Maths

Key skills and knowledge that your child will need you to be aware of.

Our aim for Maths:

Concrete – Pictorial – Abstract (CPA)

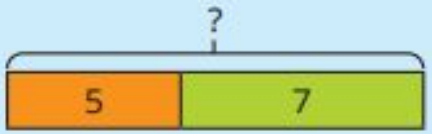
Research shows that all children, when introduced to a new concept, should have the opportunity to build competency by following the CPA approach. This features throughout our schemes of learning.

Concrete

Children should have the opportunity to work with physical objects/concrete resources, in order to bring the maths to life and to build understanding of what they are doing.

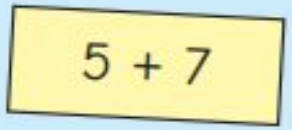
Pictorial

Alongside concrete resources, children should work with pictorial representations, making links to the concrete. Visualising a problem in this way can help children to reason and to solve problems.



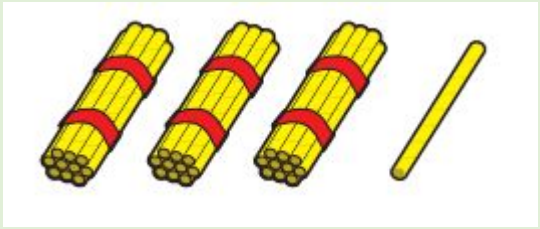
Abstract

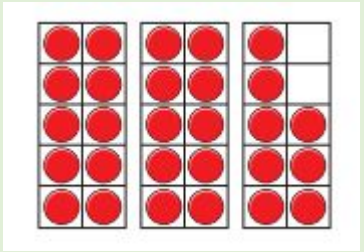
With the support of both the concrete and pictorial representations, children can develop their understanding of abstract methods.



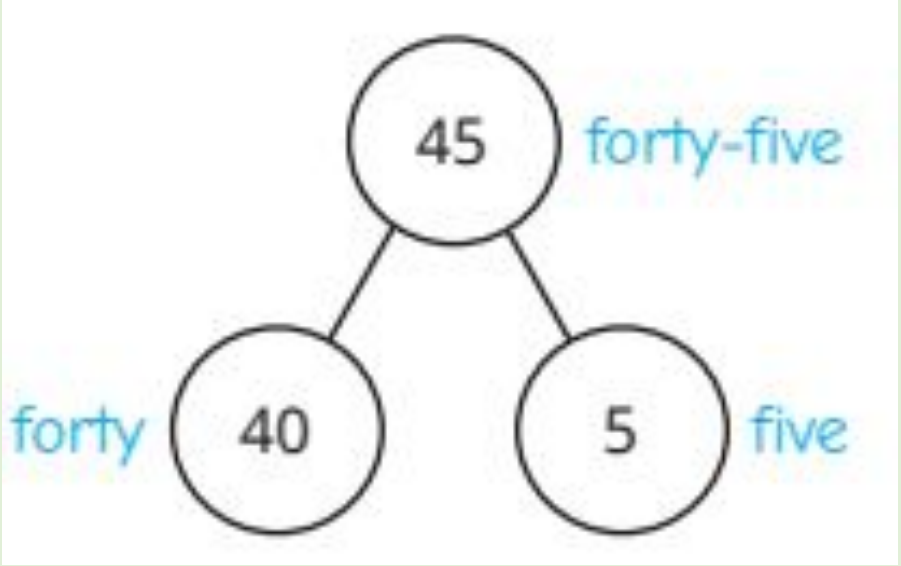
Place Value

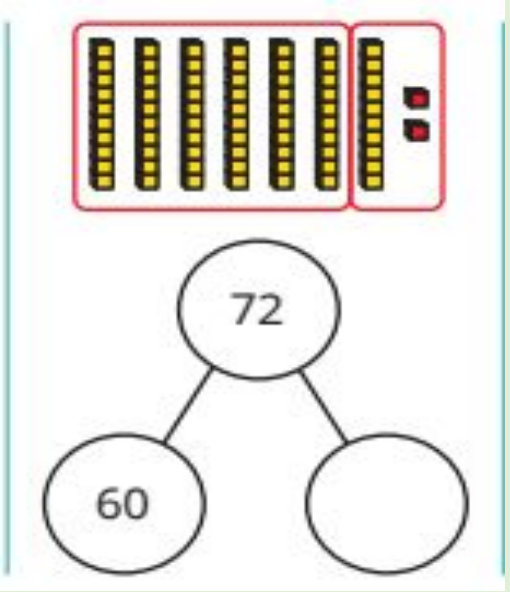
Read and write numbers to at least 100 in numerals and in words





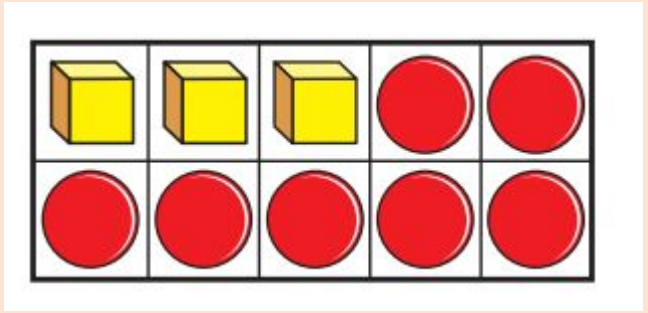
We use a range of concrete objects as well as pictures to ensure that the children truly understand the value of the numbers that we use.

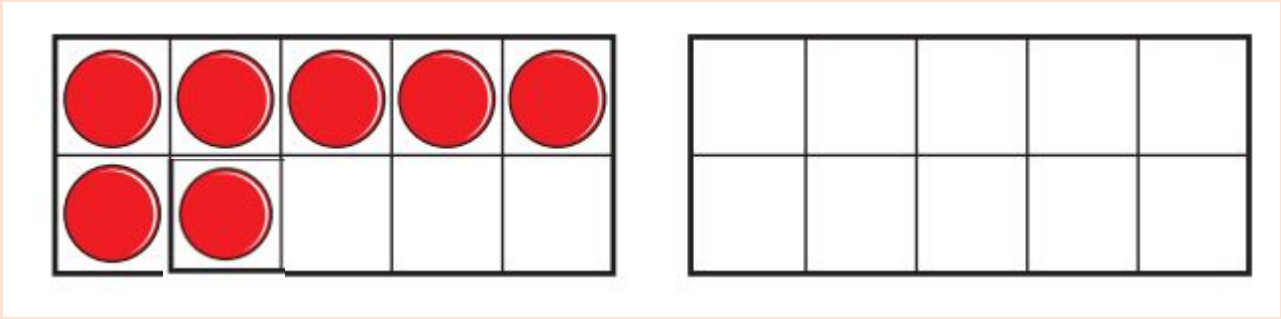


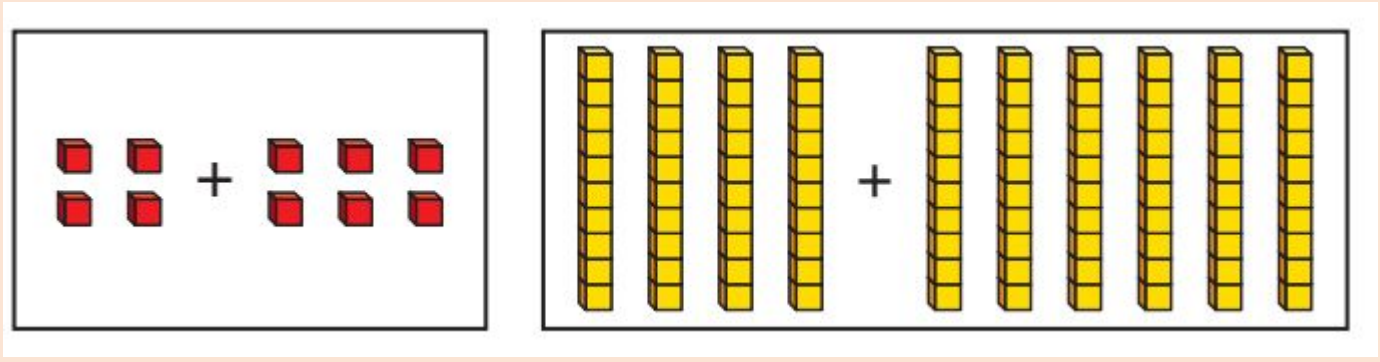


Number bonds

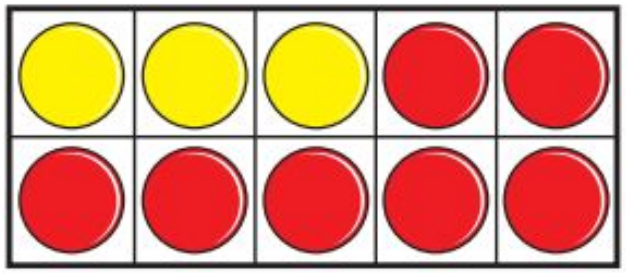
- It is important the children are confident with their number bonds to 10.
- We use this to be secure with number bonds to 20.
- We can then move on to number bonds to 100.

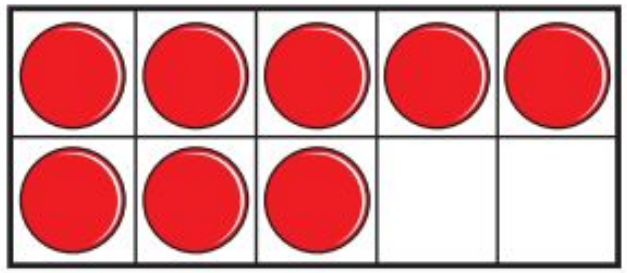






Addition and Subtraction Fact Families





Complete the fact family to match the ten frames.

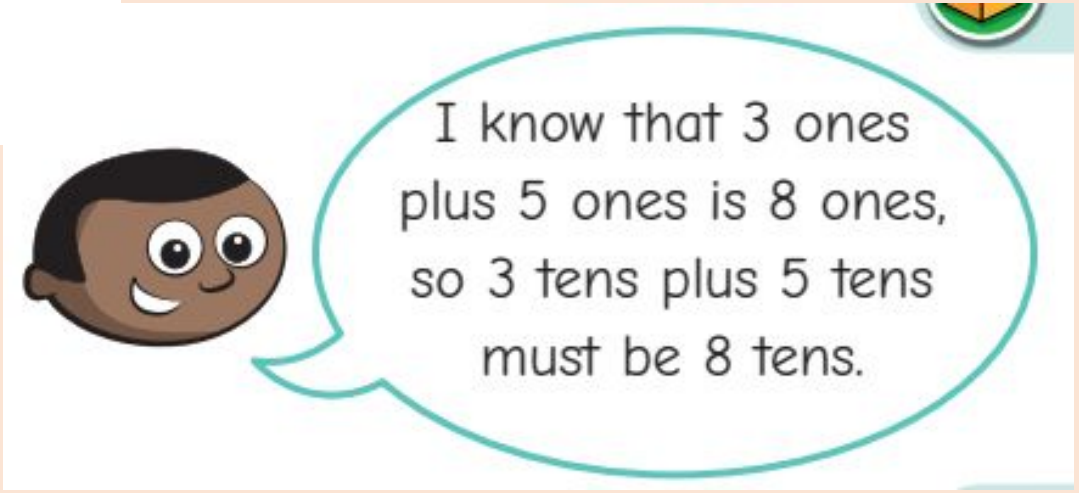
_____ + _____ = 18

_____ + _____ = 18

18 – _____ = _____

18 – _____ = _____

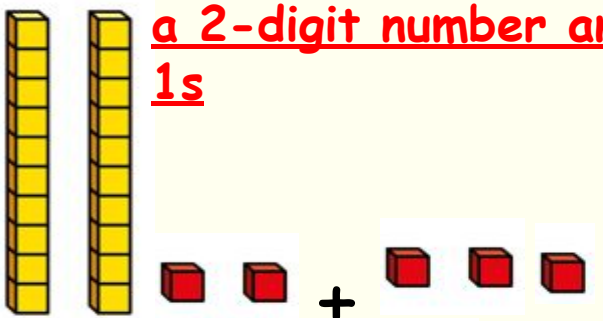
- We recall and use addition and subtraction facts to 20 fluently, and use related facts up to 100



Addition and Subtraction

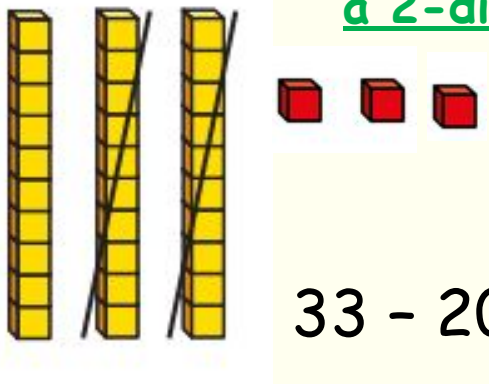
- Year 2 will learn how to add and subtract numbers using concrete objects, pictorial representations, and mentally, including:

a 2-digit number and 1s



22 + 3 = ☐

a 2-digit number and 10s



33 - 20 = ☐

- We will also be learning how to solve word problems:

- We will challenge the children to use their reasoning skills:

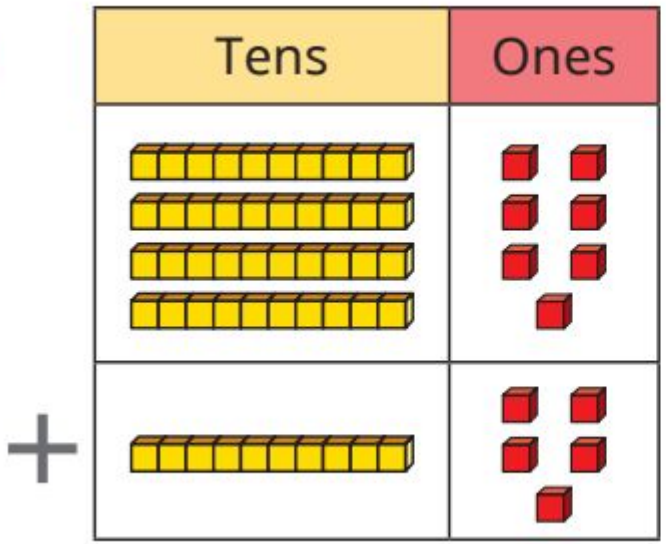
Tiny is finding bonds to 10

1 + 0 = 10

Explain the mistake Tiny has made.

What is the missing number?

Addition and Subtraction Exchanging:



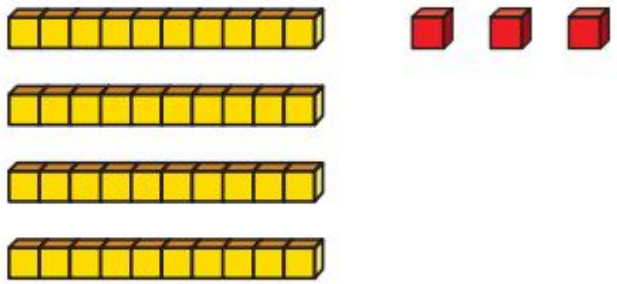
Add the ones.

Add the tens.

Complete the addition.

□ + □ = □

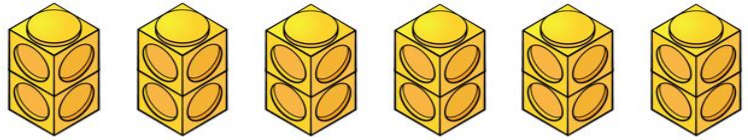
Max is working out 43 – 25



He exchanges 1 ten for 10 ones.

X2 x5 x10

- Counting in 2s, 5s and 10s are very important!



How many towers has she built? 6

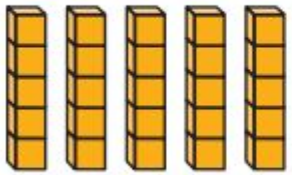
How many cubes are in each tower? 2

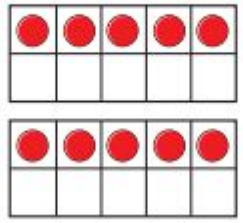
How many cubes has she used in total? 12

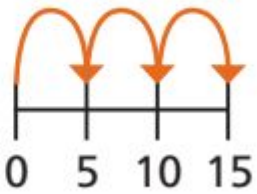
6 × 2 = 12 or 2 × 6 = 12

30		
10	10	10

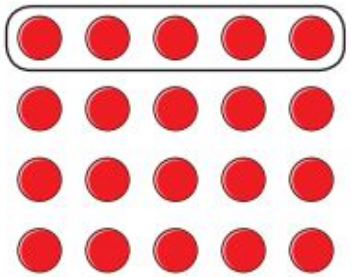
3 × 10 = 30 or 10 × 3 = 30







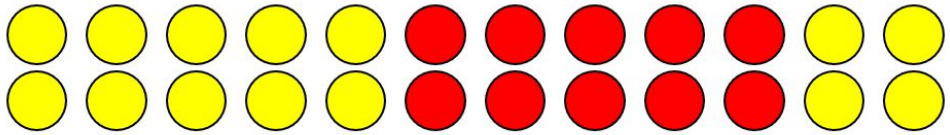
We then learn to divide by 2, 5 and 10

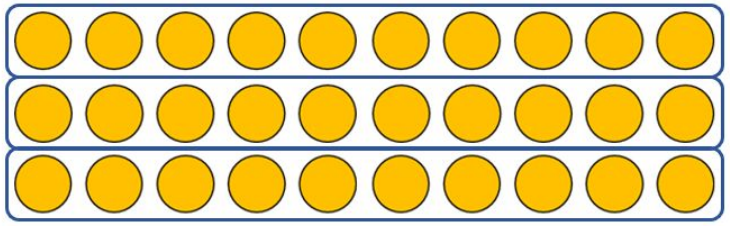


$\square \times 5 = 20$

$20 \div 5 = \square$

$\square \div 2 = 12$

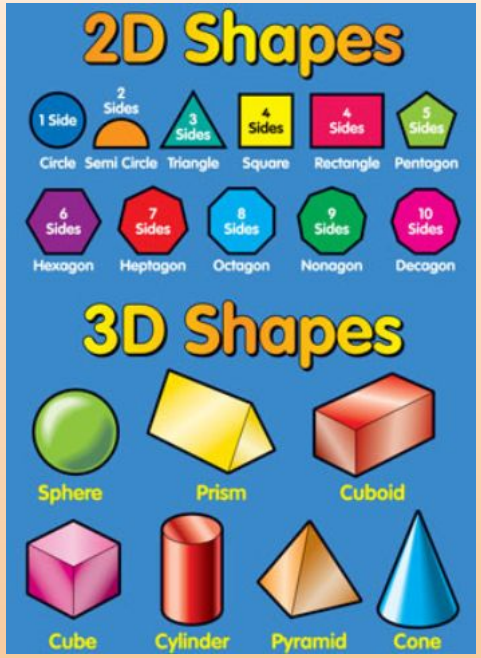




$3 \times 10 = 30$ $\quad 30 \div 10 = 3$

$10 \times 3 = 30$ $\quad 30 \div 3 = 10$

Shape and measure



- Features and comparisons of 2D and 3D shapes (lines of symmetry)
- Measure length (cm and m), capacity (ml and l) and mass (g and kg)
- Time - tell the time to half hour, quarter past, quarter to and 5 mins