PARENT LEARN

Supporting your child's learning in mathematics across Key Stage 2

HUNSLEY PRIMARY
inspire · aspire

To enable pupils to:

- Develop Fluency (in the fundamentals of maths)
- Develop Reasoning Skills (reason mathematically by following a line of enquiry and developing a proof using mathematical language)
- Embed Problem-Solving (can solve problems by applying mathematics to a variety of routine and non-routine problems)- considering problems which apply to our real lives and those that don't

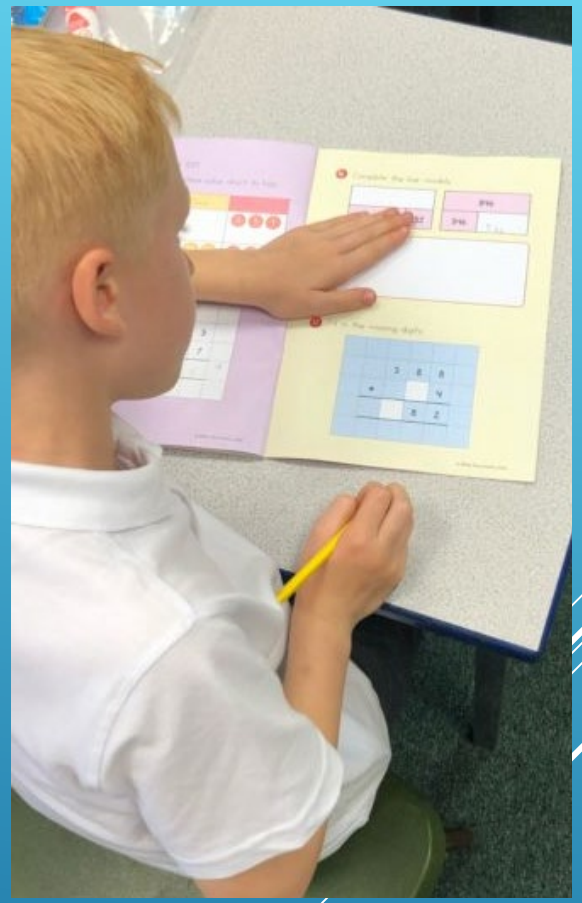
White Rose Maths Scheme

-THE WHITE ROSE SCHEME ENCOURAGES CHILDREN TO CONSIDER 'WHY' IN MATHS AND EXPLAIN THEIR ANSWERS.

-USING THE WHITE ROSE SCHEME WE ARE ABLE TO USE CPA APPROACHES TO SUPPORT ALL CHILDREN (CONCRETE, PICTORIAL, ABSTRACT)

-WE ARE ALSO ABLE TO STRETCH CHILDREN WHO ARE READY USING REASONING AND PROBLEM SOLVING QUESTIONS WHICH FLOW THROUGHOUT THE SCHEME

WE ARE NOW USING THE BOOKLETS



Learning across the year…

CURRENT LEARNING

- Apply number bonds within 10
- Add and Subtract ones, tens and hundreds
- Spot the pattern
- Add ones across tens
- Add tens across a hundred
- Subtract ones across tens
- Subtract tens across a hundred
- Make connections
- Add two numbers (no exchange)
- Subtract two numbers (no exchange)
- Add two numbers (across a 10)
- Add two numbers (across a 100)
- Subtract two numbers (across a 10)
- Subtract two numbers (across a 100)
- Add 2-digit and 3-digit numbers
- Subtract a 2-digit number from a 3-digit number
- Complements to 100
- Estimate answers
- Inverse Operations
- Make Decisions

- Mathematical understanding is developed through using concrete, pictorial and abstract representations
- Children only fully master concepts through step-by-step teaching, spending time on achieving 'greater depth'
- Mathematics is an interconnected subject, so children develop fluency by making connections
- Maths uses precise vocabulary, in rich talk and discussion – terminology is a maths tool

WHAT IS THE PEDAGOGY (METHOD OF TEACHING?)

As previously mentioned, there are three key ideas in each lesson:

- Concrete – objects, manipulatives, equipment
- Pictorial – picture representations, simple
- Abstract – giving values to bars, for example
- Reasoning and problem solving- manipulate the knowledge they have gained to solve problems

This follows Mastery Curriculum (we move through learning as one class together, at the same pace until most children are ready to continue, our booklets support this by…)

EXPLORE THE CONCEPT

Children's chances of succeeding in education and life will be maximised if they develop deep and lasting procedural and conceptual mathematical understanding.

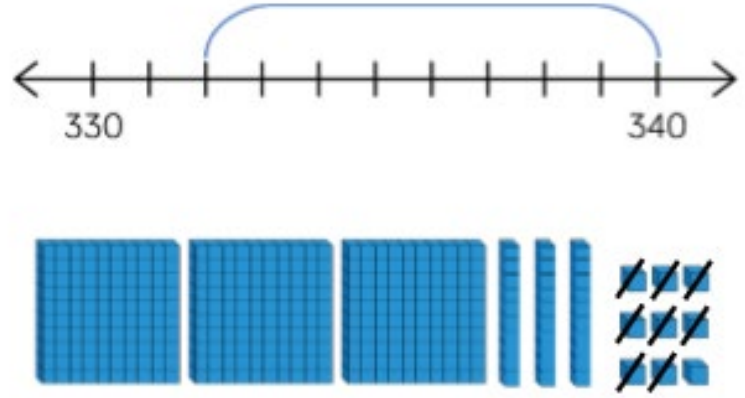
- Vocabulary: 'number sentence' (not sum); 'ones' (not units – these refer to measurement, not digits) 'exchanging' (not borrowing as we don't give the number back).
- Depth and fluency – see the maths in everyday things
- Addition and Multiplication (where can I put the =?)
- Number bonds to 10 and 20
- Think Part-Part-Whole
- Investigate in an open-ended way
- Practise each day

TEACHING FOR MASTERY – WHAT ARE THE ESSENTIALS?

Complete the diagram.

Number story	Bar model
6 × 3 = 18	
Addition sentence	Draw it

Which image does not represent 339 – 8?



Alex thinks the chart shows 456 – 4
Do you agree?

Hundreds	Tens	Ones
● ● ● ●	∅ ∅ ∅ ∅ ●	● ● ● ● ● ●

Explain why.

Examples of problem solving- more than one step

Number story

Miss Larkin has six boxes with three pencils in each. She has eighteen pencils altogether.

6 x 3 = 18

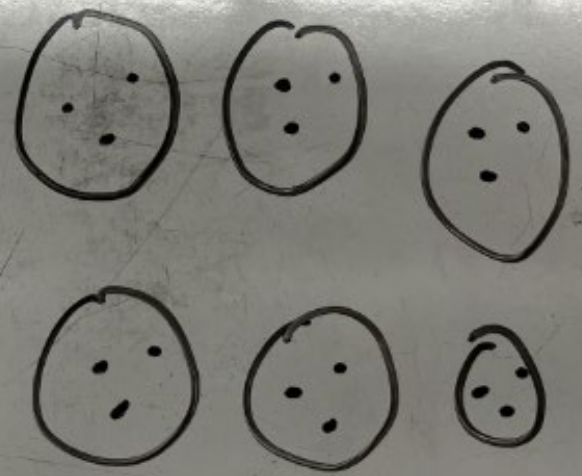
Bar model

18					
3	3	3	3	3	3

Addition sentence

3 + 3 + 3 + 3 + 3 + 3 = 18

Draw it



WHAT CAN I DO AT HOME?

Ways to promote thinking:

- **Always, sometimes, never**
- **Another, another, another**
- **Convince me**
- **Hard and easy**
- **If this is the answer, what's the question**
- **Mathematics stories**
- **Odd one out**
- **Silly answers**
- **What do you notice?**
- **What else do we know?**
- **What's the same? What's different?**
- **Zooming in**
- **What do you notice? Is there a pattern?**

USEFUL WEBSITES

- NCETM
- Maths Hubs
- The Maths Factor
- Maths Association
- Education City
- Purple Mash
- The full National Curriculum is available to anyone online

SUPPORT AT HOME

- Practice times tables: 2, 3, 4, 8, 5, 10
- Hit the button
- Maths is fun
- Purple Mash
- Times tables Rock star
- Basic addition and subtraction with and without an exchange

ANY QUESTIONS?