



Questionnaire



Parent Questionnaire: Maths at John Ball School.

(Please tick box which best suits your practice)

1) How confident are you when supporting your child's maths homework?

I run screaming	I do what I can	I am quite good	I feel confident
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2) How much time does your child spend doing maths homework per week?

10 mins	30 mins	45 mins	1 Hour +
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3) Is your child confident with their times tables up to the 12 times table?

Not At All	Ok	Good	Confident
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4) Are you happy with your child's maths teaching at John Ball School?

Unsatisfied	Satisfied	Pleased	Delighted
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5) Do you find yourself talking about maths in the wider world with your ~~child~~ ~~family~~ /
mothers / time etc...

Never	Once a week	A few times a week	Every day
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6) Are you confident in your own subject knowledge when it comes to talking about maths with your child?

A few gaps Apprehensive Ok Quite Confident Confident

If you could improve one area of the maths teaching at John Ball what would that be?

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Questionnaire

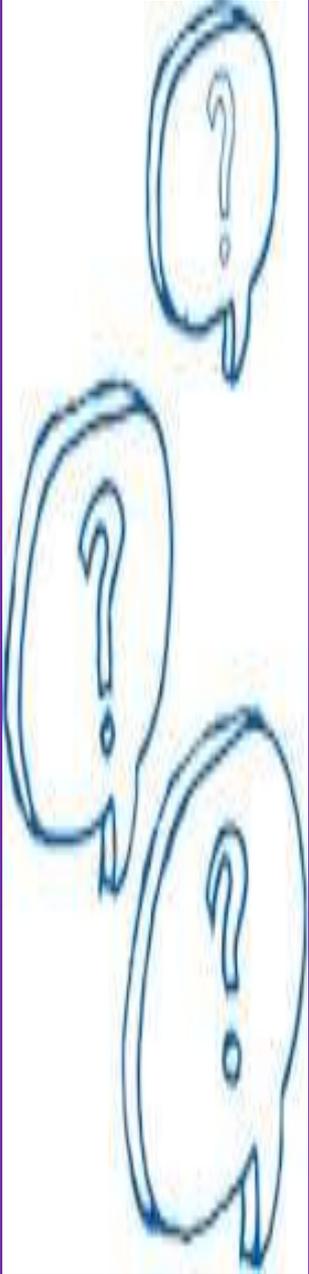
If children hear 'I can't do maths' from parents, teachers, friends they begin to believe it isn't important People become less embarrassed about maths skills as it is acceptable to be 'rubbish at maths'.

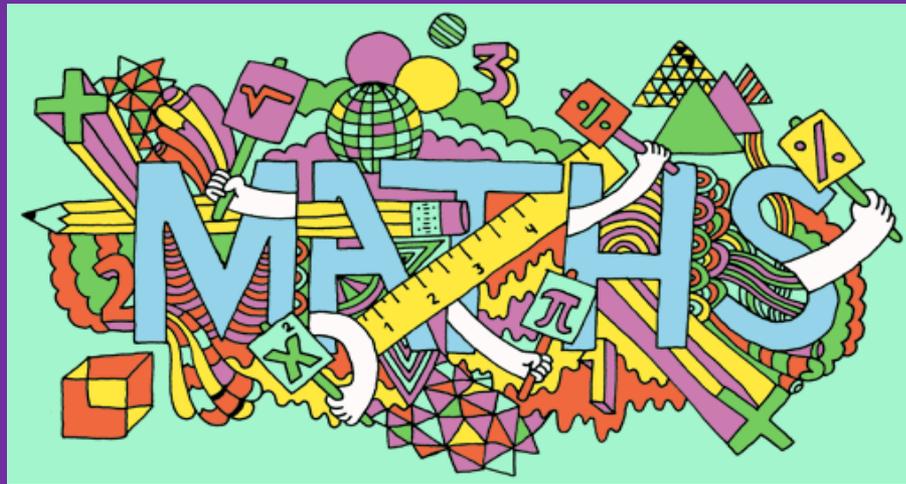
Fixed versus growth mindset

We believe that everyone can do well in maths...when they put in the effort at work at it.

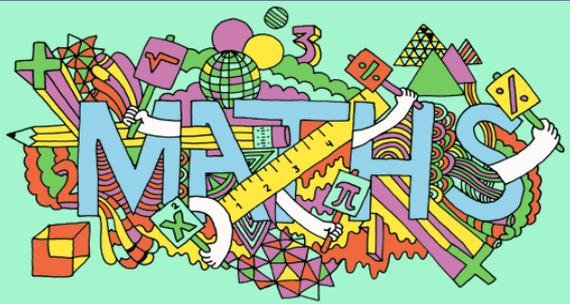
Do not praise children for being clever when they succeed at something, but instead should praise them **for working hard**.

Children learn to associate achievement with effort (which is something they can influence themselves – by working hard!), not ‘cleverness’ (a trait perceived as absolute and that they cannot change).





1. What are they up against?
2. John Ball's Pedagogy
3. FRP + CPA
4. The Maths partnership at JB



1. What are they up against?

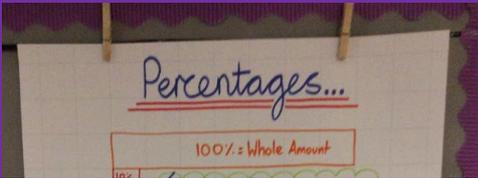
The curriculum is designed so that pupils explore mathematical ideas **in depth**.

- Number – number and place value
- Number – addition and subtraction
- Number – Multiplication and division
- Number – fractions
- Measurement
- Geometry: properties of shape
- Geometry – position and direction
- Statistics (Year 2 only)

- **Mastery** curriculum
- Reading and spelling of mathematical vocabulary

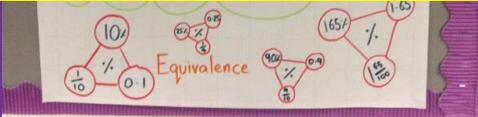
Maths at John Ball

Encouraging Discussion



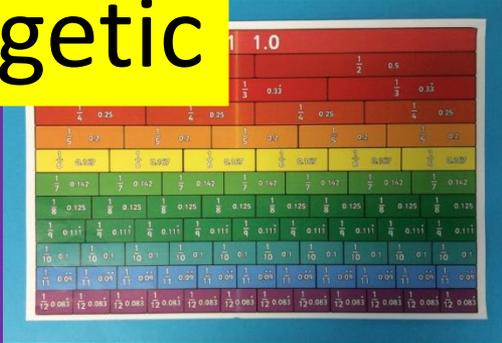
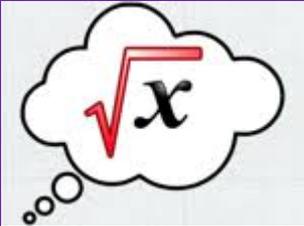
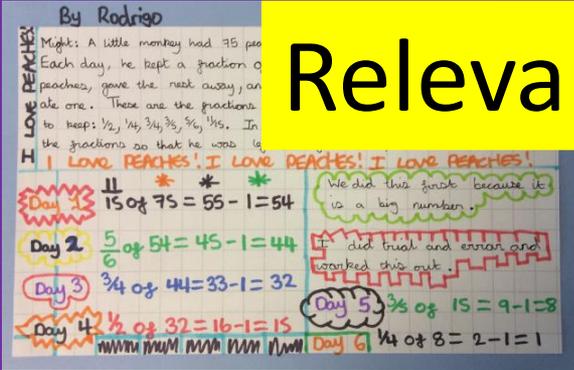
Child-led

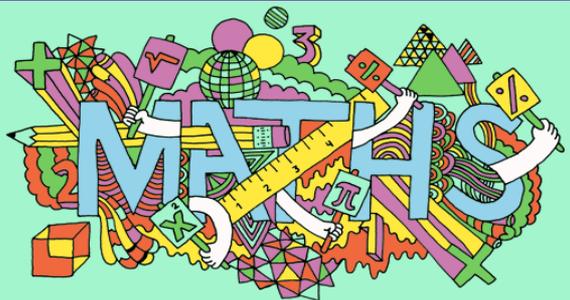
Useful



Relevant

Energetic





FRP + CPA

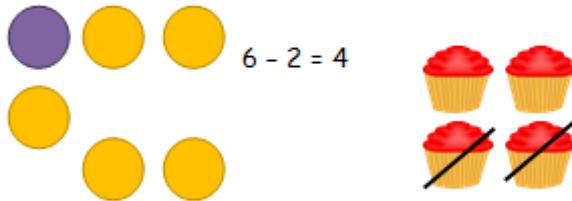
Fluency
Reasoning
Problem
Solving

Concrete
Pictorial
Abstract

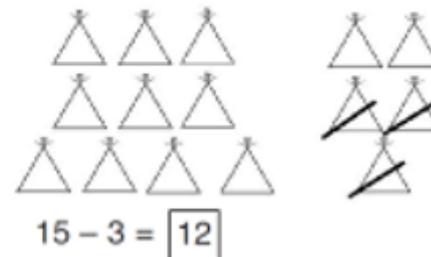
Progression in calculation in KS1

I can subtract one digit numbers including zero

Use physical objects, counters, cubes etc to show how objects can be taken away.



Cross out drawn objects to show what has been taken away.



$$18 - 3 = 15$$

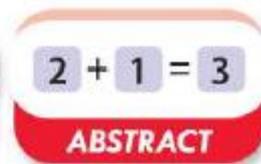
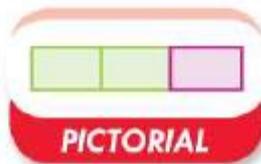
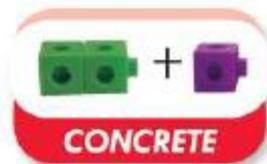
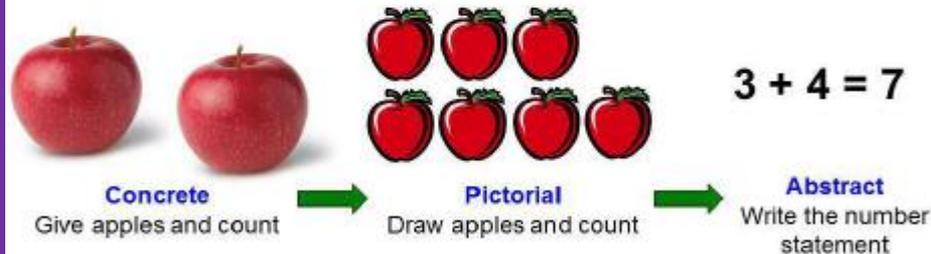
$$8 - 2 = 6$$

Concrete, pictorial, Abstract

CPA Approach	
Stage	Characteristics
Concrete	Refers to the use of manipulatives, measuring tools or objects that the student handles.
Pictorial	Refers to the use of drawings, diagrams, charts or graphs that the student draws
Abstract	Refers to abstract representations such as numbers and letters that the student writes

Example:

Tom had 3 apples. His mother gave him 4 more apples. How many apples did he have altogether?



Talk and Maths

Speaking and listening

- Vocabulary
- Questioning
- Full sentences with sentence scaffolds
- Reasoning and explanation
- Problem solving

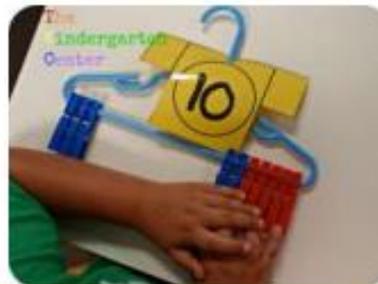


How do you know?
Can you show me?
Prove it to me...
Can you show me in a
different way?

How do WE help

What facts do they need to be able to recall?

- Number bonds
 - Addition and subtraction facts.
- Doubles and halves
- Near doubles
- Skip counting
- Times tables



How do WE help

It is important that children recognise number bonds, different pairs of numbers with the same total.

$7 + 3$

$6 + 2$

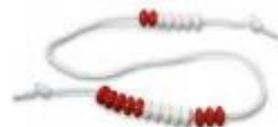
$5 + 3$



$1 + 4$

5	0
4	1
3	2
2	3

$6 + 4$



$6 + 3$

$6 + 1$

$3 +$



$5 + 4$

$3 + 3$



How do WE help

Times tables

- 2s
- 5s
- 10s
- 3s
- 4s (from the 2s)
- 6s (from the 3s)

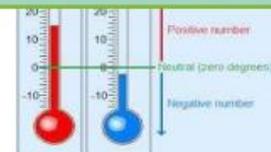
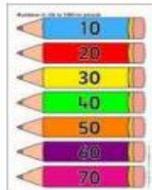
How do WE help

Inbetweenies

- Start by asking for a 2 digit number. Place it at the start of the line. Now ask for a higher 2 digit number and place at the end of the line. Now keep asking for numbers in between.

Keep Counting!

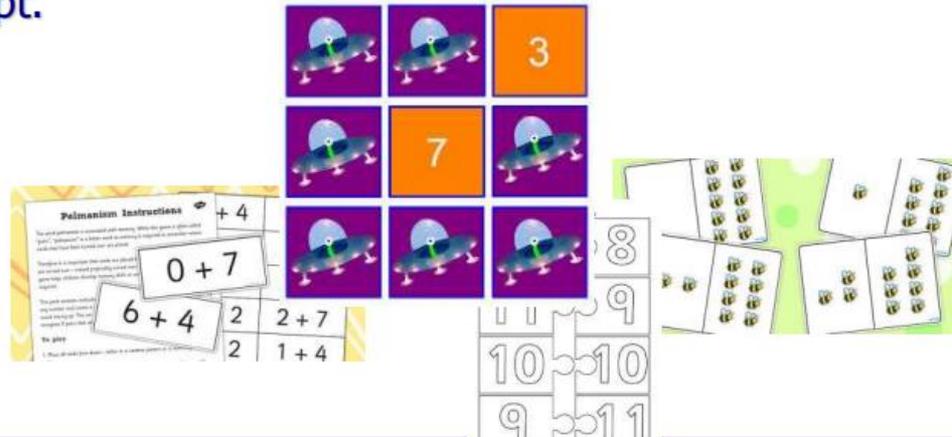
- Backwards and forwards in 1s, 2s, 5s, 10s, 100s.
 - Count with money.
 - Pairs



How do WE help

Pelmanism/ Memory games

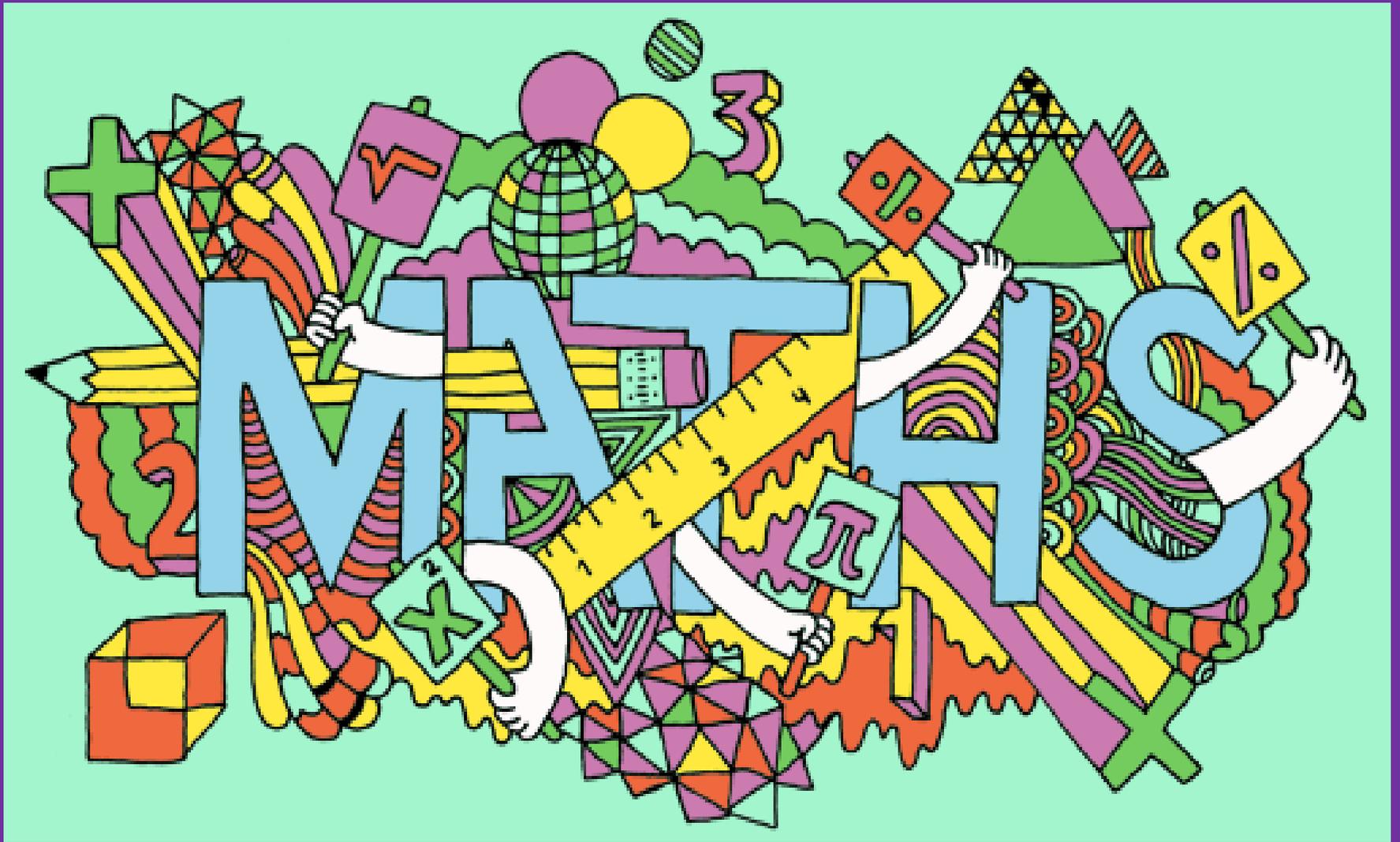
- Make own resources using pictorial or abstract.
- Adapt.



How do WE help

OTHER IDEAS:

- Dice games and card games.
- Follow a recipe: work together to find out the quantities needed, ask your child to weigh the ingredients, discuss how you'd halve or double the recipe and discuss the ratio of ingredients.
- Talk about the weather forecast: is today's temperature higher or lower than yesterday's? What do the numbers mean?
- 🗒️ Going shopping: talk about the cost of items and how the cost changes if you buy two items instead of one. Let your child count out the coins when paying and discuss the change you get back. Use coins to explore addition, subtraction, multiplication and division.
- 🗒️ Planning an outing: discuss how long it takes to get to the park, and so work out what time you need to leave the house. Encourage your child to work out the best solution based on the time and distances. Discuss what shapes you see when you get there.



Thanks you for coming!