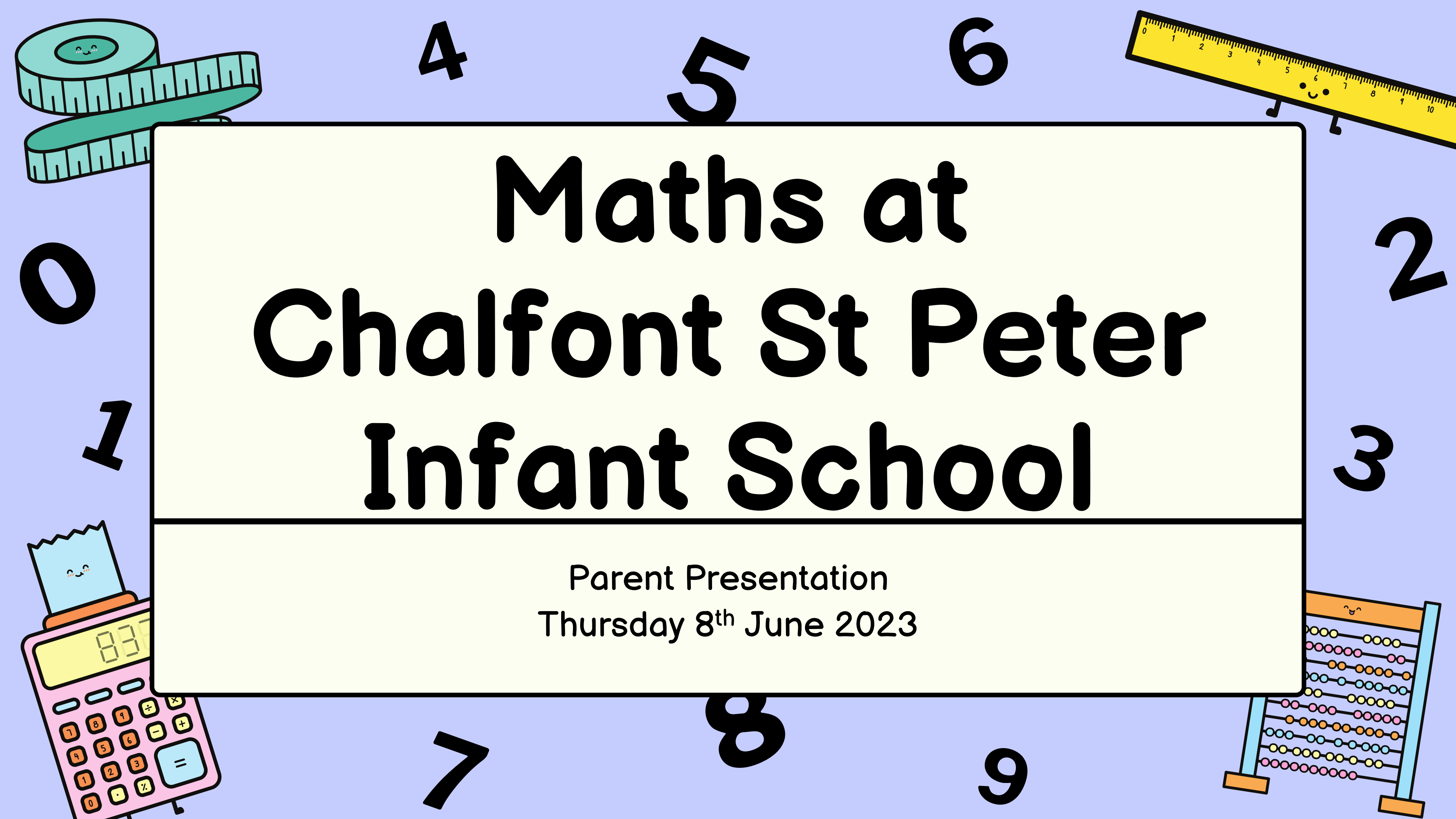
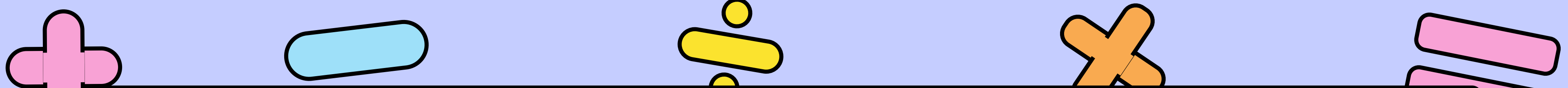


The background is a light blue gradient. Scattered around the central text box are various math-related illustrations: a green measuring tape in the top left, a yellow ruler in the top right, a pink calculator in the bottom left, and a blue abacus in the bottom right. Large, bold black numbers (0, 1, 2, 3, 4, 5, 6, 7, 8, 9) are also scattered around the central text box.

Maths at Chalfont St Peter Infant School

Parent Presentation
Thursday 8th June 2023



At Chalfont St Peter Infant School we aim to:

- enjoy the subject through practical activity, exploration and discussion
 - study Maths with confidence, competence and a sense of achievement
 - understand the fundamentals of Mathematics and develop the ability to recall and apply knowledge rapidly and with accuracy
 - solve problems by applying their mathematical knowledge with increasing complexity, including breaking down problems into a series of simpler steps and persevering in seeking solutions
 - reason mathematically by following a line of enquiry
- 

Our Maths Curriculum

- Since October 2022 we have been using White Rose Maths
- We use a Mastery Approach
- We use a Concrete, Pictorial and Abstract method when teaching Maths



Year R

Year R planning for White Rose is changing in September

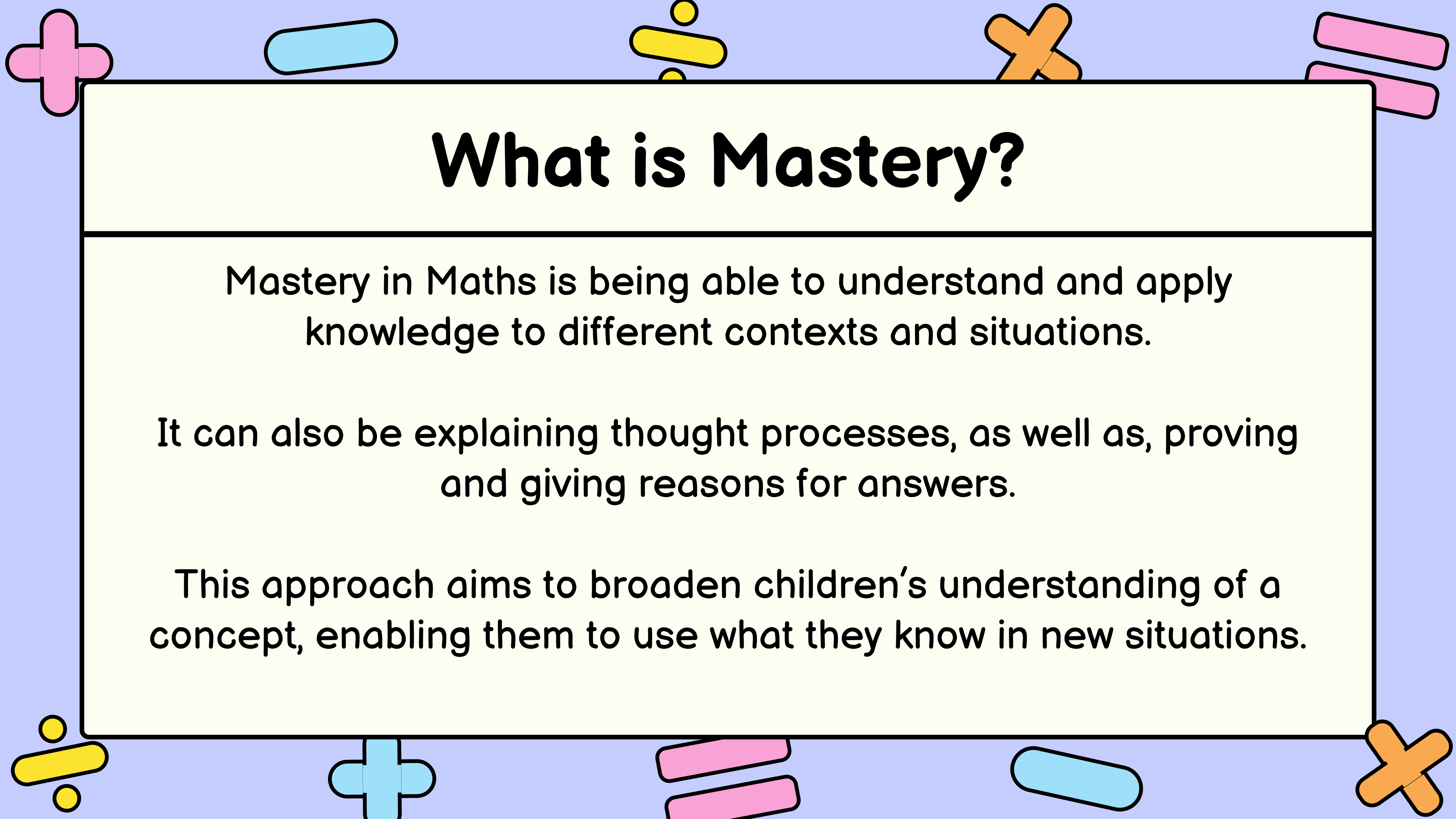
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn	Getting to Know You			Just Like Me!			It's Me 1 2 3!			Light and Dark			Consolidation	
Spring	Alive in 5!			Growing 6, 7, 8			Building 9 and 10			Consolidation				
Summer	To 20 and Beyond			First Then Now			Find My Pattern			On The Move				

Year 1

	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

Year 2

	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				Number Addition and subtraction				Geometry Shape			
Spring	Measurement Money	Number Multiplication and division						Measurement Length and height	Measurement Mass, capacity and temperature			
Summer	Number Fractions			Measurement Time			Statistics	Geometry Position and direction		Consolidation		

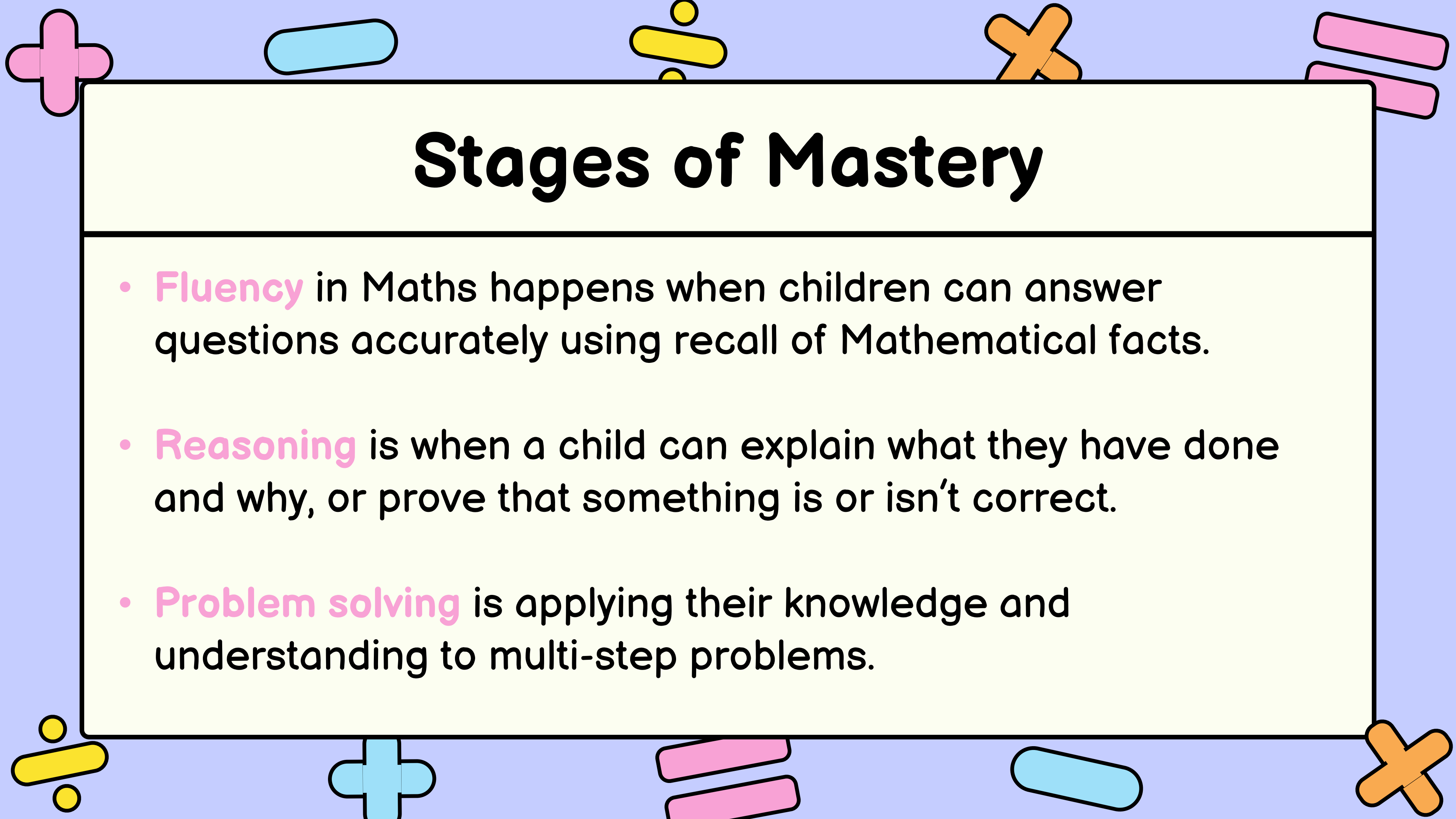


What is Mastery?

Mastery in Maths is being able to understand and apply knowledge to different contexts and situations.

It can also be explaining thought processes, as well as, proving and giving reasons for answers.

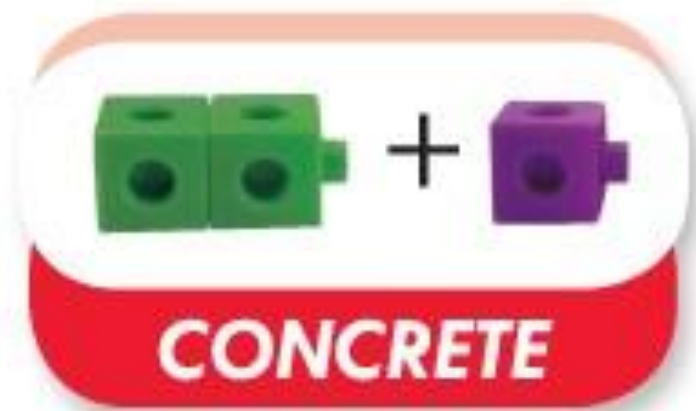
This approach aims to broaden children's understanding of a concept, enabling them to use what they know in new situations.



Stages of Mastery

- **Fluency** in Maths happens when children can answer questions accurately using recall of Mathematical facts.
- **Reasoning** is when a child can explain what they have done and why, or prove that something is or isn't correct.
- **Problem solving** is applying their knowledge and understanding to multi-step problems.

Concrete- Pictorial- Abstract

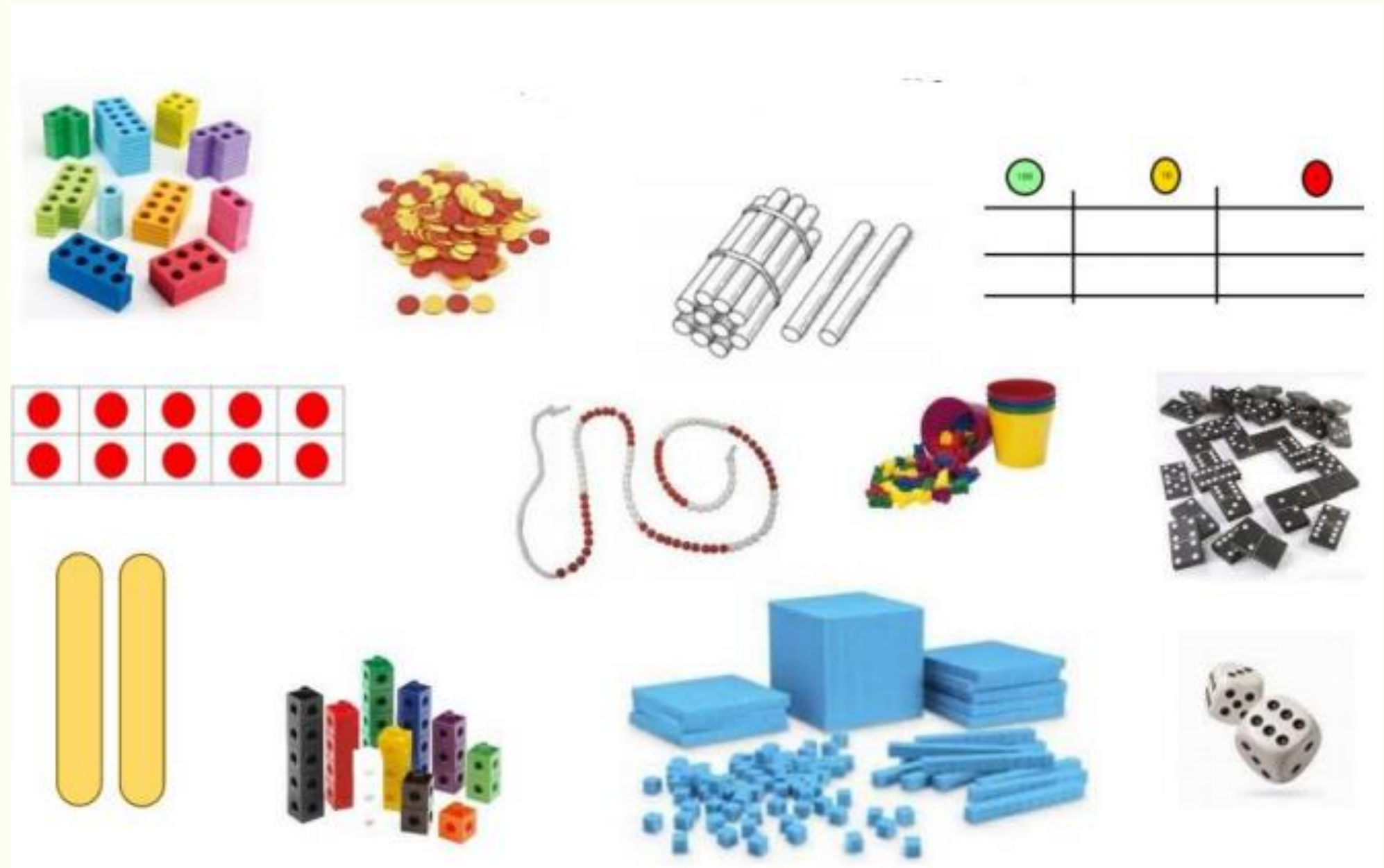


Pupils begin at the concrete level where they use a number of different manipulatives such as dienes, unifix, numicon, ten frames, straws, dot patterns, counters, shapes, coins and dice to help them grasp a concept and solve problems. Pupils then progress to the pictorial stage which aids visualisation of problems. Key strategies used within the pictorial stage are number lines, hundred squares, diagrams, bar models and pictures. When pupils demonstrate a sound understanding of concepts they are able to move to the abstract stage where numbers and symbols are used to solve problems.

Concrete

The Concrete stage encourages use of manipulatives and physical resources to physically show the process behind what is being taught.

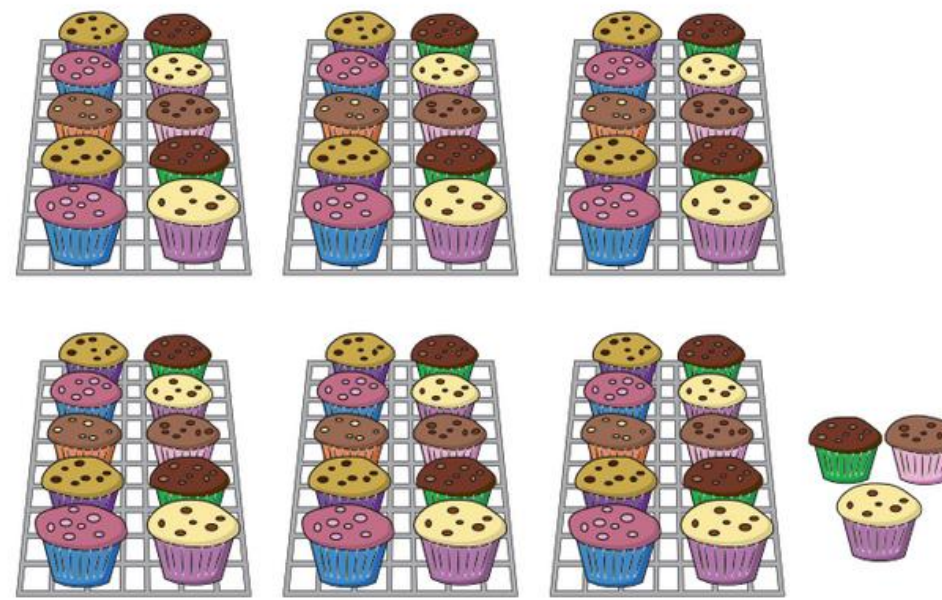
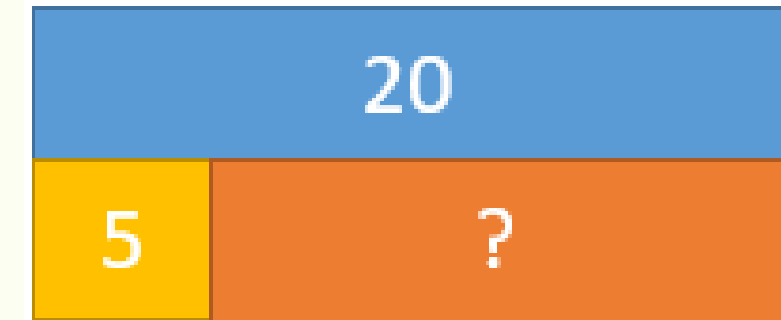
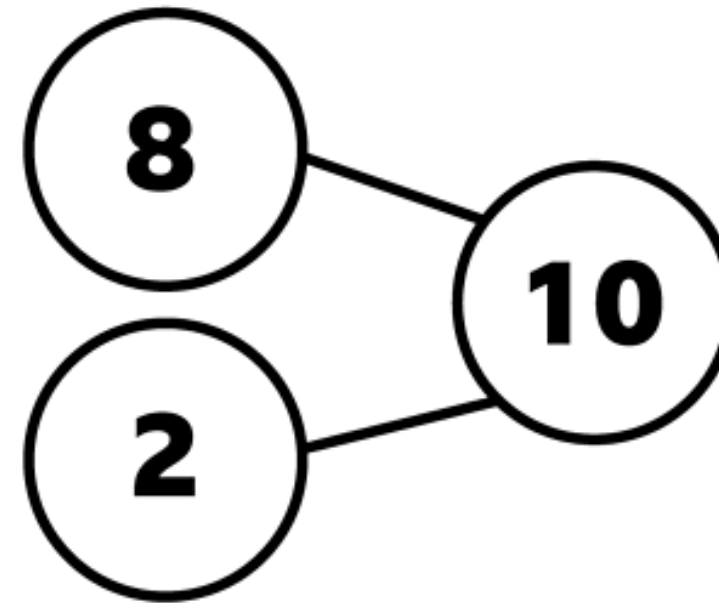
Numicon
Tens Frames
Counters
Place Value
Counters
Dominoes
Dice
Cubes
Dienes
Bead Strings



Pictorial

Once secure with understanding at the concrete stage, pupils move on to pictorial based problem-solving and expression. The physical resources are generally replaced with a pictorial representation.

Tens Frames
Part Whole Model
Bar Model
Number Lines
Hundreds
Squares
Diagrams
Pictures



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Abstract

The abstract stage is when children face questions using numbers and symbols, or key vocabulary alone. For instance, $6 + 3 = ?$ Or What is $\frac{2}{3}$ divided by 2?

At this stage, pupils are expected to have a depth of knowledge which can now be applied without the need for physical or visual support strategies.

a) 92 has tens and ones.

a) $\frac{1}{4}$ of 4 $\frac{3}{4}$ of 4

b) $\frac{1}{2}$ of 20 $\frac{3}{4}$ of 20

3 Tiny is working out the missing number.

$$3 + \boxed{} = 11$$

The missing number is 14



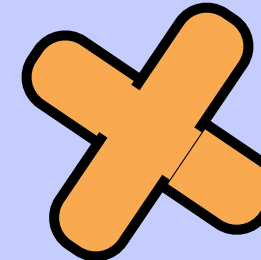
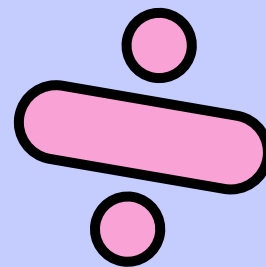
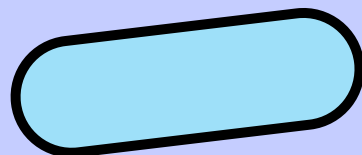
Do you agree with Tiny? _____

Explain your answer.

a) $28 - 6 = 27 - \boxed{}$

f) $13 + 61 = \boxed{}$

0



5

1

2

3

4

What does a Maths Lesson look like?

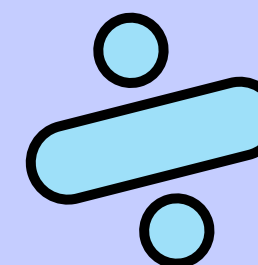
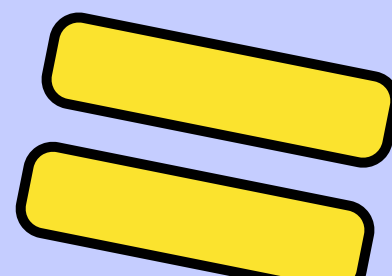
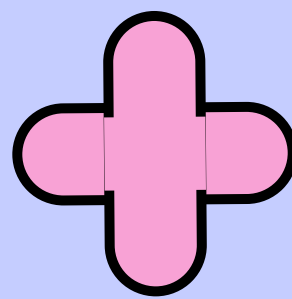
Year R and Key Stage 1

6

7

8

9



Year R

Teaching

We start the lesson with a song
(counting, shape).
Next we complete our Flashback
4's.

We are then teach our learning
objective, this could be done using
the board or practical resources.

Activity

Children complete activities in small groups.
These are practical activities using concrete
resources and occasionally pictorial and
abstract representations.

These are uploaded to Tapestry.

In preparation for Year 1 the children are
also completing a Maths workbook activities
in Summer 2.

Key Stage 1

Teaching

We start with Flashback 4.

Next we have a starter activity recapping on previous learning.

We are then taught the first part of the lesson.

Once we have completed the work for the first part we are then taught the second part.

Activity

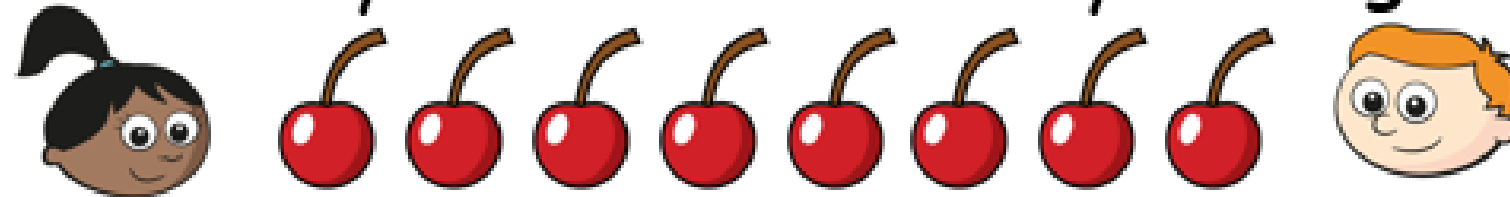
Children complete their work in their White Rose Work book. These activities include pictures, concrete resources, fluency, reasoning and problem solving type questions. They also complete practical investigations throughout the year.

Flashback 4 Example

Flashback 4

Year 1 | Week 4 | Day 1

- 1) Sam and Ron share the cherries equally.
How many cherries will they each get?



- 2) Double  is eggs

- 3) There are groups of flowers.



- 4) $1 + 6 = 7$ so $11 + 6 =$

Teaching Slide Example

School starts at 9 o'clock
and playtime is at 20
minutes to 11



How many minutes are there between
the start of the day and playtime?



Have a think



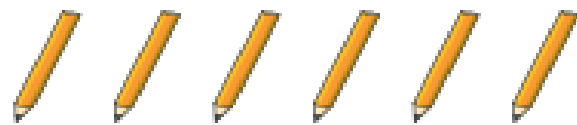
Year R Activity Examples



Year 1 White Rose Example

Find a half of a quantity

- 1 a) Circle half of the pencils.



- b) Complete the sentence.

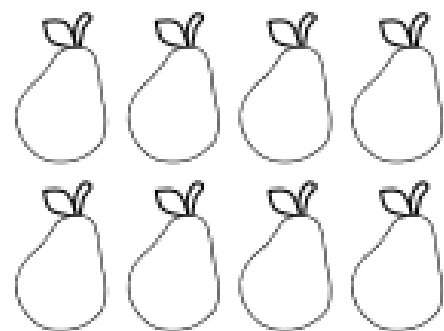
Half of 6 is

- 2 Colour half of each group.

a)

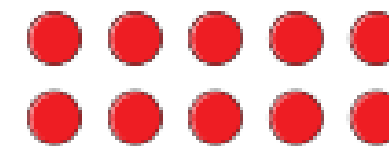


b)



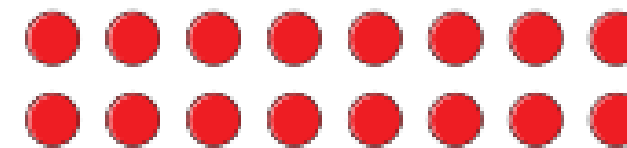
- 3 How many counters are there in each group?
Find half of each group.

a)



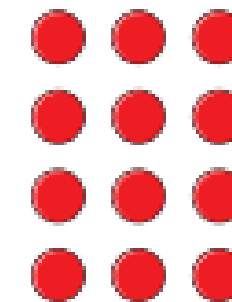
Half of is

b)



Half of is

c)



is half of

Year 2 White Rose Example

Hours in a day

White
Rose
Maths

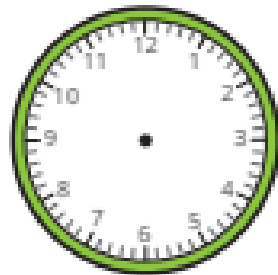
1



a) What time is it?

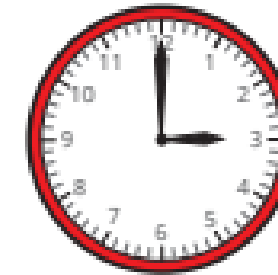
o'clock

b) What will the time be in 1 hour?
Draw your answer on the clock.



c) Look at the time you have drawn.
What time will it be in 1 hour?

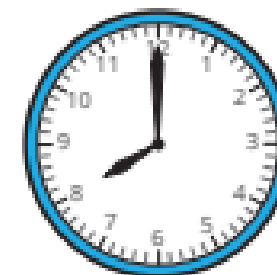
- 2 The time is 3 o'clock.
How many hours will it
be until the hour hand
reaches 3 again?



hours

- 3 How many times in one day does a clock
show this time?

Tick the correct answer.



1 time

2 times

3 times

8 times

- 4 Use the numbers to complete the sentences.

2

24

12

There are hours shown on a clockface.

The hour hand moves round the clock
times in a day.