

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**

	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				Number: Multiplication and Division			Consolidation	
Spring	Number: Multiplication and Division			Measurement: Money	Statistics		Measurement: Length and Perimeter		Number: Fractions		Consolidation	
Summer	Number: Fractions			Measurement: Time			Geometry: Properties of Shape	Measurement: Mass and Capacity				Consolidation

- ▶ Multiplication and Division
- ▶ 3s, 4s, 8s and move onto 50s in our next unit.
- ▶ Constant reminders of previous multiplication facts: 2s, 5s and 10s
- ▶ Always remind children to use the number facts they already have
- ▶ Division (sharing and grouping, when dividing the whole must come at the start of our number sentence)
- ▶ Multiplication (what is the total when we add the groups together? Repeated addition)
- ▶ Practise methods/examples: with actions, stomping/clapping/clicking, singing them, posters to view, lots of repetition!

CURRENT LEARNING

- ▶ **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**

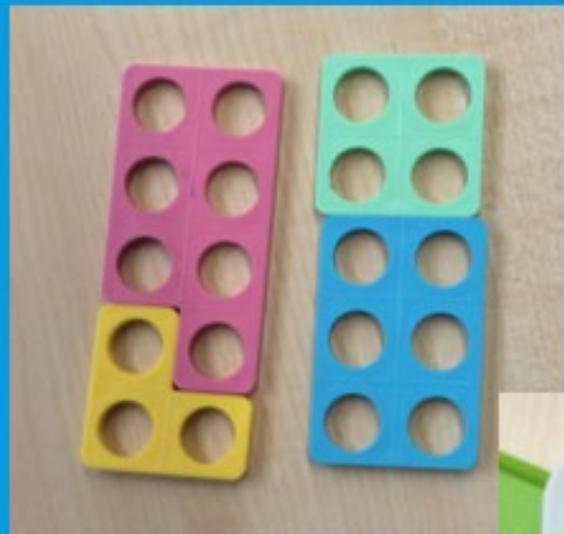
WHAT IS THE PEDAGOGY?

Three key ideas permeate 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*

EXPLORE THE CONCEPT

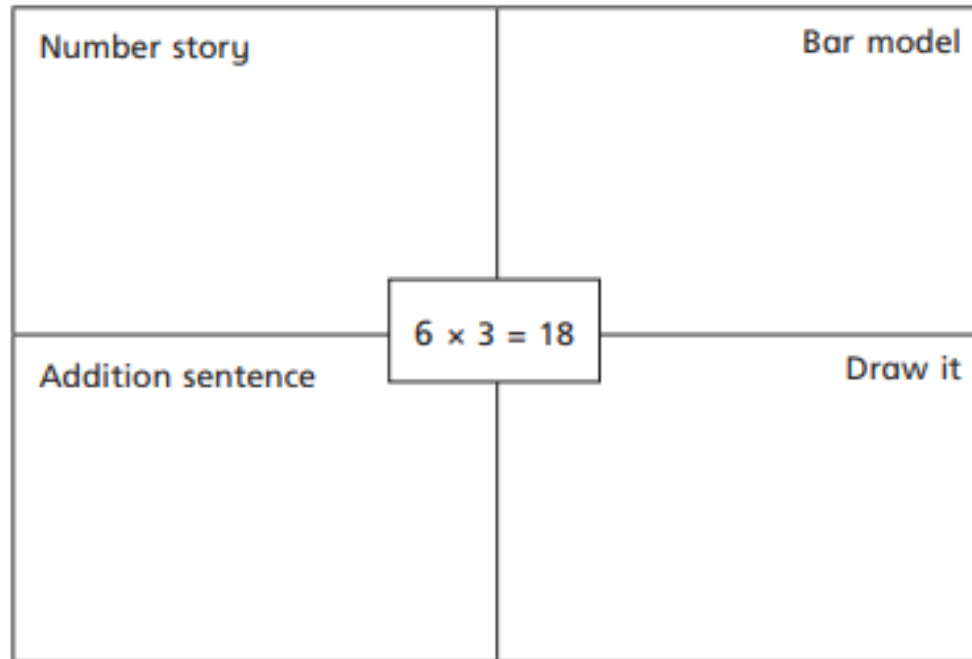


Children's chances of succeeding in education and life will be maximised if they develop deep and lasting procedural and conceptual mathematical understanding.

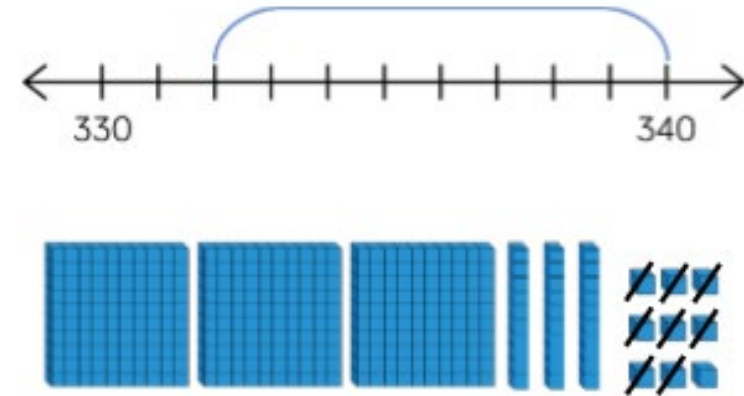
- ▶ Vocabulary: 'number sentence' (not sum); 'ones' (not units – these refer to measurement, not digits) 'exchanging' (not borrowing as we don't give the number back.
- ▶ Depth and fluency – see the maths in everyday things
- ▶ Commutivity – addition and multiplication (where can I put the =?)
- ▶ Number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

TEACHING FOR MASTERY – WHAT ARE THE ESSENTIALS?

Complete the diagram.



Which image does not represent $339 - 8$?



Alex thinks the chart shows $456 - 4$
Do you agree?

Hundreds	Tens	Ones

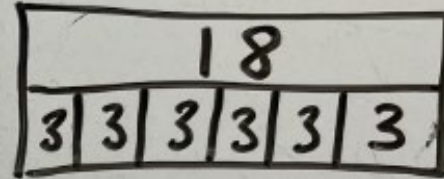
Explain why.

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.

$$6 \times 3 = 18$$

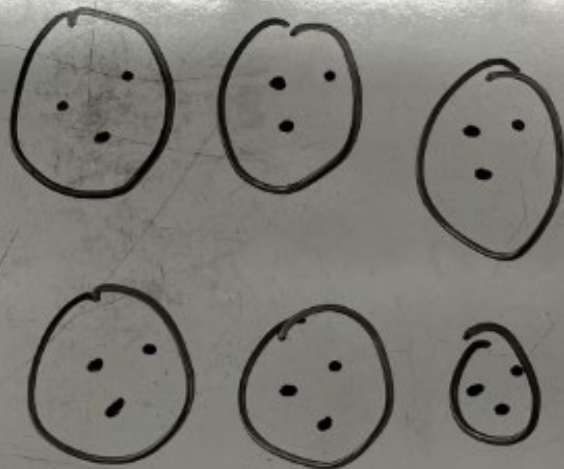
Bar
model



Addition
sentence

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

Draw
it



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?

WHAT CAN I DO AT HOME?

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

USEFUL WEBSITES

- ▶ Practise times tables: 2, 3, 4, 8, 5, 10
- ▶ Hit the button
- ▶ Maths is fun
- ▶ Purple Mash
- ▶ Times tables Rock star

SUPPORT AT HOME

A decorative graphic consisting of several parallel white lines of varying lengths, slanted upwards from left to right, located in the bottom right corner of the slide.



ANY QUESTIONS?

