



South Farnborough Infant School  
Parent workshop  
Wednesday 26<sup>th</sup> November 2025



# Welcome!

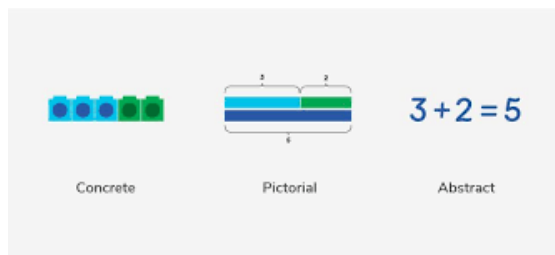
# Aims of today's session:



- To introduce you to our Power Maths scheme and how it supports children's learning.
- To explain how we teach and structure maths lessons in our school.
- To give you the chance to experience the CPA approach (Concrete, Pictorial, Abstract).
- To talk about the importance of mathematical language and how you can support this at home.
- To reassure you that you're already helping more than you realise, and to share simple ideas for supporting maths at home.



Maths should be hands-on and meaningful, so we teach using the CPA approach (concrete, abstract, pictorial).

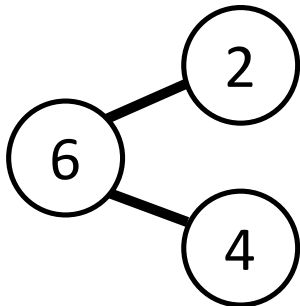
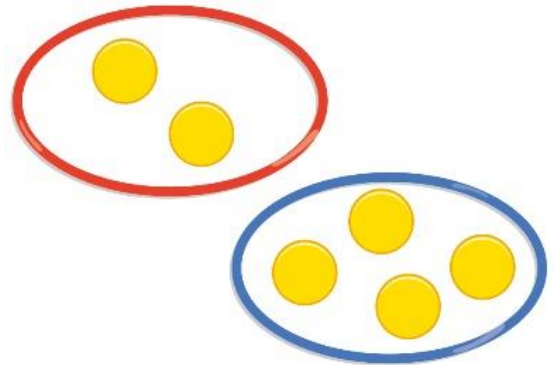


First, children explore new ideas using real, concrete objects they can touch and move (like cubes or counters).

Next, they learn to represent these ideas using pictures or diagrams.

Finally, once they understand the concept, they move on to solving problems in a more abstract way, using numbers and symbols ( + - x).

# Concrete, Pictorial, Abstract



$$2 + 4 = 6$$



To help children follow these processes, we use our school mantra.

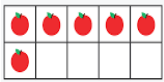
*Say it, make it, draw it, write it, explain it*



Say it *Can you explain what you need to do?*



Make it *Can you make it using manipulatives?*



Draw it *Can you draw what you've made?*

$$4 + 5 = 9$$

Write it *Can you record your answer?*



Explain it *Can you explain what you've done and show it another way?*

Teachers model  
this language  
when teaching.



Let's Find Out

Why did we choose Power Maths, and how does this fit together with our CPA approach?





Ash



Flo



Astrid



Dexter



Sparks



1. It is an inclusive scheme that supports all learners (scaffolding and stretch).
2. It supports precise learning of mathematical language.
3. It's a spiral curriculum (revisits concepts).
4. It carefully considers the models and manipulatives required to solve problems from year R up to year 6.
5. Most importantly, it has a proven success rate of building confidence toward problem solving.

# Key aims of *Power Maths*

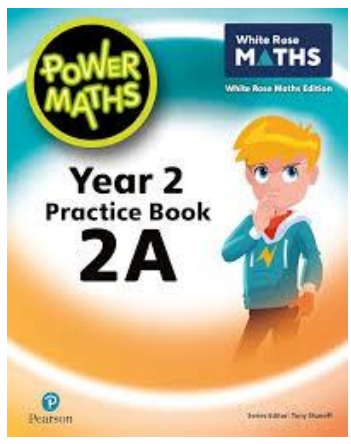


Keeping the whole class progressing together

Providing rich problem solving to challenge and engage every child

Practical assessment to reveal misconceptions and inform speedy interventions

Nurturing a growth mindset and building children's confidence in maths



- Many children experience maths anxiety (the belief that they *can't* do maths).
- We aim to reduce this by including all children throughout the learning and targeting gaps through maths intervention.



Want to find out more? [Get six week free trial and tou](#)

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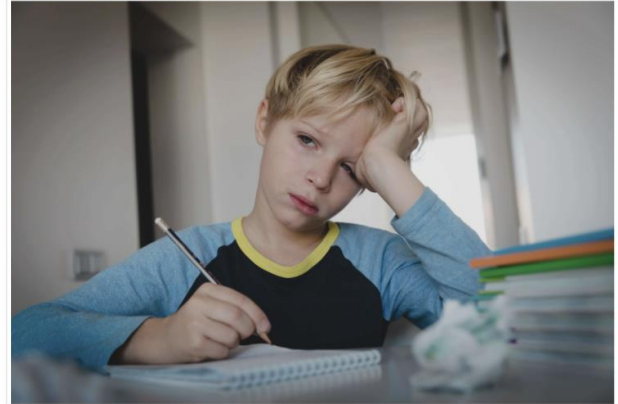
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## Confidence with numbers: understanding and overcoming maths anxiety

*"A negative emotional reaction to mathematics, leading to varying degrees of helplessness, panic and mental disorganisation that arise among some people when faced with a mathematical problem."* The [Maths Anxiety Trust](#) - definition of maths anxiety.

Understanding the cause of children's maths anxiety or even just finding out what to do if faced with it can help us to feel more confident tackling it.

This page brings together guidance from a range of organisations, each providing information that will help you understand why maths anxiety occurs along with strategies for helping your child overcome it.



[National Numeracy - understanding maths anxiety](#)

Many adults experienced maths very differently when they were at school.

Often, people feel they “weren’t good at maths,” when in reality the issue was the way maths was taught, not their ability.



## Parents’ maths anxiety linked to lower numeracy skills in children, study finds

3 February 2025

Children

Education



Tweets by LboroPR

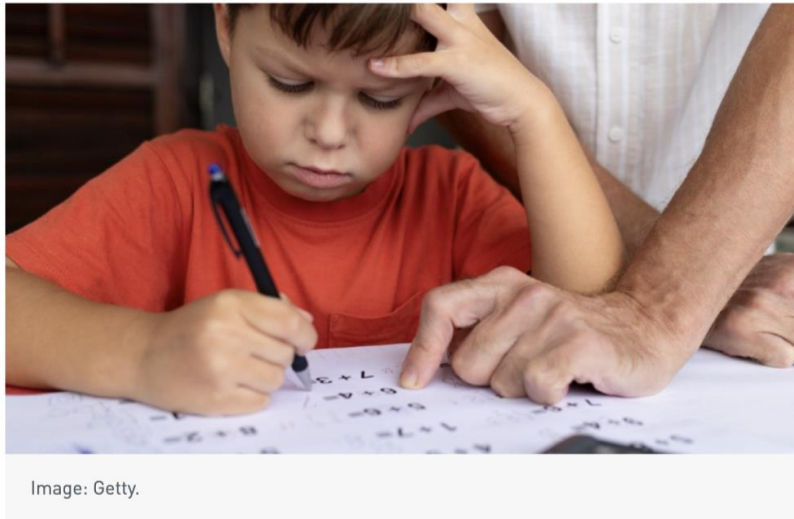


Image: Getty.



Today, we are going to experience maths in two ways:

1. Solving problems through our CPA approach in groups.
2. Observing what it looks like in the classrooms.

# Let's do a lesson together...



## Discover

Unit 1: Numbers to 100, Lesson 3

### Count in 10s and 1s

#### Discover



- 1 a) Count the stacked cones.
- b) How many cones are there in total?

16

What would you need to know to solve this problem?



Yes - Counting in 10s!



# A scaffold could be...

Unit 1: Numbers to 100, Lesson 3

## Count in 10s and 1s

### Discover



- 1 a) Count the stacked cones.
- b) How many cones are there in total?

Language we will use:

more, tens (10s), ones (1s), how many, pattern

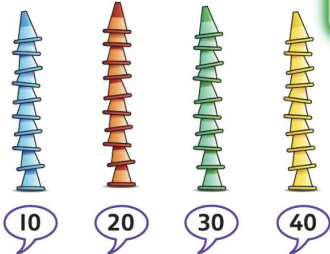
## Skip counting by 10's

10 20 30 40 50

60 70 80 90 100

Share

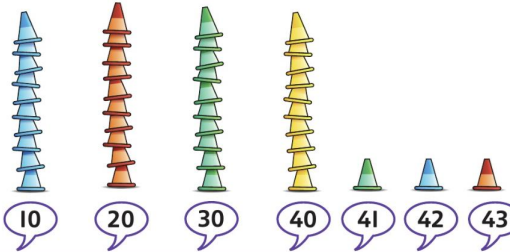
- a) Each stack has 10 cones.  
Count in 10s.



I used counters on a ten frame to help me.



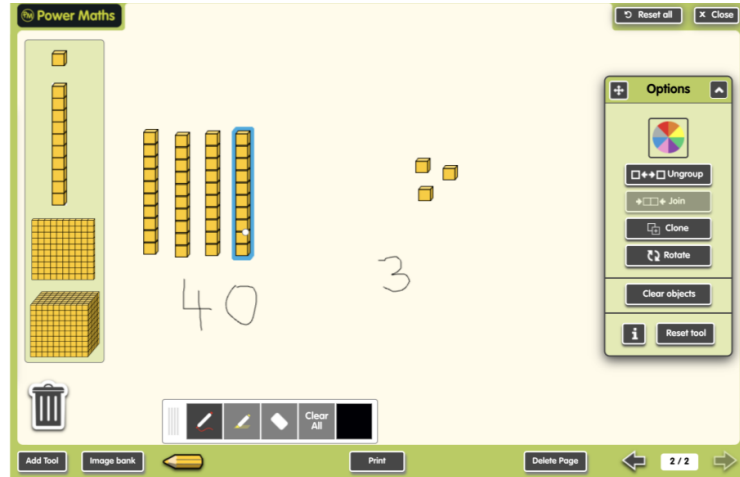
- b) There are 3 **more** cones.  
Count in 10s, then count in 1s.



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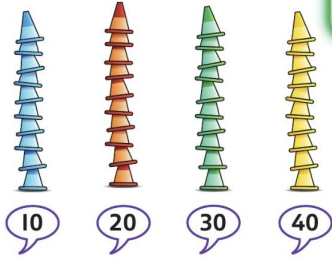
The slides demonstrate Clearly how to solve by Giving exciting and interesting images.



It also has interactive manipulatives to model.

Share

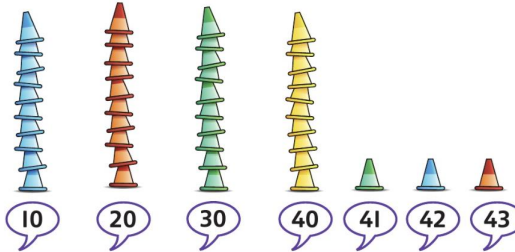
- a) Each stack has 10 cones.  
Count in 10s.



I used counters on a ten frame to help me.



- b) There are 3 more cones.  
Count in 10s, then count in 1s.



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Contents



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Your turn...



What  
if...?

...there were 5 stacks and 6 cones. Can you 'make it?'

Can the children now use the same method to work out our 'Think together' section? Some might be ready to move on to a challenge. This doesn't mean that others haven't achieved the objective.



Unit 1: Numbers to 100, Lesson 3

### Think together

1 How many stars are there?

2 Are Jo and Jim correct?

a) Jo

There are 25 seashells.

b) Jim

I think there are 27 seashells.

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PUPIL TEXTBOOK 2A PAGE 18

Unit 1: Numbers to 100, Lesson 3

### CHALLENGE

3 Count the pencils, pens and rubbers.

I cannot see each pencil or pen.

Let's try counting the 10s.

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Children are now ready to have a go in their books. Here is an example of the work that they are provided following the input from the teacher.



on 3

Unit 1: Numbers to 100, Lesson 3 Date: \_\_\_\_\_

**Count in 10s and 1s**

1 Count the cans.

\_\_\_\_\_ cans

2 Count the cubes.

\_\_\_\_\_ cubes

3 Count the dots.

\_\_\_\_\_ dots

12

Unit 1: Numbers to 100, Lesson 3

4 Is Kat correct? **2 tens are the same as 20 ones.**

Show a partner using counters and ten frames.

Kat

5 Count by making 10s.

a) \_\_\_\_\_ birds

b) \_\_\_\_\_ fingers

c) \_\_\_\_\_ cakes

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# So, how can you help at home?



## Year R (Reception)

Focus: building early number sense, language and confidence.

### 1. Count everything

Count steps, toys, snacks, cars...

Try counting forwards and backwards.

### 2. Play with real objects

Use blocks, pasta, buttons, Lego.

Make small groups: "Can you give me 3?"

"Which group has more?"

### 3. Talk about shapes

Spot circles, squares, triangles in the environment.

Describe shapes: "It has 3 sides... It's a triangle!"

### 4. Compare and sort

Sort objects by size, colour, shape.

Compare: bigger/smaller, longer/shorter, heavier/lighter.

### 5. Use maths language

Words like *more*, *fewer*, *altogether*, *next*, *before*, *after*, *first*, *last*.

### 6. Play games

Number puzzles, board games, building towers, simple dominoes.

## Year 1

Focus: developing number facts, using the CPA approach, problem-solving and mathematical talk.

### 1. Practise simple addition and subtraction

Use objects or pictures to show how numbers work.

E.g., "You have 5 grapes, I give you 2 more—how many now?"

### 2. Number bonds

Practise pairs that make 10 and then 20.

Use toys: "We have 7. How many more do we need to make 10?"

### 3. Explore time and daily routines

Use clocks, talk about morning/afternoon.

Discuss order: first, next, last.

### 4. Play with money

Use real coins to play shop.

Discuss values: "This coin is 2p, this is 5p."

### 5. Use simple measurement

Compare lengths with a ruler or string.

Bake together—measure ingredients.

### 6. Encourage clear explanations

Ask: "How do you know?" "Can you show me another way?"

# So, how can you help at home?



## Year 2

Focus: solidifying number facts, reasoning, using different strategies and confidence solving simple problems.

### 1. Secure number bonds & times tables

Practise number bonds to 20.

Begin 2, 5 and 10 times tables using objects, arrays or songs.



### 2. Real-life addition & subtraction

Use prices, recipes, shopping lists.

“If these cost 35p and 20p, how much altogether?”

### 3. Encourage mental maths

Spot patterns: doubles, near doubles, counting in 2s/5s/10s.

Quick questions: “What is 10 more than 24?”



### 4. Use maths in daily life

Tell the time to the nearest quarter hour.

Measure and compare items around the house.



### 5. Problem solving

Pose small challenges:

“There are 12 biscuits. We eat 4. How many left?”

“Can you find 3 different ways to make 20?”

### 6. Talk through their thinking

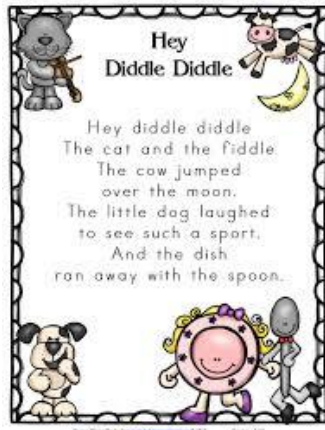
Ask open questions:

“Why did you choose that method?”

“Can you prove it?”

“Is there another way?”





Today, let's count backwards on the steps. We know there are 12 altogether so 11, 10...

What number does Mr Jones live in? Can you read that number?

Do you want your toast cut in to parts or would you like it whole?

Yesterday there were 4 cars across the road but now there are only 3. How many fewer are there today?

Can you pour half a glass of milk for your brother?

Let's count the doors on the way home. I notice they're not counting up in 1s. Can you see a pattern?

Can you estimate how many more pieces of lego you think you will need to build a car?

What 3D shape do you think the Rice Krispies box is?

# Questions?

