MALTBYLEARNINGTRUST
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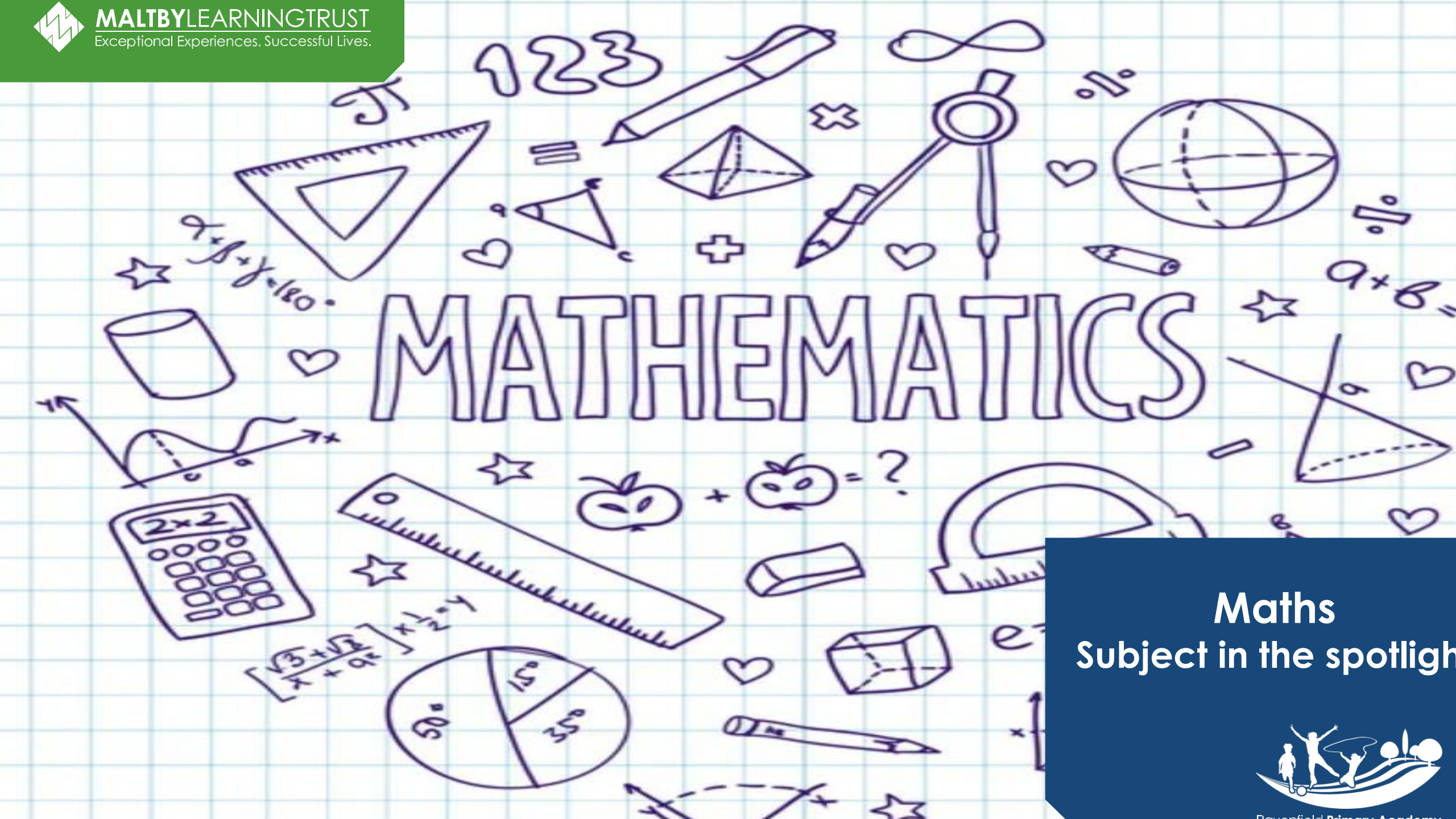
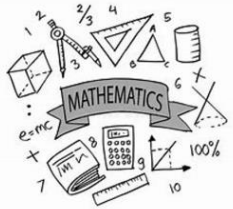


Maths
Subject in the spotligh

Ravenfield Primary Academy

Aim

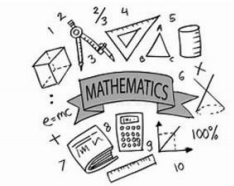
I am a mathematician!



Aims

- Mathematic Intent
- Mathematic Planning
- Structure of a math lesson
- Arithmetic and Reasoning
- Manipulatives to support
- How to support your child

I am a mathematician!

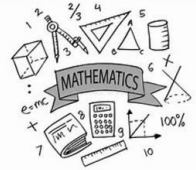


Intent

At Ravenfield Primary Academy we recognise that mathematics underpins much of our ***daily lives*** and therefore it is of paramount importance to ensure all children leave Ravenfield being ***competent and confident mathematicians***, with a true ***love for the subject***.
We aim for children to leave us being ***fluent with times tables, confident in reasoning, and have a sense of curiosity.***

Timetable

I am a mathematician!



When is mathematics taught?

Every day

Time	Activity
8:35-8:45	Doors open
8:45-9:00	Morning work and registration
9:00-9:15	Assembly
9:15-10:15	Phonics/reading
10:15-11:00	Writing
11:00-11:15	Break
11:15-12:15	Maths
12:15-1:15	Dinner
1:15-1:30	Story time
1:30-2:15	Foundation Subject 1
2:15-3:00	Foundation Subject 2
3:00-3:15	Mindfulness – calming/opportunity to check-in

Planning

How do we plan mathematics at Ravenfield?

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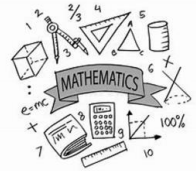
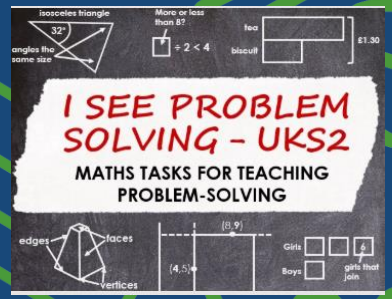


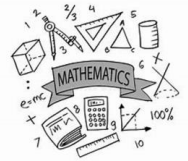
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value (within 10)					Number Addition and subtraction (within 10)					Geometry Shape	Consolidation
Spring	Number Place value (within 20)			Number Addition and subtraction (within 20)			Number Place value (within 50)		Measurement Length and height		Measurement Mass and volume	
Summer	Number Multiplication and division			Number Fractions	Geometry Position and direction		Number Place value (within 100)		Measurement Money	Measurement Time		Consolidation



Structure

Teaching sequence

I am a mathematician!



Sharp start – Input – Practice – Review

Sharp start	*Input*	*Practice*	*Review*
Quick fire starter activities Counting sticks Fastest finger first Sticky Knowledge Quiz	Modelling Split Inputs	Whiteboard work Application Task	Plenary Quiz

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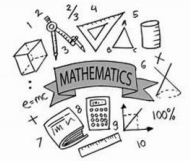
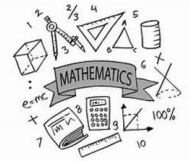


What does a lesson look like?

Sharp Start

I am a mathematician!



Sharp start

Maths - I can statements

Sharp start – Input – Practice – Review

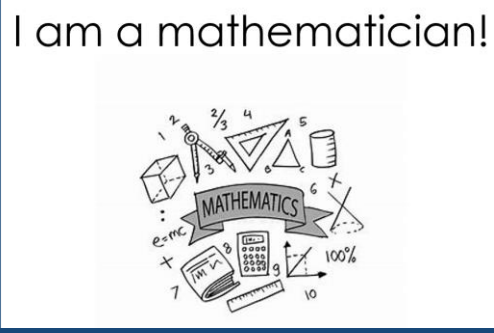
Sharp start	Input	Practice	Review
Quick fire starter activities Counting sticks Fastest finger first Sticky Knowledge Quiz	Modelling Split Inputs	Whiteboard work Application Task	Plenary Quiz

Expectation – confident by the end of the year

I can recognise the value of digits in 2 digit number

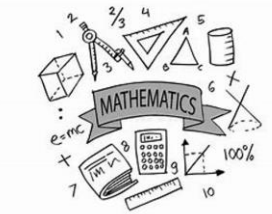
I can statements

- I can make and decompose two digit numbers using whole tens and units and part tens and units (36=30+6 or 36=22+14)
- I can reason about the location of 2 digit numbers in the linear number system – including using the next and previous multiple of ten
- I can rapidly recall number bonds to 10 (+ and -)
- I can add and subtract across 10 and within 100
- I can add and subtract with 100 by applying related one digit addition and subtraction facts: · Add or subtract only ones or only tens from a two digit number. · Add and subtract any 2 digit number
- I can recognise 'difference' as a way of expressing subtraction
- I can use multiplication as repeated addition within the 2,5 and 10 times tables
- I can use missing number multiplication questions to solve grouping problems
- I can describe and compare 2D and 3D shapes using their properties
- I can draw polygons by joining marked points
- I can identify parallel and perpendicular sides



What is maths?

I am a mathematician!



Maths is the study of numbers, calculations, shapes and equations.

What is a Mathematician?

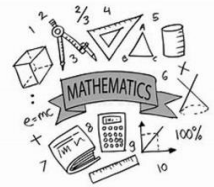
A mathematician is someone who uses mathematics in their work, to solve mathematical problems.

Mathematicians are concerned with numbers, data, quantity, structure, space, models, and change.

14.09.25

KQ1

I am a mathematician!



Maths Knowledge Organiser Place Value Year 2

Key Questions:

KQ1: How do I write and count numbers to 20?
KQ2: How can I count objects to 100 by making 10s?
KQ3: Can I recognise tens and ones?
KQ4: How do I use a place value chart?
KQ5: Can I partition numbers to 100?
KQ6: How do I write numbers to 100 in words?
KQ7: How can I flexibly partition numbers to 100?
KQ8: How do I write numbers to 100 in expanded form?
KQ9: How do I count 10s on the number line to 100?
KQ10: How do I count in 10s and 1s on the number line to 100?
KQ11: How do I estimate numbers on a number line?
KQ12: Can I compare objects?
KQ13: Can I compare numbers?
KQ14: How do I order objects and numbers?
KQ15: How do I count in 2s, 5s and 10s?
KQ16: How do I count in 3s?

I can statements:

I can recognise the value of digits in 2 digit number

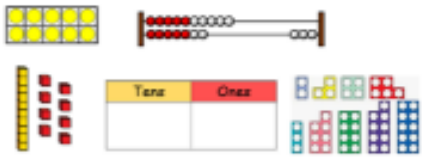
I can make and decompose two digit numbers using whole tens and units and part tens and units (36=30+6 or 36=22+14)

I can reason about the location of 2 digit numbers in the linear number system – including using the next and previous multiple of ten

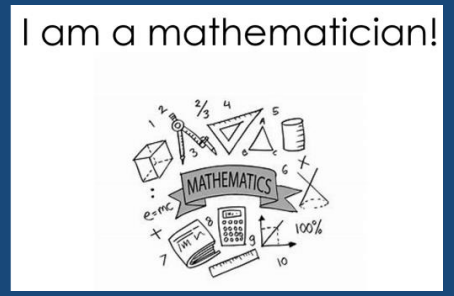
Vocabulary

Place Value – The value of a digit
Digit – A single number
Numeral – A symbol or name 3 or three
Compare – Greater than, less than or equal to
Partition – To separate a number
Part Whole – Whole numbers split into parts

Manipulatives:



Input



- Explains new vocabulary and its meaning
- Models how to use manipulatives
- Models how to set out mathematical equations
- Models how to use small steps to answer fluency and reasoning questions
- Models how to think mathematically
- Models how to look for patterns
- Scaffolds learning – I do, we do, you do

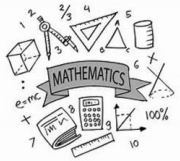
Sharp start – Input – Practice – Review

Sharp start	Input	Practice	Review
Quick fire starter activities Counting sticks Fastest finger first Sticky Knowledge Quiz	Modelling Split Inputs	Whiteboard work Application Task	Plenary Quiz

Practice

Over to you…

I am a mathematician!



11.09.25

KQ4

Fluency

1 Complete the sentences for each place value chart.

There are ☐ tens and ☐ ones.

The number is ☐

a)

Tens	Ones

b)

Tens	Ones

3 Complete the place value charts and sentences.

a)

Tens	Ones

There are 9 tens and 4 ones.

The number is ☐

b)

Tens	Ones

There are ☐ tens and ☐ ones.

The number is 75

2 Draw base 10 on place value charts to show the numbers.

a) 26 b) 47

Reasoning & Problems

Ron and Max have each made a number in a place value chart.

Ron

Tens	Ones

Max

Tens	Ones

Is the statement true or false?

Ron and Max have made the same number.

Challenge

1a. Which place value chart represents 4 tens and 2 ones?

A.

Tens	Ones

B.

Tens	Ones

1b. Which place value chart represents 2 tens and 3 ones?

A.

Tens	Ones

B.

Tens	Ones

2a. I want to show 43. Draw the missing tens.

Tens	Ones
10	1 1 1

2b. I want to show 26. Draw the missing ones.

Tens	Ones
10 10	1 1

3a. Steve is representing a number on a place value chart.

My chart shows 15.

Tens	Ones

Is he correct?

3b. Lauren is representing a number on a place value chart.

My chart shows 48.

Tens	Ones

Is she correct?

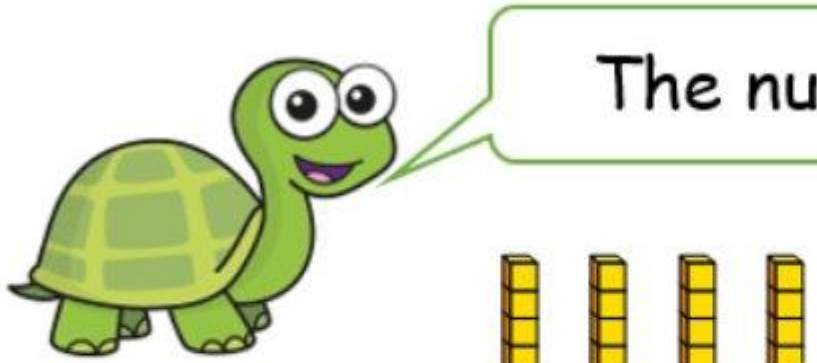
Sharp start – Input – Practice – Review

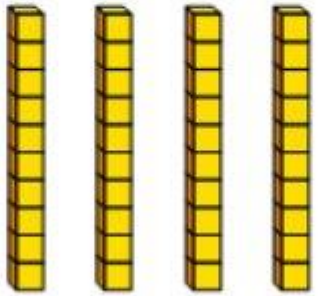
- Quick fire starter activities
  - Counting sticks
  - Fastest finger first
  - Sticky Knowledge Quiz
- Modelling
  - Split Inputs
- Whiteboard work
  - Application
  - Task
- Plenary
  - Quiz

Review

Learning Stop
T-Y-P

Tiny is using base 10 to make a number.





Tens	Ones
4	0

Tiny writes the number in a place value chart.

Explain Tiny's mistake.

Review

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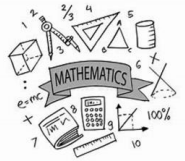
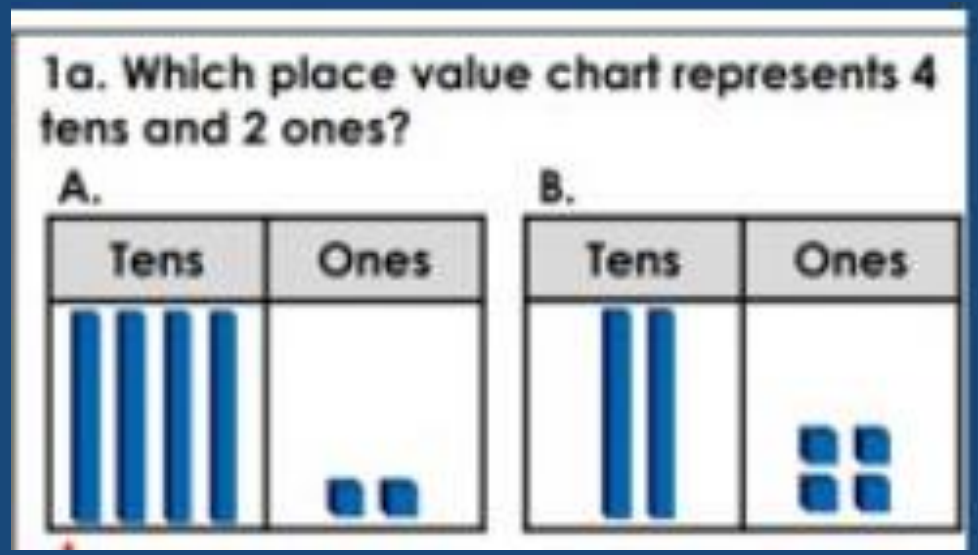


Review/plenary



What do you notice?

How would you solve this problem?

Sharp start – *Input* – *Practice* – *Review*

Sharp start	Input	Practice	Review
Quick fire starter activities Counting sticks Fastest finger first Sticky Knowledge Quiz	Modelling Split Inputs	Whiteboard work Application Task	Plenary Quiz

Arithmetic Reasoning

Arithmetic and Reasoning

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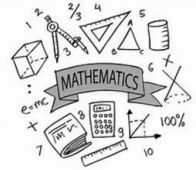


- Taught once a week
- Focusses on arithmetic and Reasoning questions
- I do, you do
- Models how to use manipulatives to support learning

Input

I do

¾ of 12 =

Show at least two different ways to find the answer.
Use manipulatives if this applies.

You do

¾ of 16 =

Pupils choose the method they want from the models you have shown, to work out the answer, in their books.

I am a mathematician!

Reasoning

I do You do

11. Samuel plants 3 rows of carrots.
There are 9 carrots in each row.
A rabbit eats 8 carrots.
How many carrots are left?

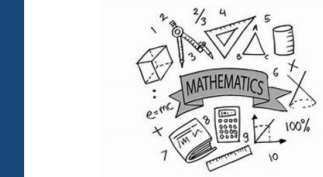
12. Devante plants 3 rows of seeds.
There are 8 seeds in each row.
A bird eats 9 seeds.
How many seeds are left?

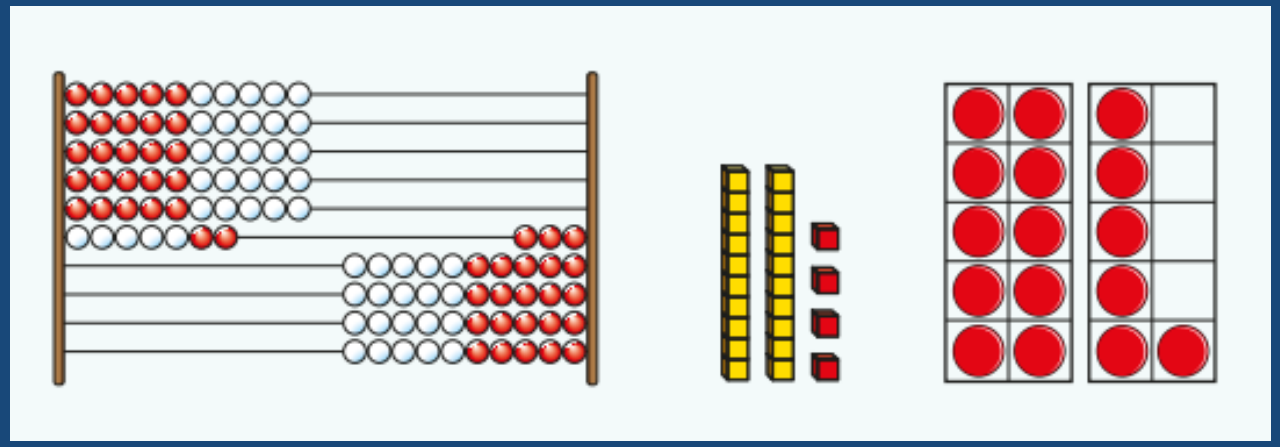
I am a mathematician!

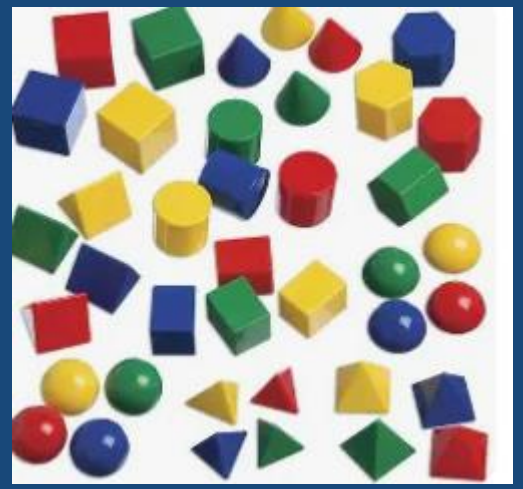
Stick in books, show working out.
Use manipulatives if needed.

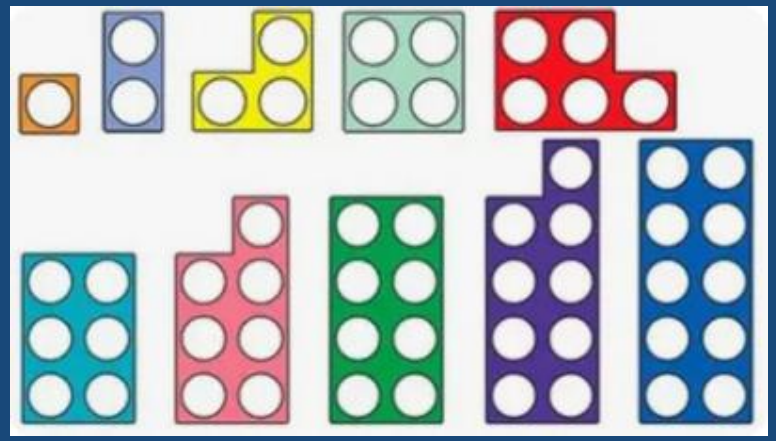
Manipulatives

I am a mathematician!





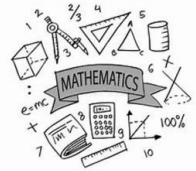




Over the past two decades, research has **consistently** shown the **positive impact** of using manipulatives in the classroom. **"Statistically significant results**" are seen when teachers use manipulatives compared with when they only used abstract maths symbols. This highlights the role that manipulatives play in supporting conceptual understanding and facilitating the progression from concrete to abstract thinking.

Supporting your child

I am a mathematician!



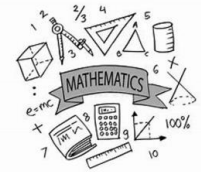
How can I support my child?

- **Read with your child 3 x a week -** Understanding maths problems often depends on reading the question carefully and picking out key information.
  Tip: Talk about maths language in stories (e.g. size, time, patterns, shapes).
- **TT Rockstars 10 minutes 3 x a week -** is a great way to build quick recall of times tables through fun and engaging games. Short, regular sessions really help build fluency. Aim for **10 minutes, 3 times per week.** Celebrate their improvements – speed and accuracy will grow over time!
- **Ask for help/resources - We are here to suupport you and your child.**
- **Telling the time** is a key life skill. Read clocks at home (analogue and digital) Talk about what time you do different activities. Use time language like *o'clock, half past, quarter to, in 10 minutes*
- **Shopping – addition, subtraction and money.** The shops are full of maths! Involve your child in: Adding prices together, Working out change, estimating totals, comparing value and looking at coins and notes. This helps develop **real-life problem solving** and understanding of money.
- **Maths is everywhere** — point it out in real life:

"How many plates do we need?"
"What shape is that sign?"
"How long will it take to get there?"
"What's the temperature today?"
Asking questions like these helps children see maths as part of the world around them.

Lessons

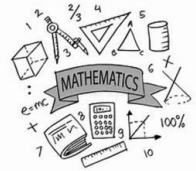
I am a mathematician!



EYFS	Perform some counting rhymes, number formation, reading maths themed picture books, building with 3D shapes, peg board patterns, and a number scavenger hunt outdoors.
Year 1	Comparing numbers and groups by matching.
Year 2	Partitioning numbers to 100
Year 3	Recognising 100's
Year 4	Finding 1, 10, 100 and 1000 more and less
Year 5	10/100/1,000/10,000/100,000 more or less.
Year 6	Addition and subtraction.

Lessons

I am a mathematician!



Thank you for all the support you already give at home.

By encouraging curiosity and making maths part of your daily routine, you're helping your child build skills that will last a lifetime.