

PARENT LEARN

Supporting your child's learning in
mathematics across Key Stage 1 – Year 1

**HUNSLEY
PRIMARY**
inspire · aspire

How do we teach mathematics using WhiteRose maths in Key Stage 1?



Concrete-

This is the 'doing' stage. Children will use concrete objects to investigate, experiment and problem solve.

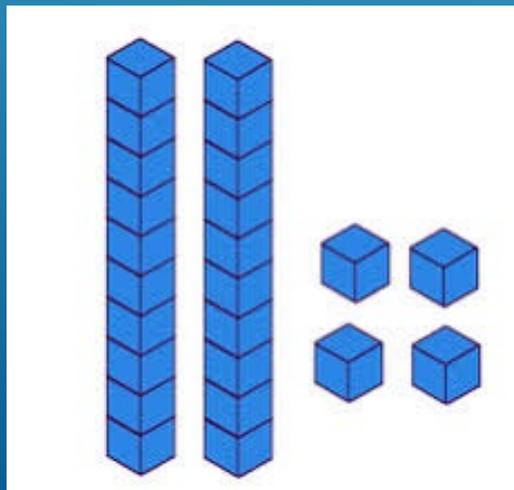
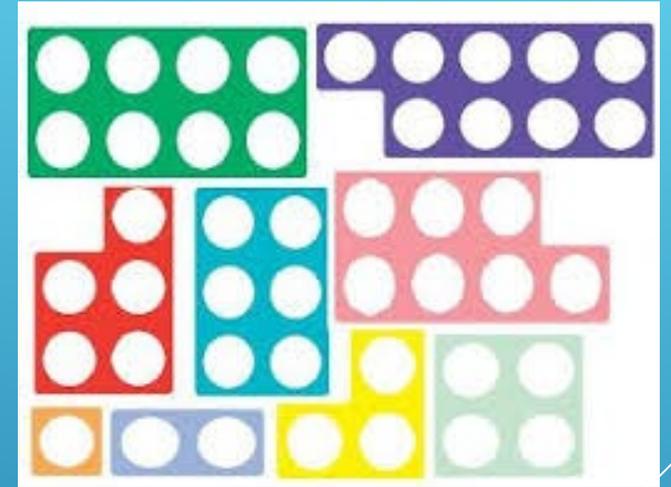
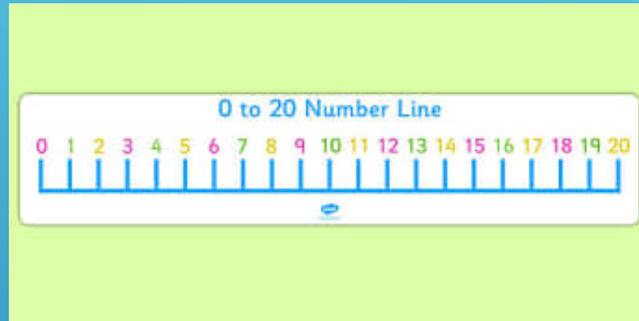
Pictorial-

This is the 'seeing' stage. Visual representations of concrete objects are used to model problems. This stage encourages children to make a mental connection between the physical object they just handled and the abstract pictures, diagrams or models that represent the objects from the problem.

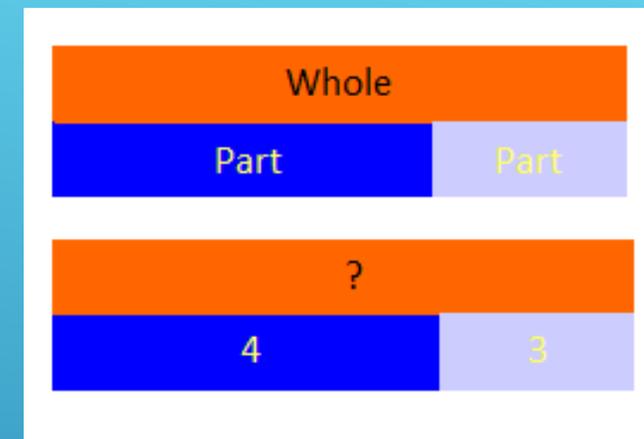
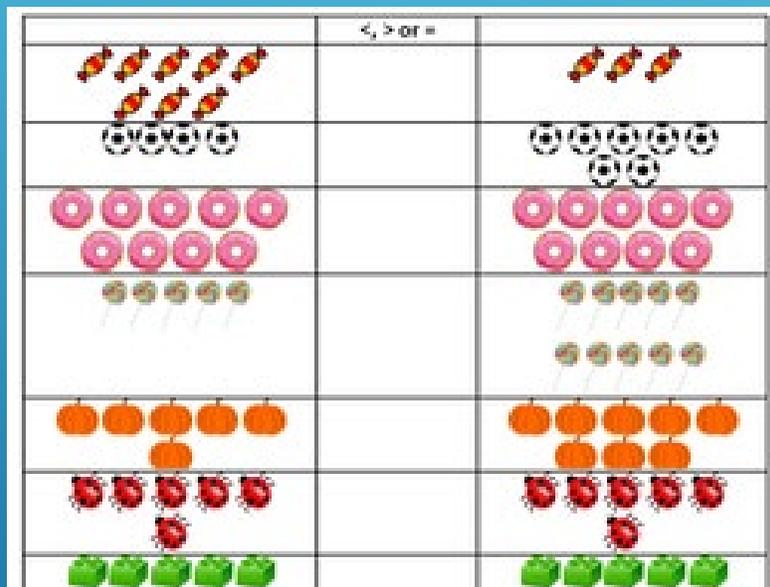
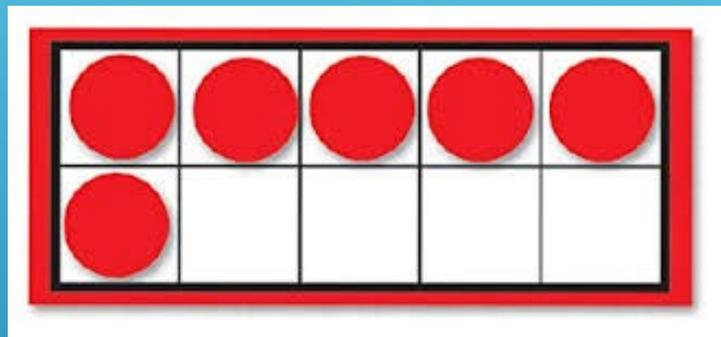
Abstract-

This is the 'symbolic' stage, where children use abstract symbols to model problems. Students will not progress to this stage until they have demonstrated that they have a solid understanding of the concrete and pictorial stages of the problem.

Concrete – objects, manipulatives, equipment

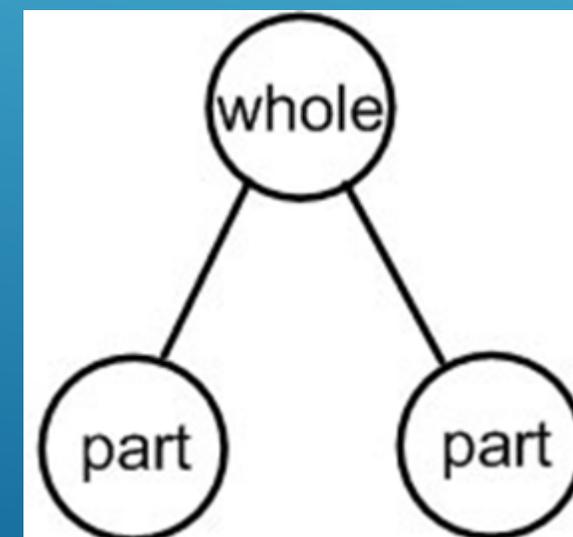


Pictorial – picture representations



| | | | | | |
|----------------|---|------|------|--|--|
| <p>Base 10</p> | <p>Ten Frame</p> | | | | |
| <p>Straws</p> | <p>Place Value Grid</p> <table border="1"> <tr> <td>Tens</td> <td>Ones</td> </tr> <tr> <td></td> <td></td> </tr> </table> | Tens | Ones | | |
| Tens | Ones | | | | |
| | | | | | |

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Abstract – move to numbers and methods

Abstract

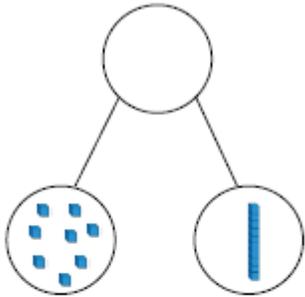
$2+2=4$

$10+0=10$
 $9+1=10$
 $8+2=10$
 $7+3=10$
 $6+4=10$
 $5+5=10$
 $4+6=10$
 $3+7=10$
 $2+8=10$
 $1+9=10$
 $0+10=10$

Reasoning and problem solving

applying knowledge and explaining

Alex makes a part-whole model.



She says:



There are 8 tens and 1 one.

Explain her mistake.

What is her number?

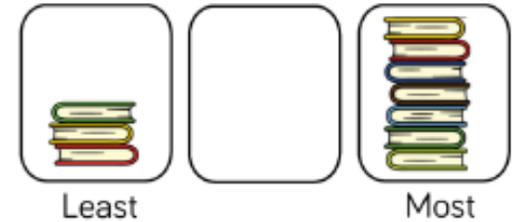
Teddy says,



I can make all the numbers from eleven to twenty using the digits 1 - 9

Do you agree?
Explain your answer.

How many books can go in the empty box?

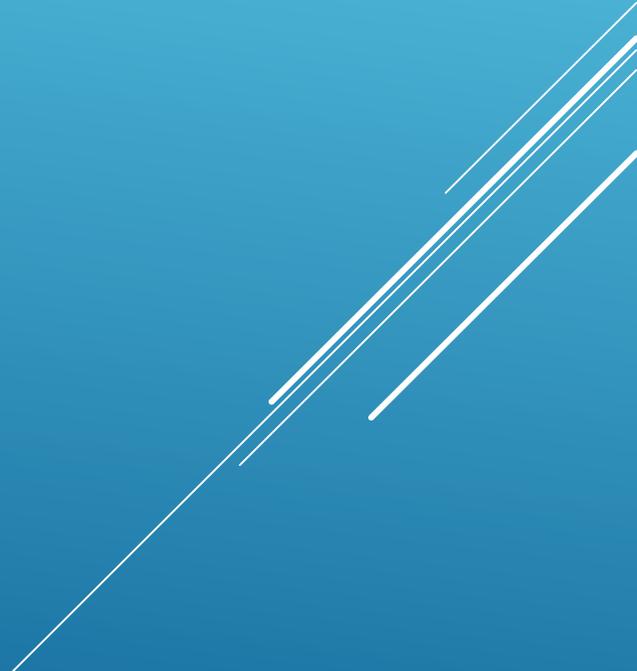


Compare with your partners- have you drawn the same amount of books?

How many possibilities are there?

Is it possible to have 3 or 7 books in the middle pile?

Ways to promote thinking:

- *Always, sometimes, never*
 - *How many ways can you represent*
 - *How many ways can you find.....*
 - *True or false?*
 - *If I know this, then I know*
 - *How do you know?*
 - *Convince me*
 - *If this is the answer, what's the question*
 - *Mathematics stories*
 - *Odd one out*
 - *What do you notice?*
 - *What else do we know?*
 - *What's the same? What's different?*
- 

Year 1 Curriculum

| | 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 | Number: Place Value (within 20) | | Consolidation |
| Spring | Number: Addition and Subtraction (within 20) | | | | Number: Place Value (within 50) (Multiples of 2, 5 and 10 included) | | | Measurement: Length and Height | | Measurement: Weight and Volume | | Consolidation |
| Summer | Number: Multiplication and Division (Reinforce multiples of 2, 5 and 10 to be included) | | | Number: Fractions | | Geometry: Position and Direction | Number: Place Value (within 100) | | Measurement: Money | Measurement: Time | | Consolidation |

Key things for Year 1

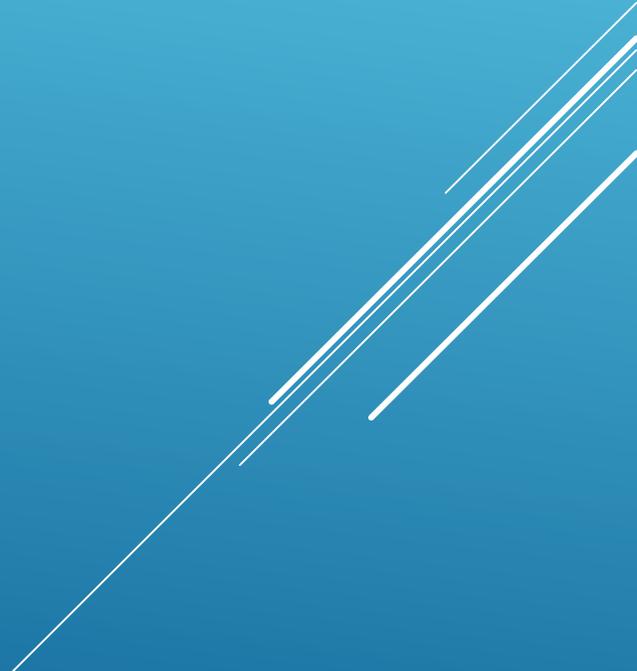
- *Number recognition*
- *What addition means*
- *What subtraction means*
- *What equals means*
- *Number bonds to 10 and 20 - fluency*
- *Represent and use number bonds and related subtraction facts within 20*
- *Add and subtract one-digit and two-digit numbers to 20, including 0*
- *Developing fluency in counting in 2s, 5s and 10s*
- *Vocabulary - 'number sentence' (not sum), ones (not units)*

Useful websites

<https://www.topmarks.co.uk/maths-games/hit-the-button>

<https://www.ncetm.org.uk/>

<https://www.mathshubs.org.uk/>

A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, set against a blue gradient background.