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)
Spring 1	5	Introduction to multiplication
	6	Introduction to division structures
Spring 2	7	Shape
	8	Addition and subtraction of two-digit numbers (2)
Summer 1	9	Money
	10	Fractions
	11	Time
	12	Position and direction
Summer 2	13	Multiplication and division – doubling, halving, quotitive and partitive division
	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 3 & 4 have 5 Maths lessons per week
- 4 Arithmetic lessons
- Teachers use a range of strategies, representations and resources
- Children are encouraged to explore and discover

How do we teach Maths?

Teacher questioning and modelling

Independent task

Group discussion

Partner talk

Generalisations

Mixed ability grouping

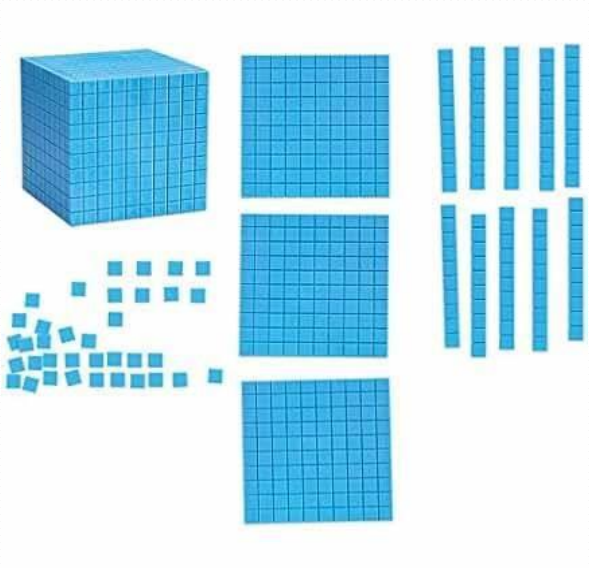
How do we teach Maths?

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?

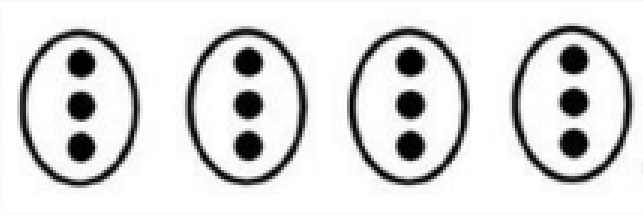
Concrete



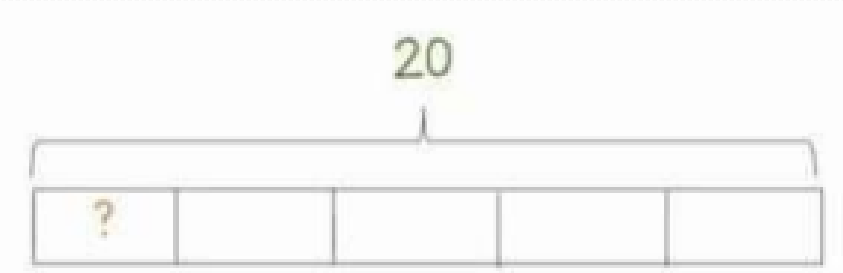
How do we teach Maths?

Pictorial

12 ÷ 4 = 3

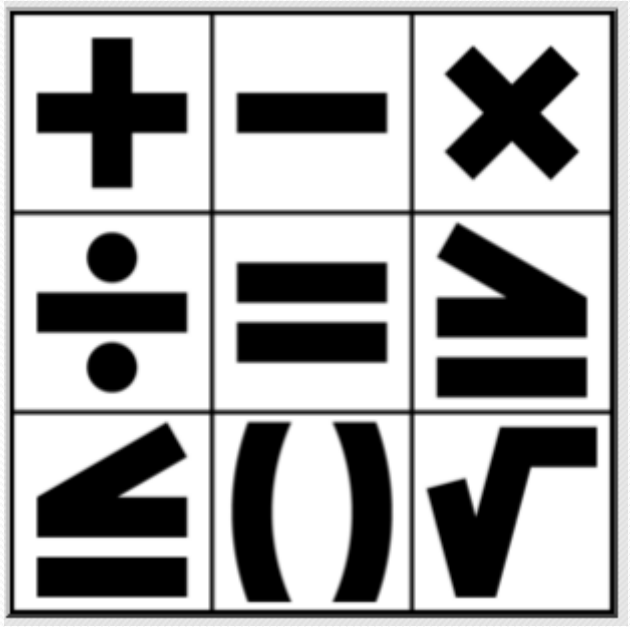


20 ÷ 5 = ?



How do we teach Maths?

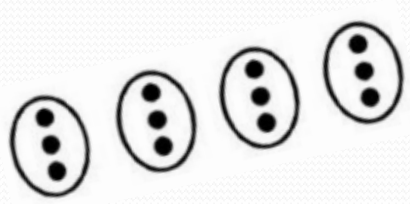
Abstract



Interactive session

Division in Year 3 and 4

Grouping

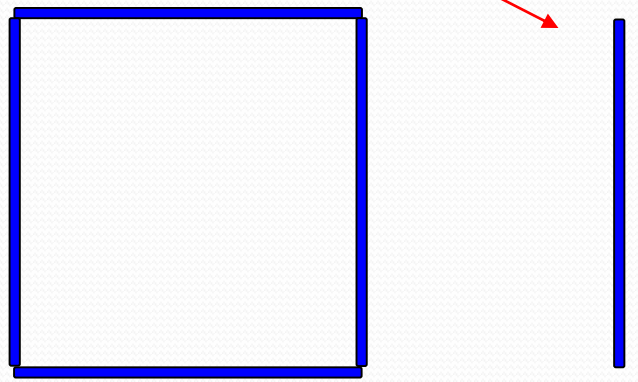


Groups of

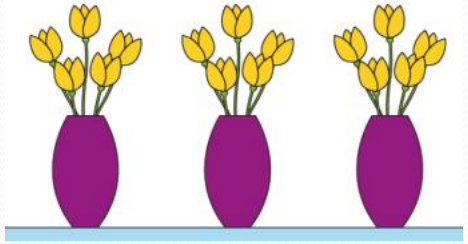
$$32 \div 8 = 4$$

Dividend **Divisor** **Quotient**

Remainder

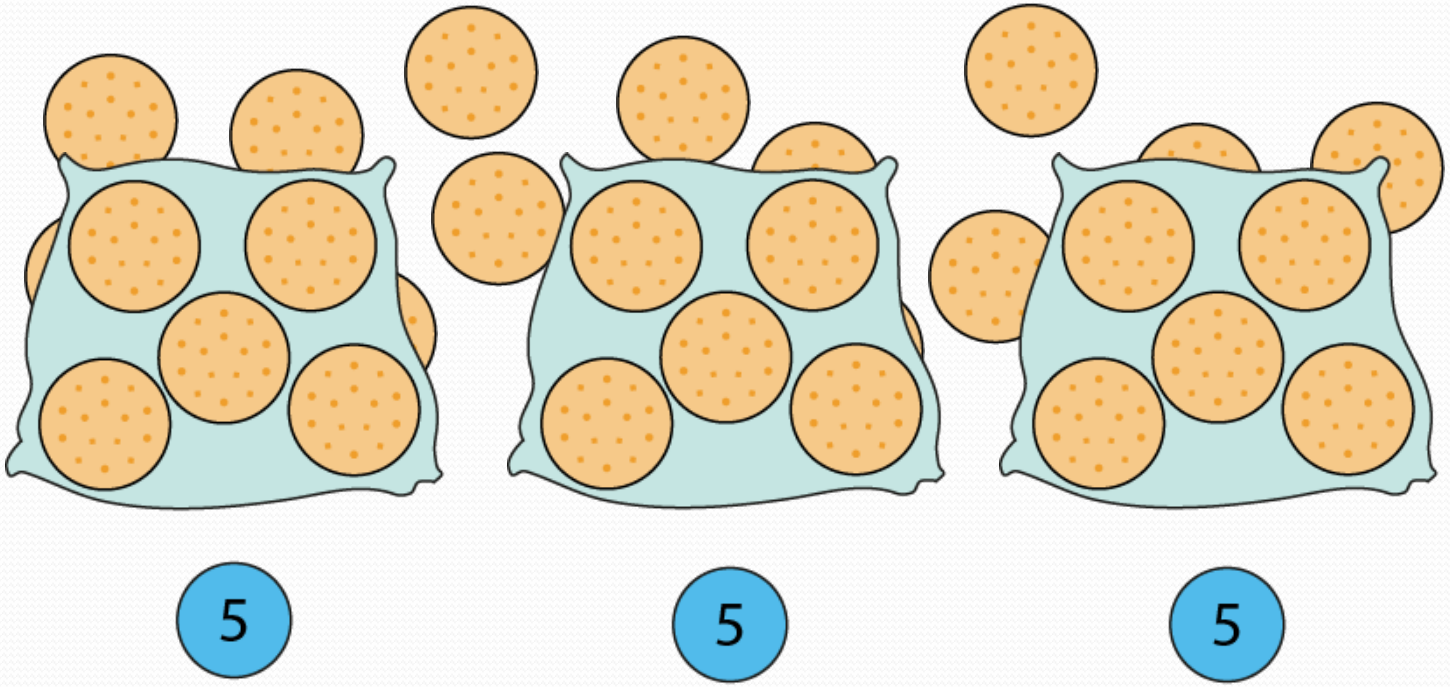


15 ÷ 5



Division Expression

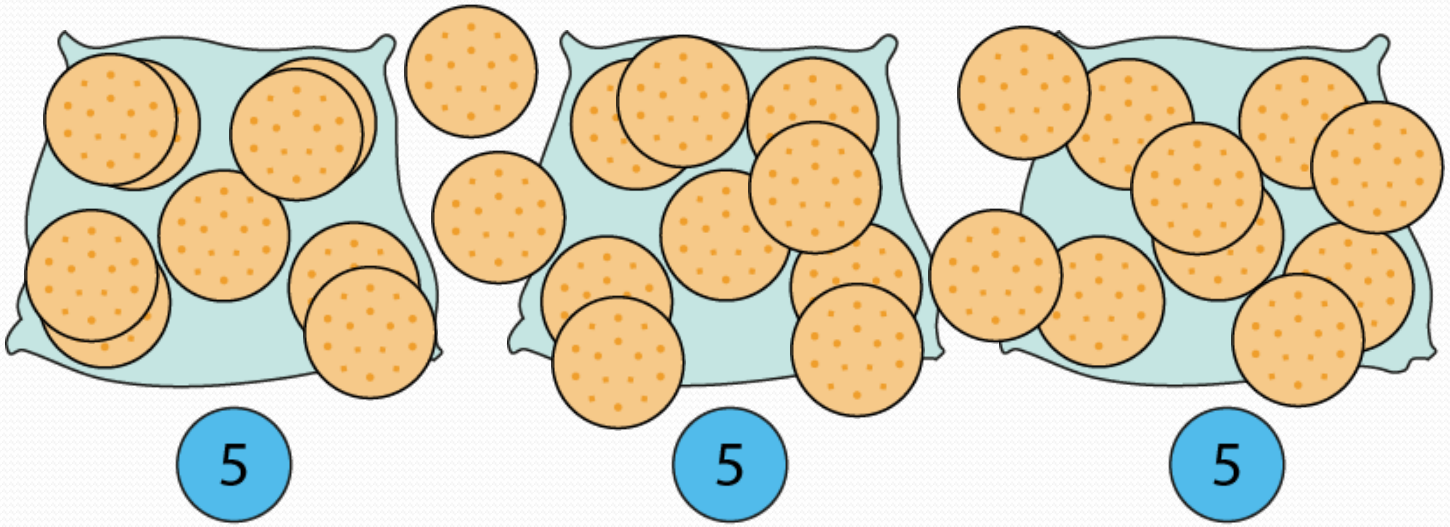
I have 15 biscuits and I can fit 5 in each bag. How many bags do I need?



15 is divided into groups of 5.

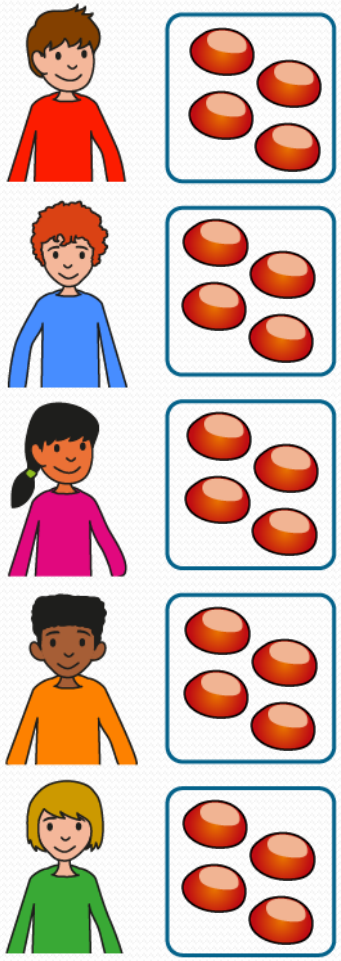
There are 3 groups.

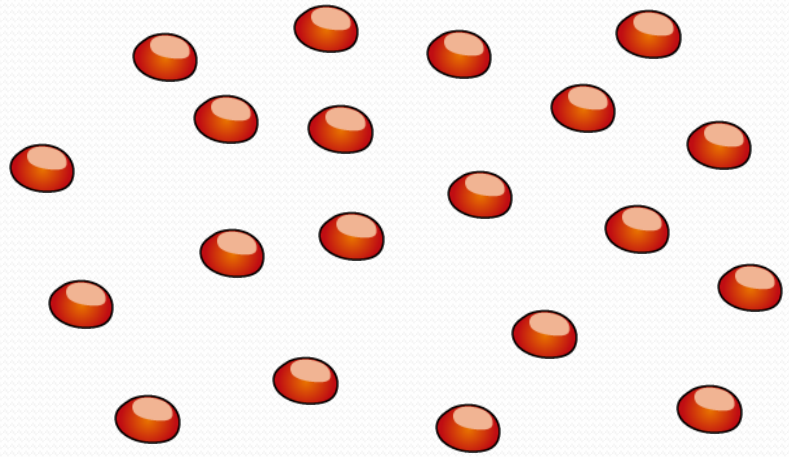
There are 3 groups of 5 in 15.



15 ÷ 5 = 3

20 conkers, shared equally among 5 children. How many each?

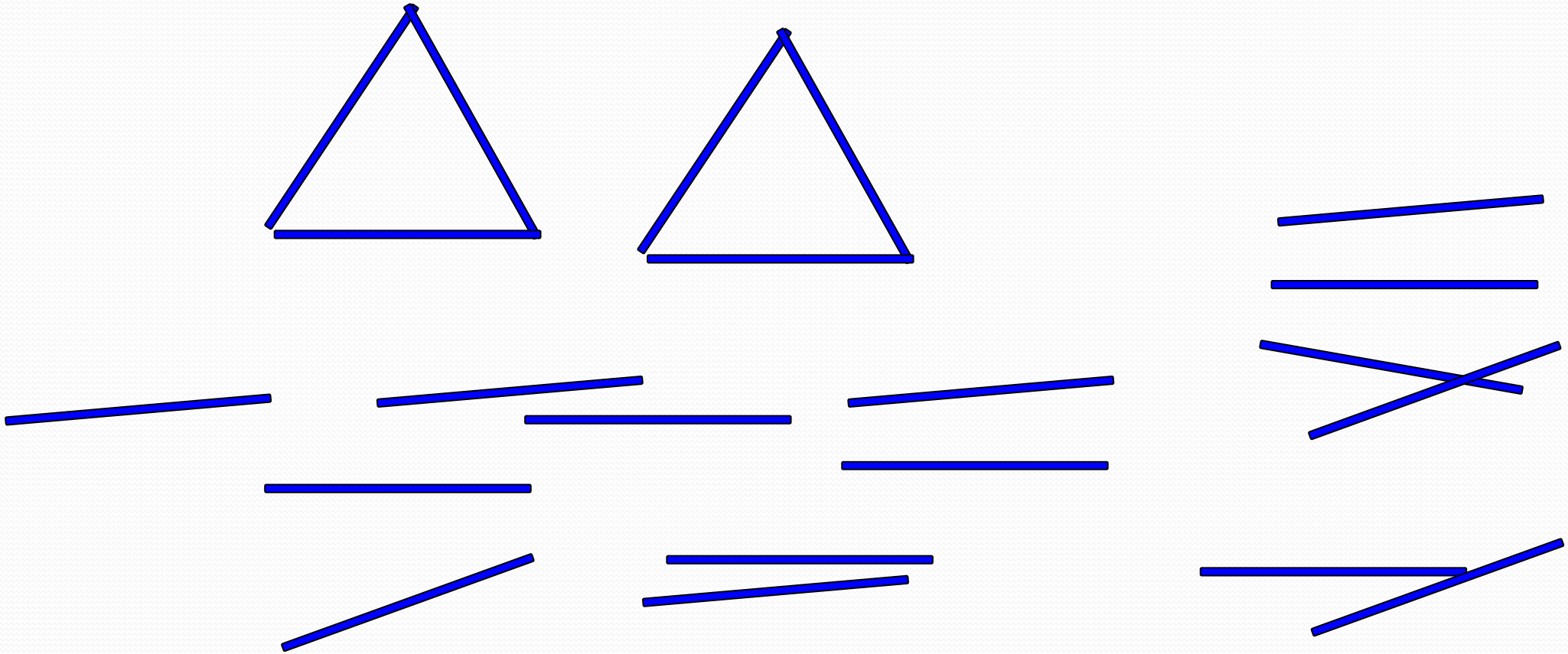




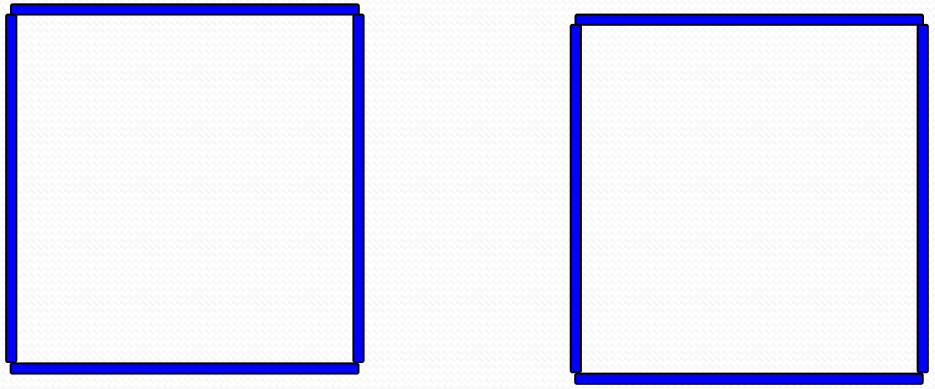
Each child gets 4 conkers.

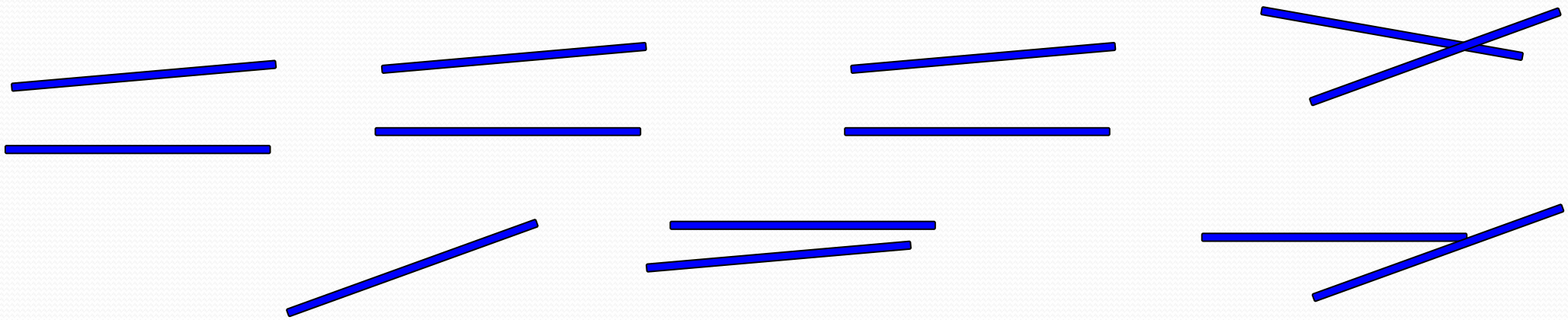
$20 \div 5 = 4$

Arrange 21 sticks into triangles.
How many triangles are made?
Are there any any sticks remaining?

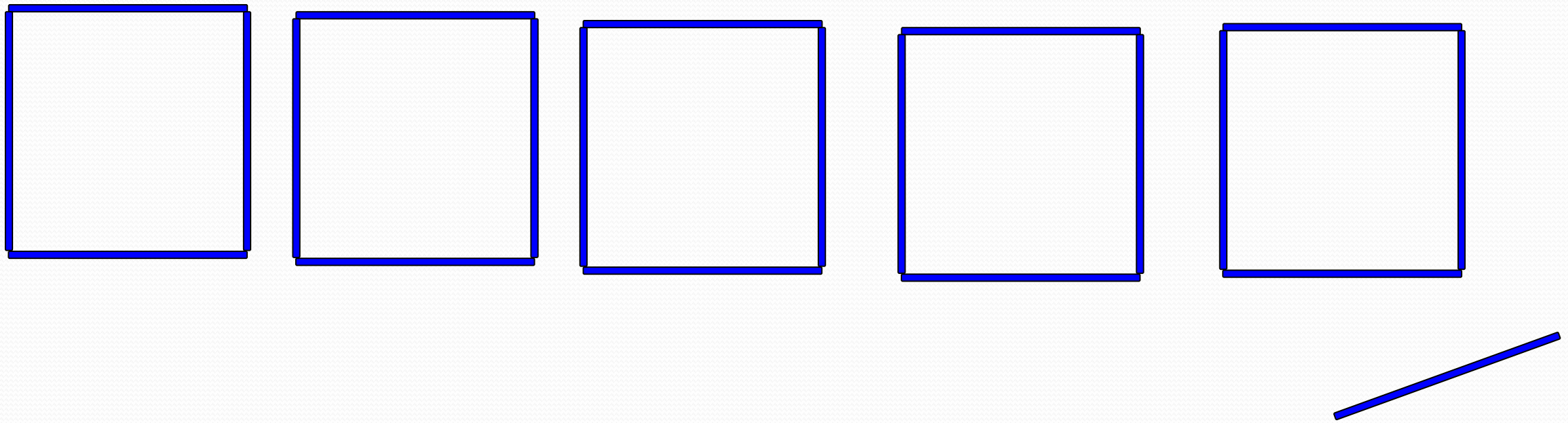


Arrange 21 sticks into squares.
How many squares are made?
How many sticks remaining?





Arrange 21 sticks into squares.
How many squares, how many remaining?



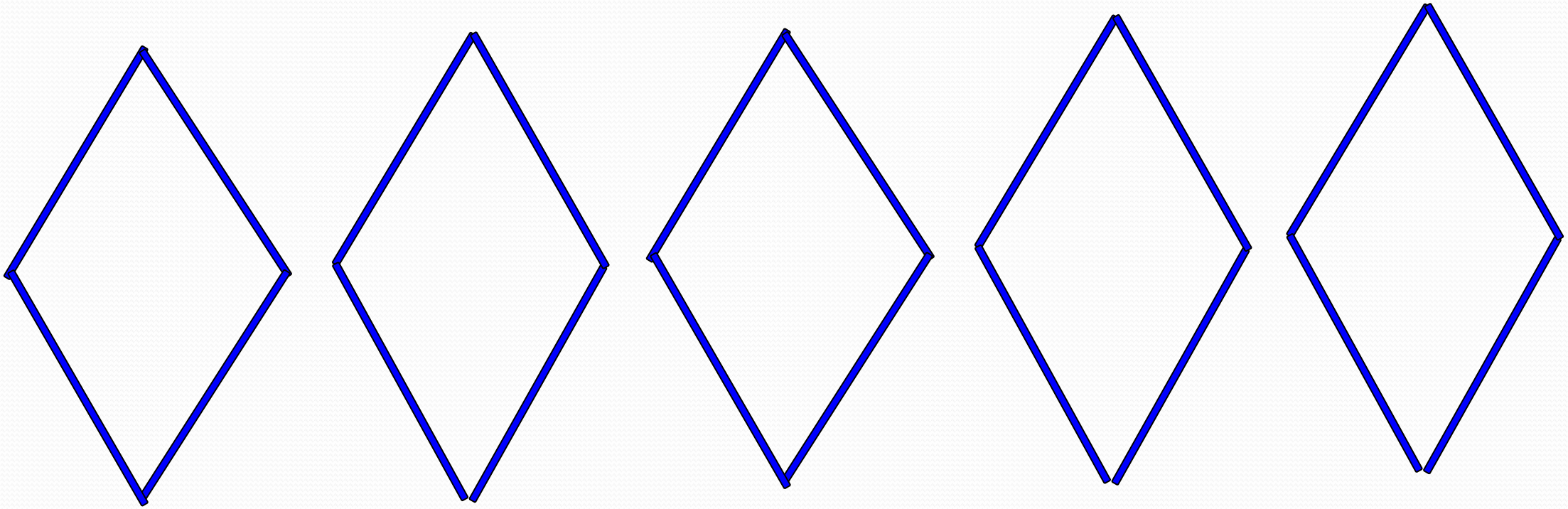
How would you describe what you have?

I have 5 groups of 4 and 1 remaining.

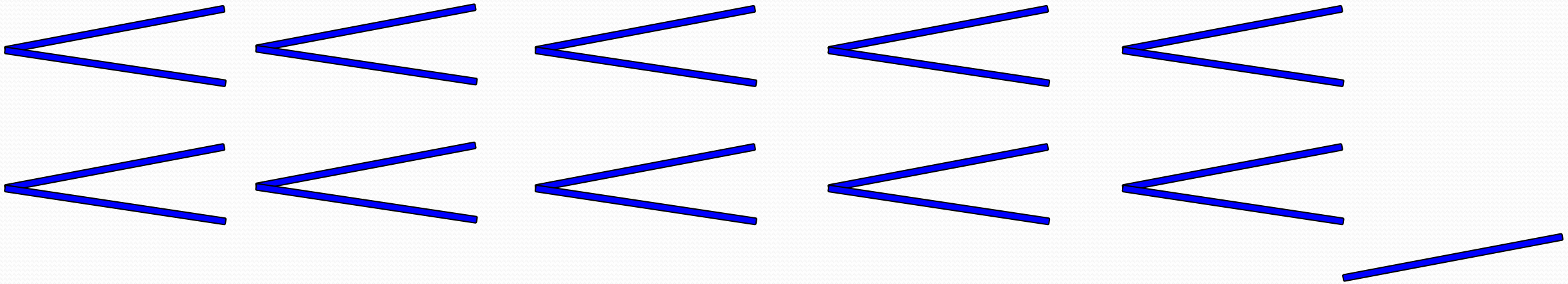
True or False?

I have 4 groups of 5 and 1 remaining.

I have 5 groups of 4 and 1 remaining.



$21 \div 2 = 10 \text{ r } 1$

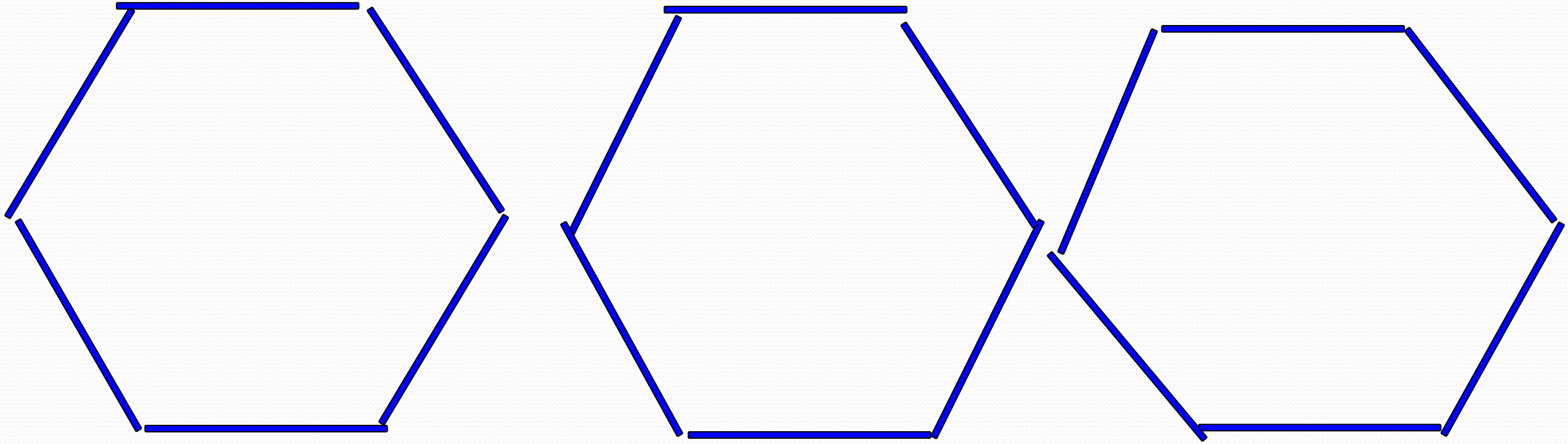


How many groups of 2 do I have?

There are 10 groups of 2 and 1 remaining

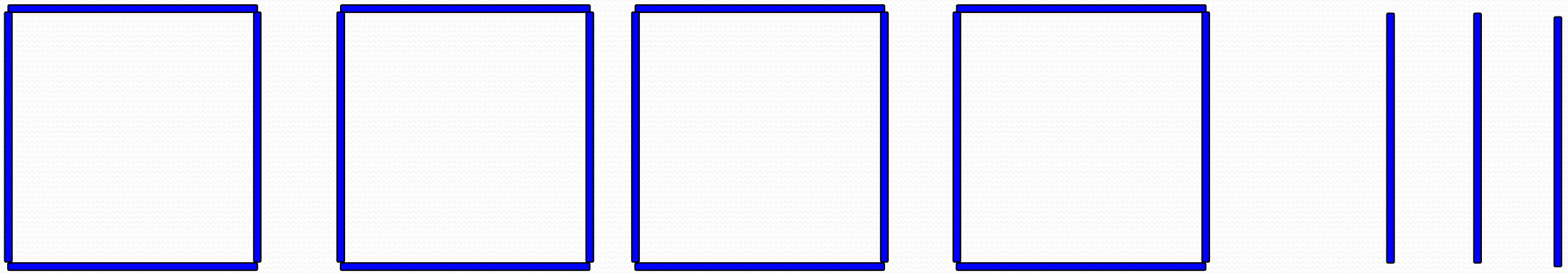
21 ÷ 6 = 3 r 3

I have 3 groups of 6 and 3 remaining.



I have 19 sticks and I want to arrange them in groups of 4.

$19 \div 4 = 4 \text{ r } 3$



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.

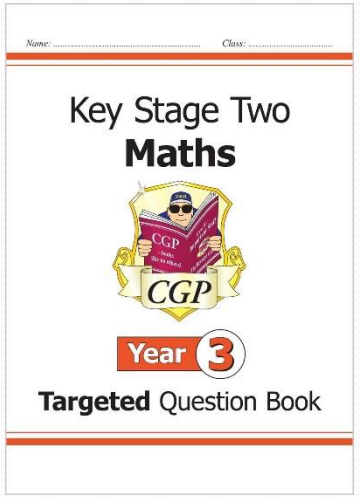
To be practiced as often as necessary

Practice makes perfect!

Use this intuitive platform to practice multiplication and division facts

To be practiced **daily**.

Year 4 Multiplication Tables Check (MTC)

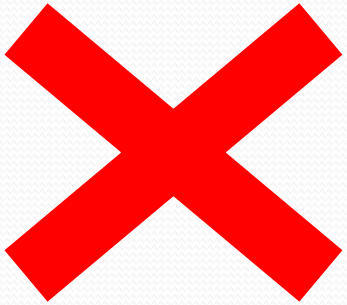


Whole School

To practice what has already been taught

How can you help at home?

- Support them through practicing aspects that must be memorised eg. TTRS/ Numbots, skip 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

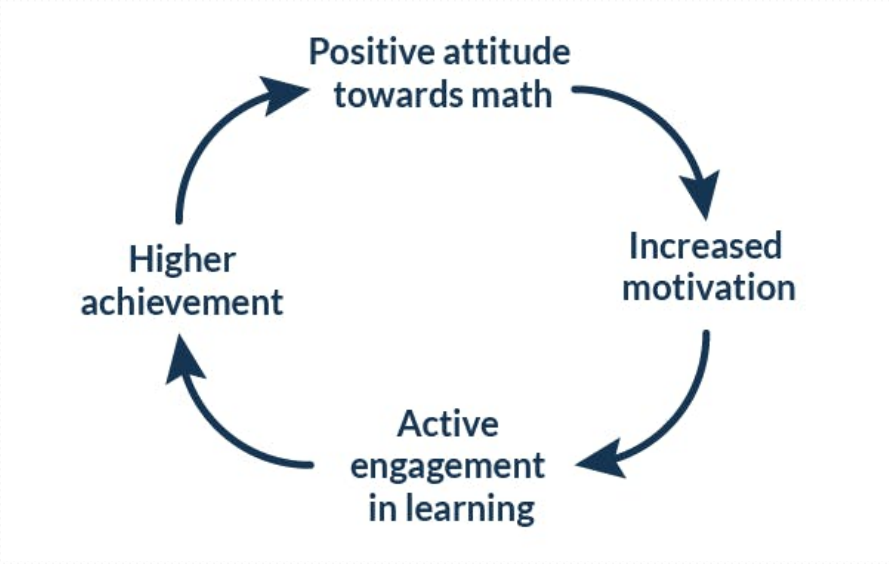
How can you help at home?

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:

UKS2 (Y5 & 6) - 13th March

Your feedback is important to us!