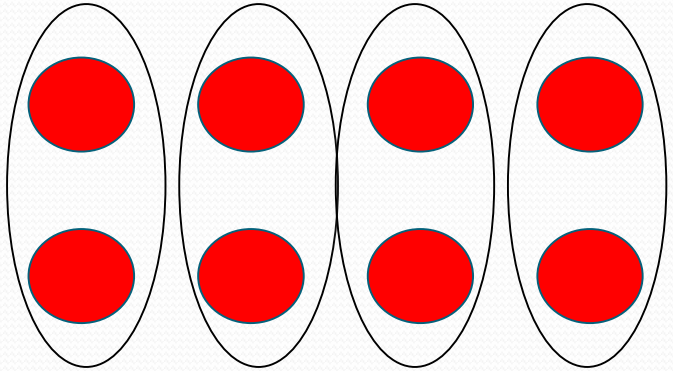
Lucia's groups are ____ because there are a different number of apples in each group.

There are four equal groups of bears.
There are two bears in each group.
There are four groups of two.

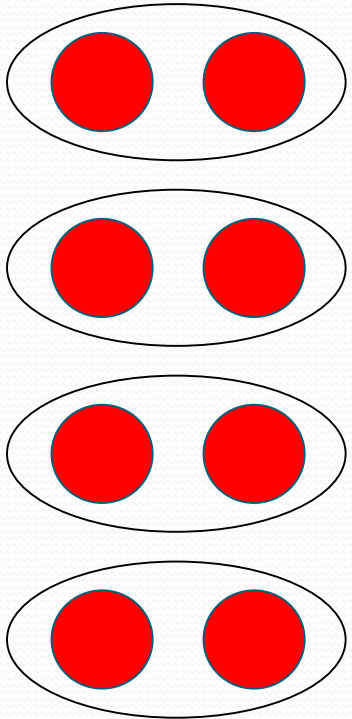
Can you show me four groups of two with your cubes?

Arrays



Four groups of __

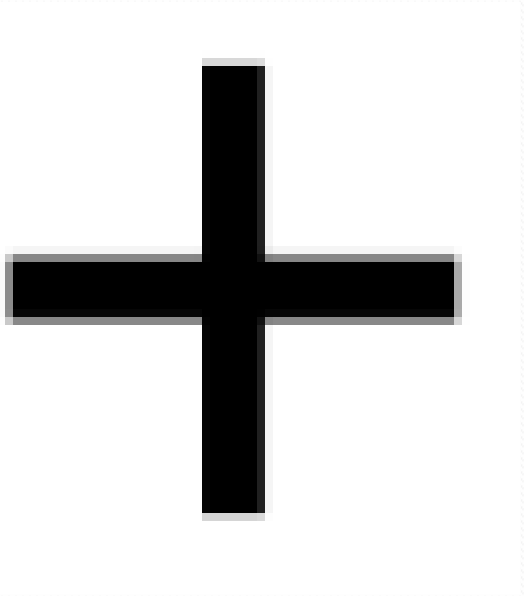
2 + 2 + 2 + 2



Four groups of ___.

2 + 2 + 2 + 2

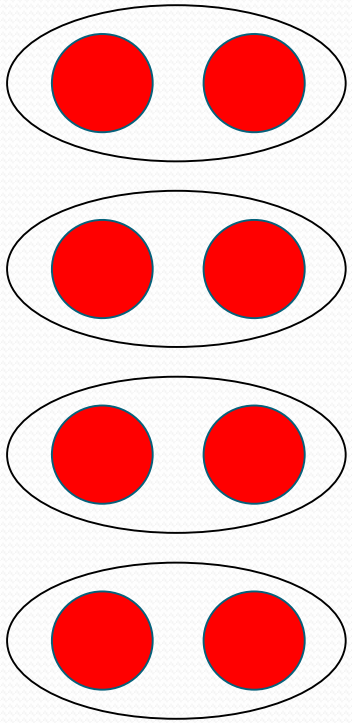
Multiplication Symbol



Multiply
Times
Groups of

Add
Plus

Multiplication Expression



4 groups of 2

2 + 2 + 2 + 2

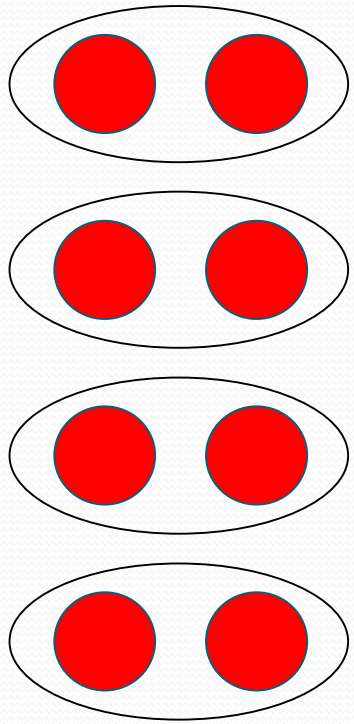
4 x 2

4 groups of 2 = 2 + 2 + 2 + 2 = 4 x 2

How to calculate

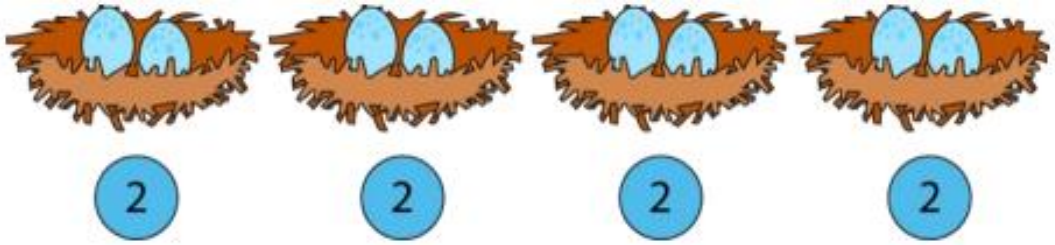
Different ways to calculate 4 x 2:

- Draw an array
- And count in 1s
- And count in 2s
- Eventually learning their number facts.



Commutativity

Factor pairs can be written in either order, with the product remaining the same.



$2 + 2 + 2 + 2 = 8$

- *'There are four groups of two eggs. There are eight eggs altogether.'*

  $4 \times 2 = 8$

- *'There are two eggs, four times. There are eight eggs altogether.'*

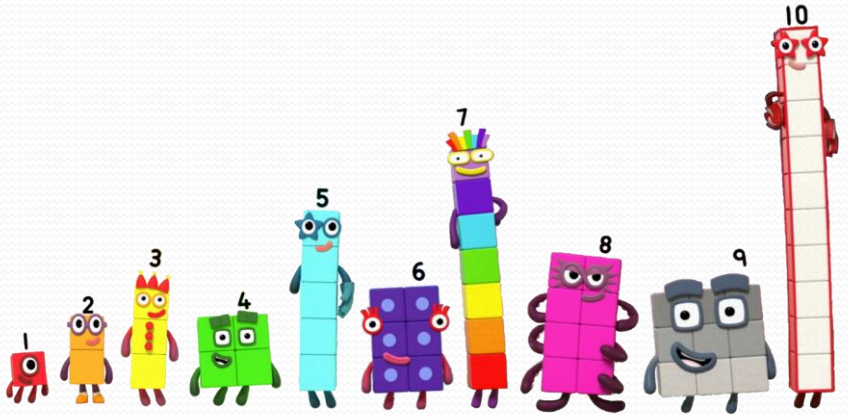
  $2 \times 4 = 8$

How can you help at home?

This platform equips each pupil with the set of core maths skills they require:

Subitising;
Number bonds;
Addition & Subtraction.

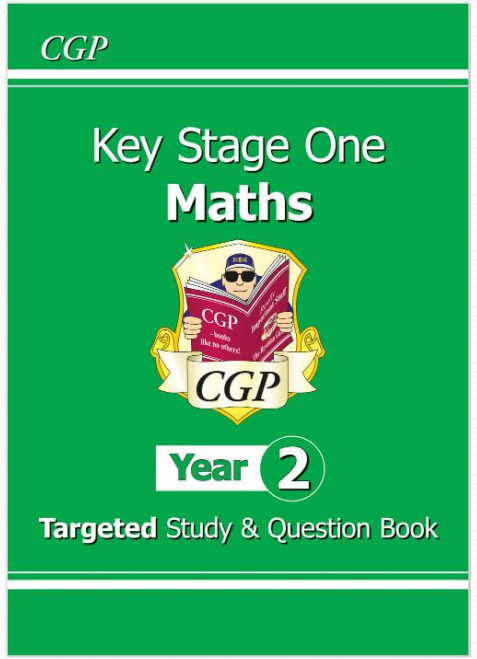
To be practiced **daily** with additional optional challenges.



NumberBlocks

BBC iPlayer

YouTube

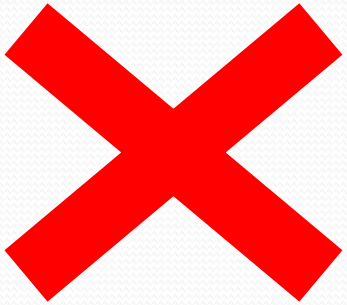


Whole School

To practice what has already been taught

How can you help at home?

- Support them through practicing aspects that must be memorised eg. Numbots / Numberblocks, counting
- Use online platforms to develop number facts
- Encourage children to use mathematical vocabulary when explaining ideas to you
- Find ‘the Maths’ in everyday activities and make connections



- Teach your child new methods or concepts
- Challenge children by teaching them skills needed for older year groups
- Be negative about your experience of Maths

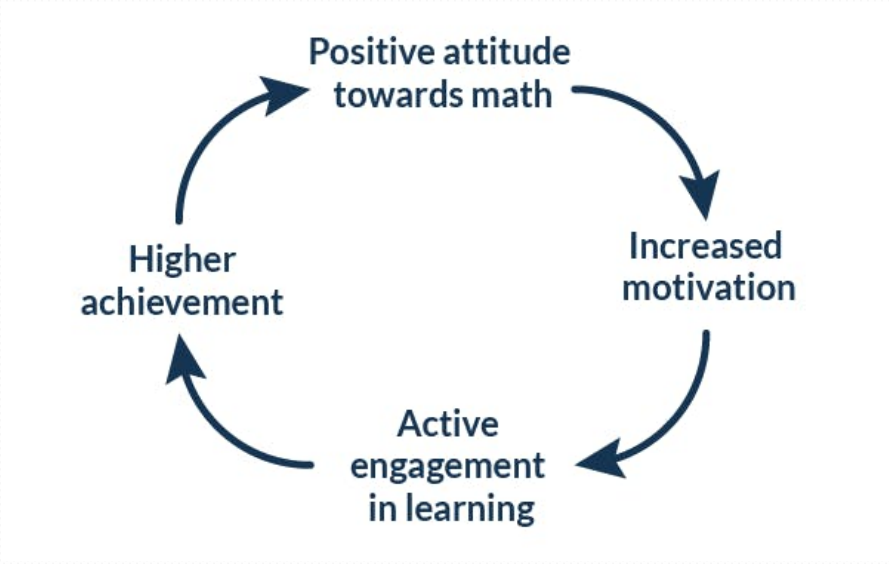
How can you help at home?

You may find yourself from time to time saying '*I was never good at Maths*.' Children will pick up and mirror this energy.

'**It's fine to make mistakes, we all do**'

'**It's ok that you find this tricky, let's look through it together**.'

Positivity can go a long way to improving their attitude towards Maths!



Questions & Answers

Look out for…

Future parent workshops:

LKS2 (Y3 & 4) - 27th February

UKS2 (Y5 & 6) - 13th March

Your feedback is important to us!