

Year 1 Addition and Subtraction

Miss Salisbury, Mrs Drinkwater and Mrs Ree

The National Curriculum for Year 1

- Number – Number and Place Value
- Number – Addition and Subtraction
- Number – Multiplication and Division
- Number – Fractions
- Measurement
- Geometry – Properties of Shapes
- Geometry – Position and Direction

The National Curriculum for Year 1

Read, write and interpret mathematical statements involving addition (+) and equals (=) signs

Represent and use number bonds and related subtraction facts within 20

Add and subtract one-digit and two-digit numbers to 20, including zero

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $12 = 9 + ?$

About White Rose Maths

Everyone can

Together, we're building a whole new culture of deep understanding, confidence and competence in maths – a culture that produces strong, secure learning and real progress. No matter what their starting points, we help teachers and learners everywhere to achieve excellence.

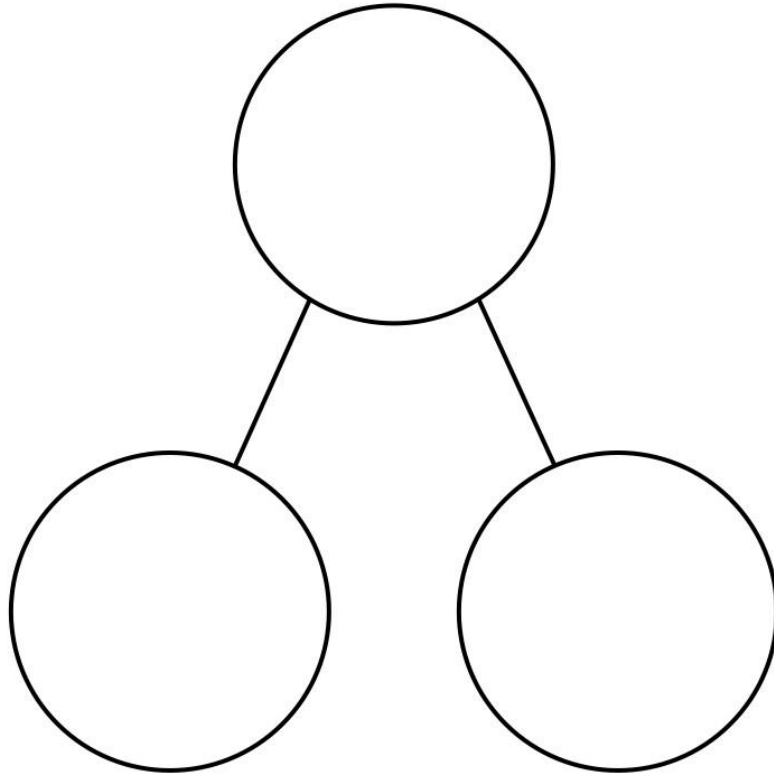
Year 1 – Yearly Overview

	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 to be 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	Time		Consolidation

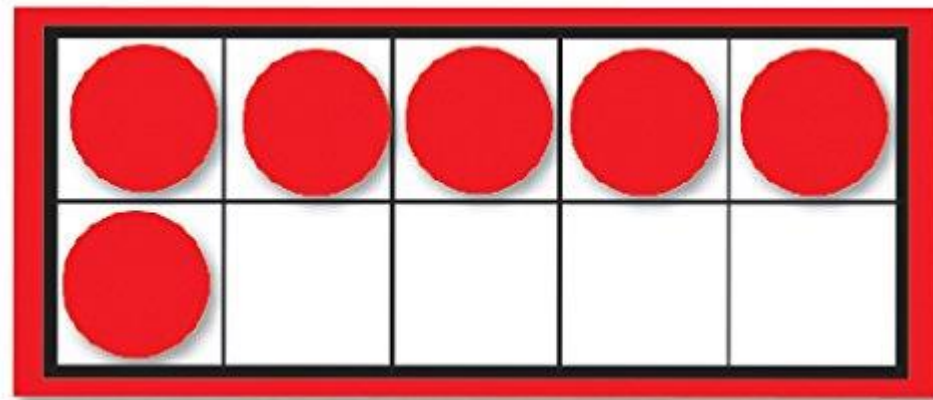
Resources and models

Throughout school we use a variety of models and resources that support the children to visually conceptualise when they are solving calculations.

Part whole model



Tens frames



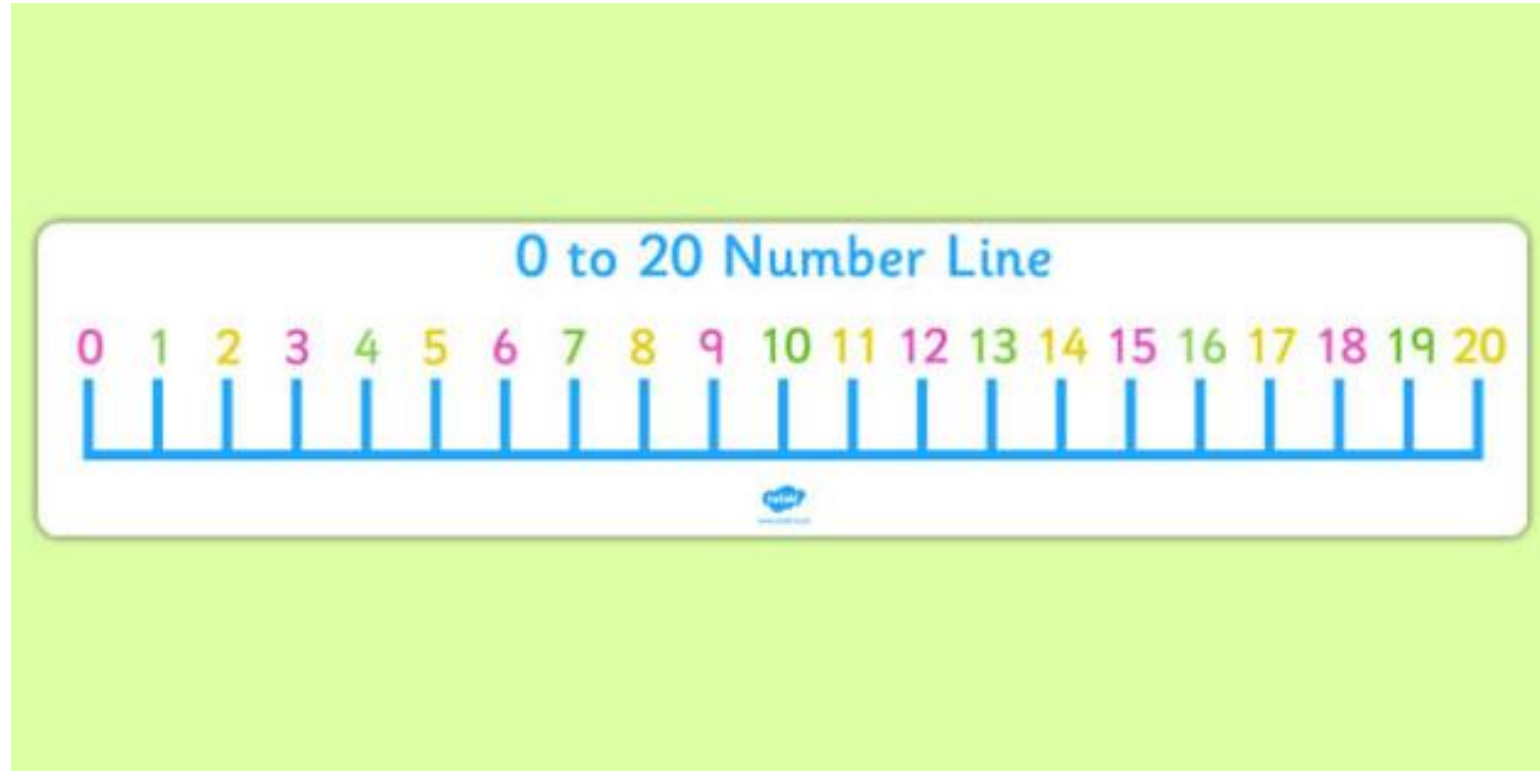
Dienes



Tens and ones frames

Tens	Ones

Number line

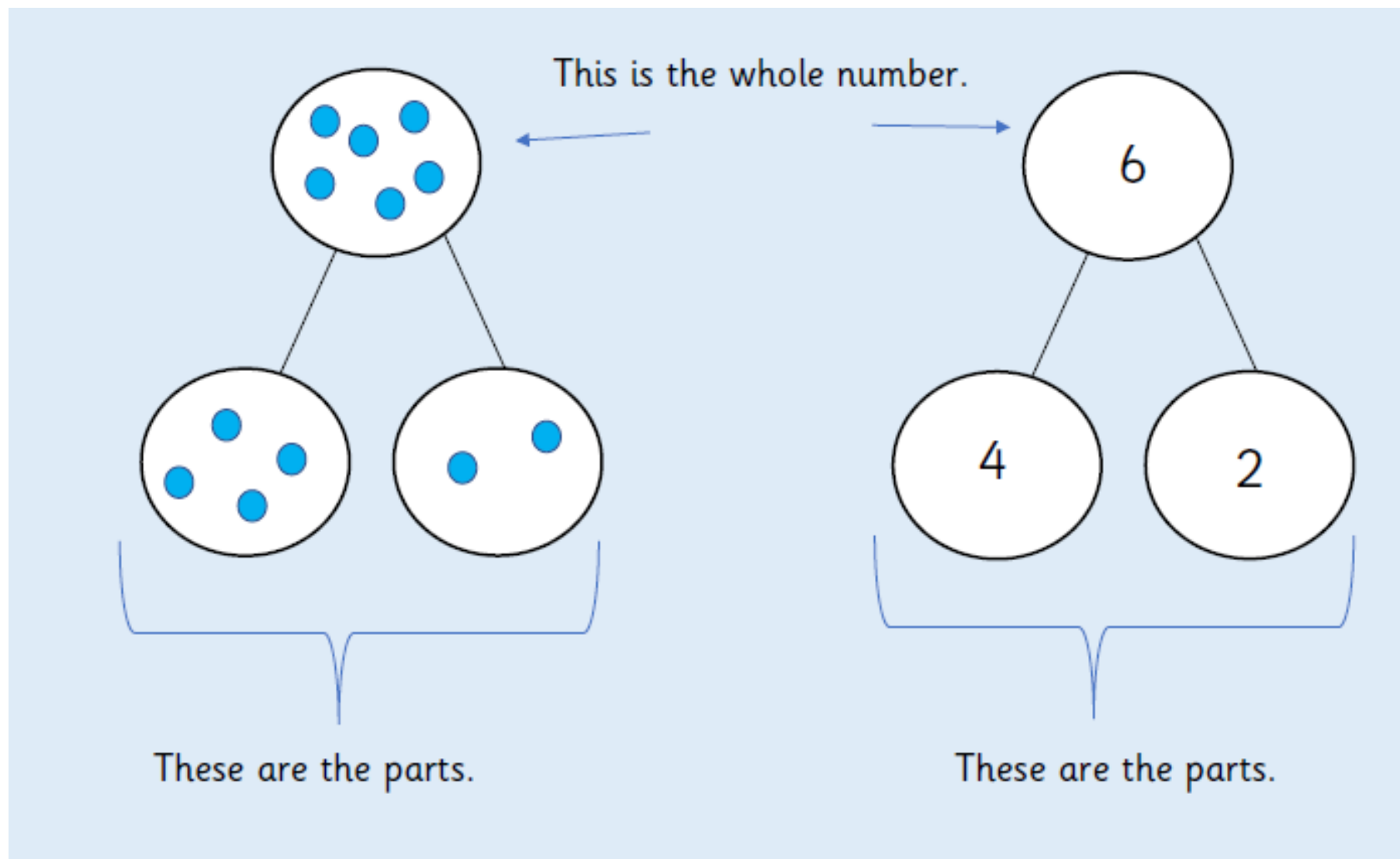


Numicon



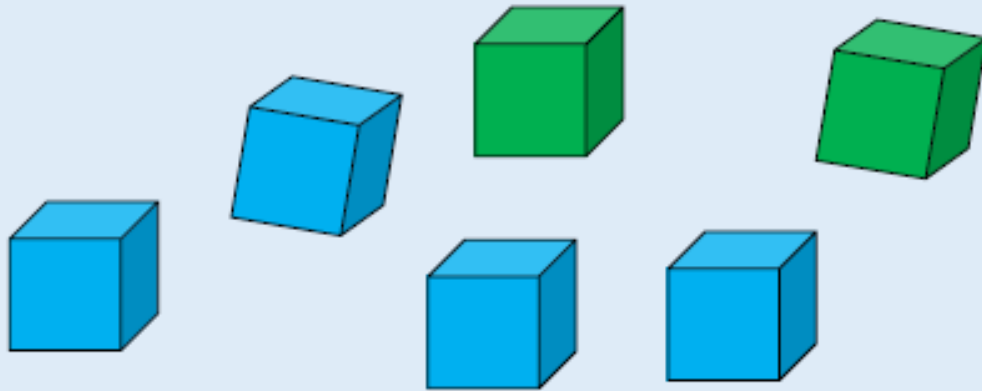
Read, write and interpret
mathematical statements
involving addition (+) and equals
(=) signs

Part Whole Model



The Addition Symbol

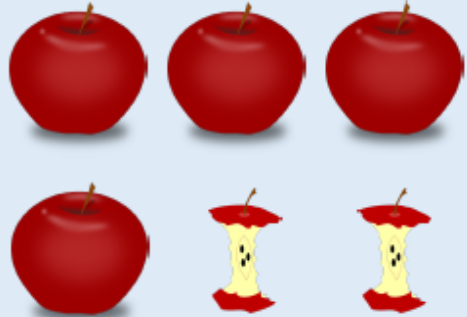
4 blue cubes plus 2 green cubes is equal to 6 cubes.



As a number sentence this is:

$$4 + 2 = 6$$

Taking Away – How Many Left?

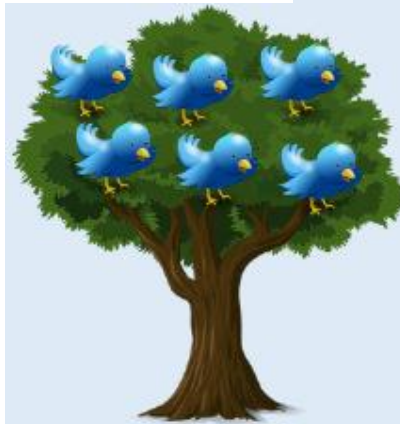


At first there were _____ apples.

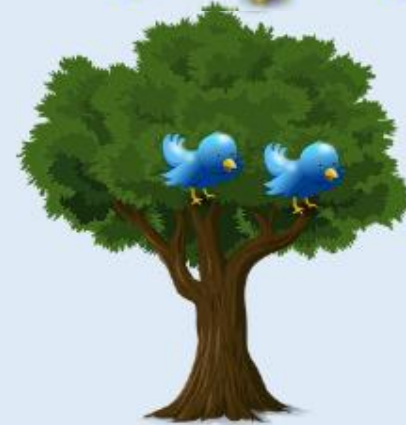
Then _____ were eaten.

Now there is _____ .

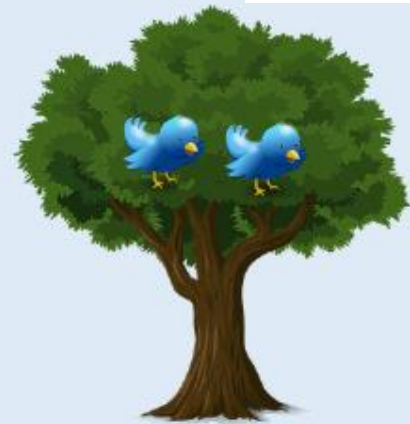
There were 6 birds in the tree
and 4 fly away.



First



Then



Now

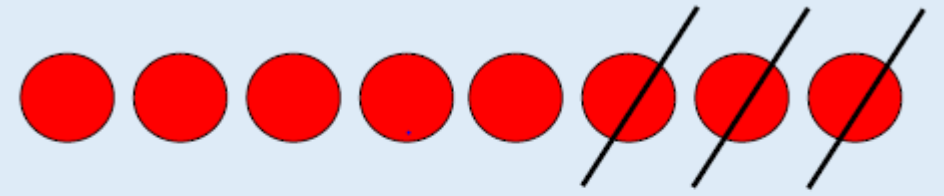
The Subtraction Symbol

At first there were 5 monkeys. Then 2 ran up a tree. How many are left?



Use counters/ cubes to help you solve this and complete:

$$\square - \square = \square$$



$$\square 8 - \square 3 = \square$$

Aisha has 6 footballs. She gives 6 away. How many does she have left?



$$\square - \square = \square$$

Represent and use number
bonds and related addition facts
within 20

Number Bonds to 10



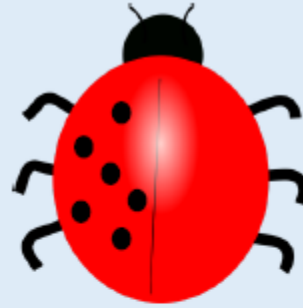
Songul shows a number on her fingers.



How many fingers are needed to make 10?



$$7 + \underline{\quad\quad} = 10$$



$$6 + \underline{\quad\quad} = 10$$

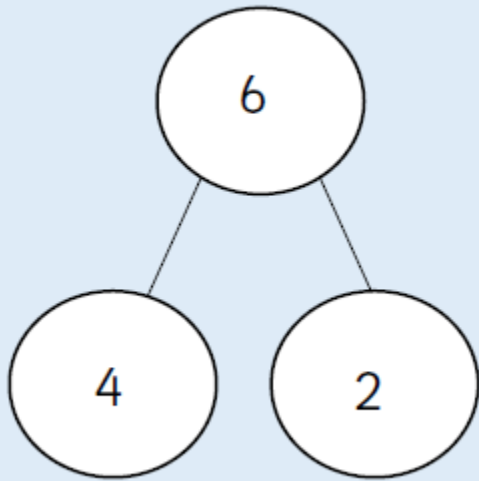


$$3 + \underline{\quad\quad} = 10$$

Complete the spots and the number sentences.

How many more to make 10?

Fact Families



$$4 + 2 = 6$$

$$2 + 4 = 6$$

$$6 = 4 + 2$$

$$6 = 2 + 4$$

Using the counters, how many calculations can you create?



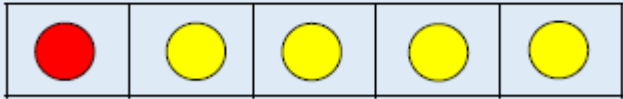
$$\square + \square = \square$$

$$\square + \square = \square$$

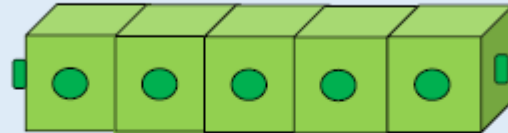
$$\square - \square = \square$$

$$\square - \square = \square$$

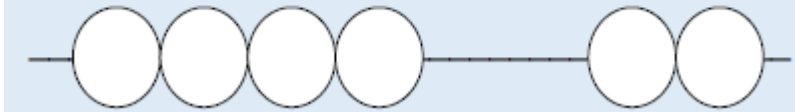
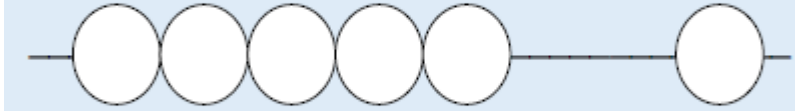
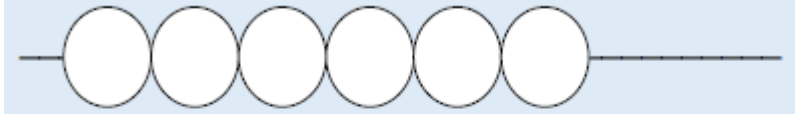
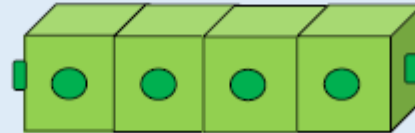
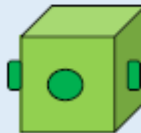
Systematic Number Bonds



Here are 5 cubes.

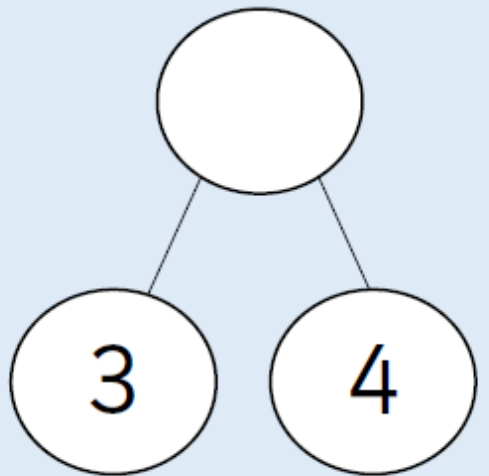


You can break them apart to find all the different number bonds to 5.

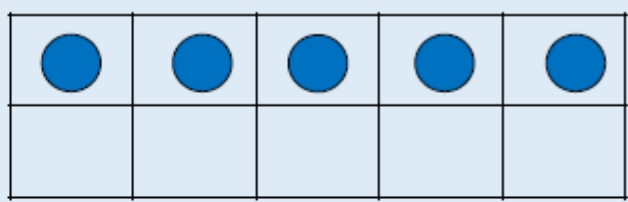
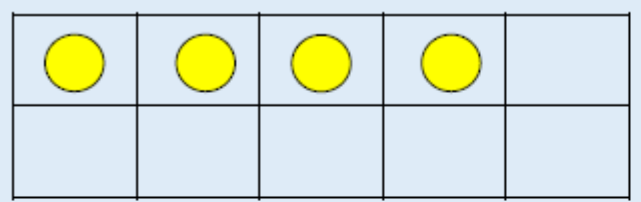


Add one-digit and two-digit
numbers to 20, including zero

Adding together

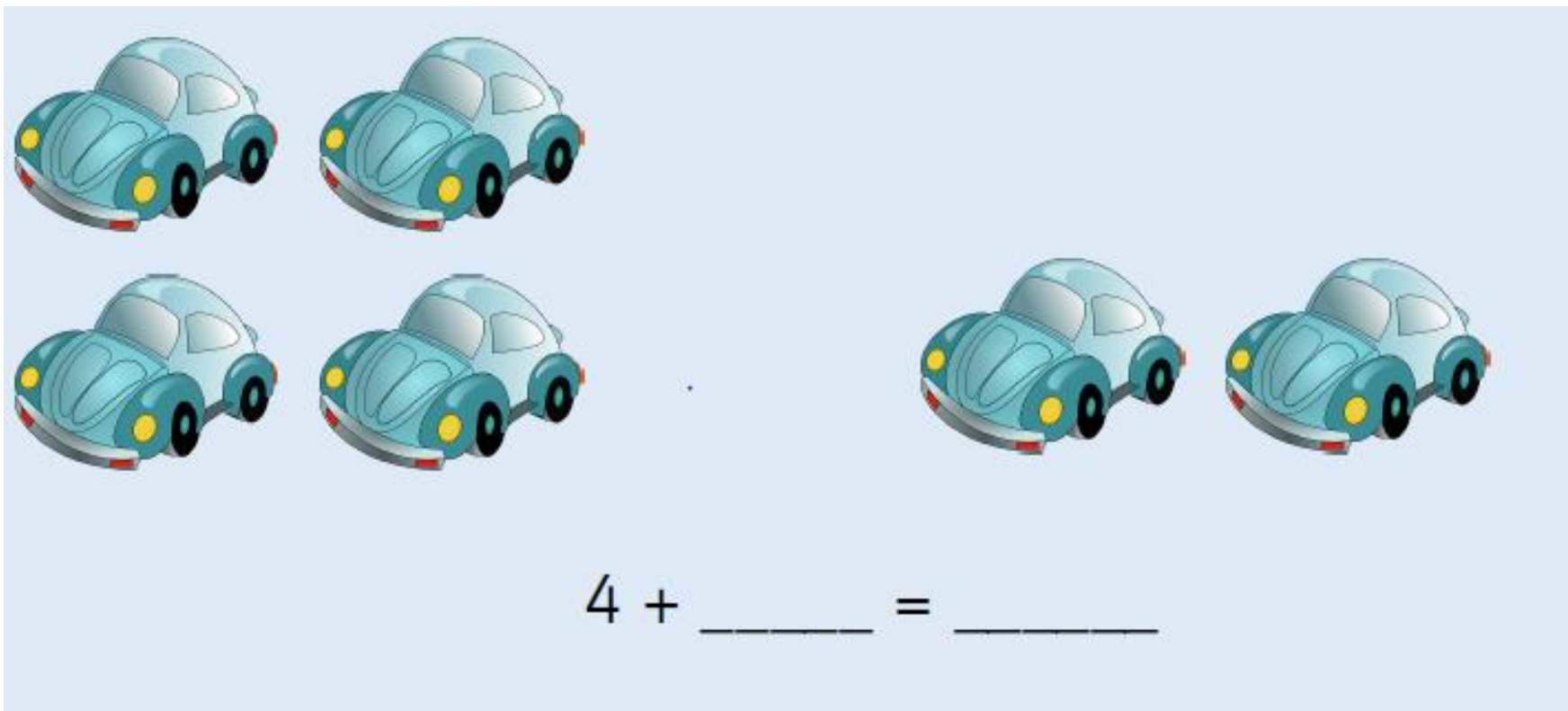


_____ + _____ = _____

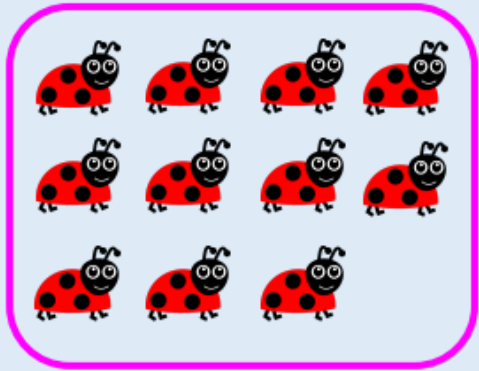
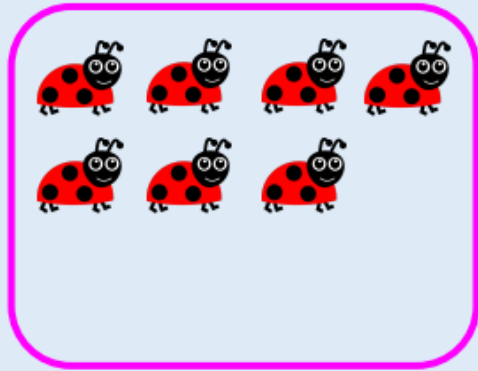
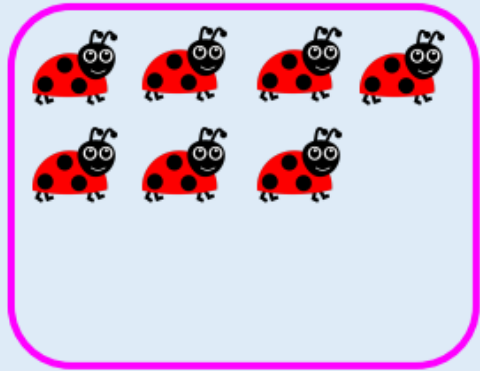


_____ + _____ = _____

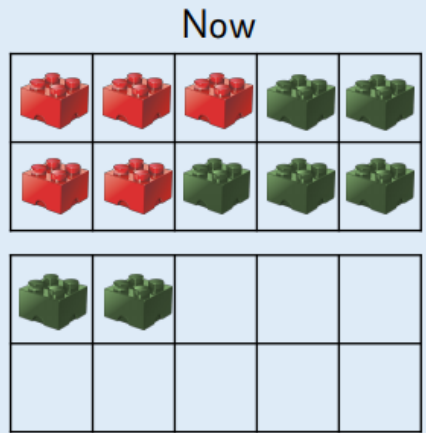
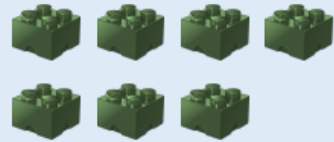
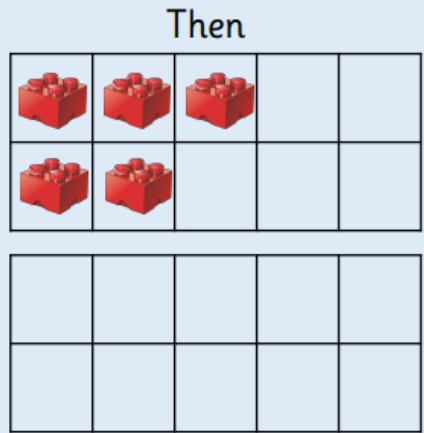
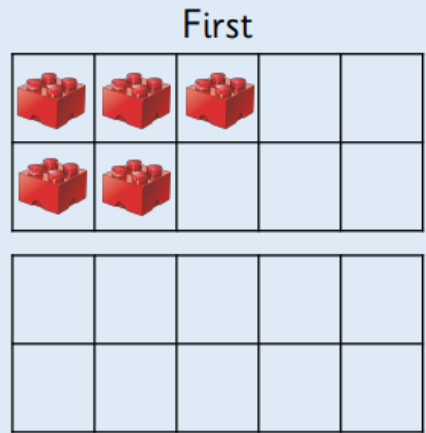
Adding More



Counting On



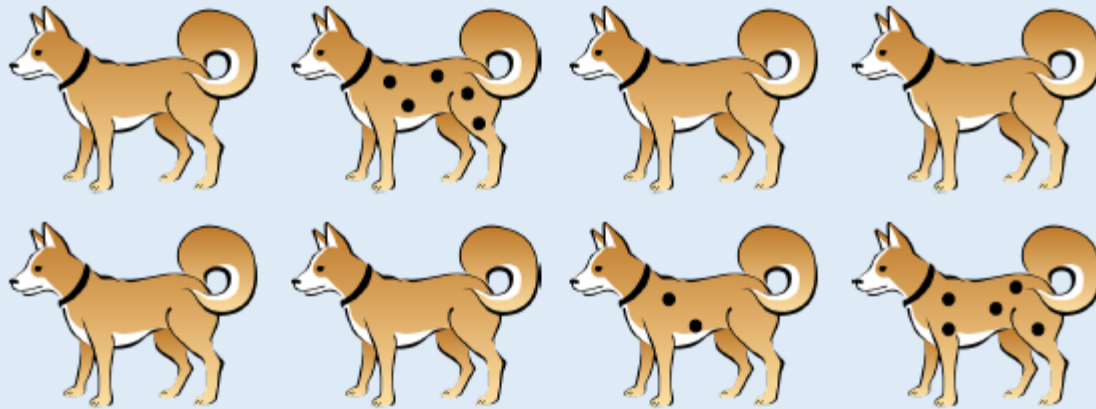
First there were ____ ladybirds.
Then ____ more joined the group.
Now there are ____ ladybirds.



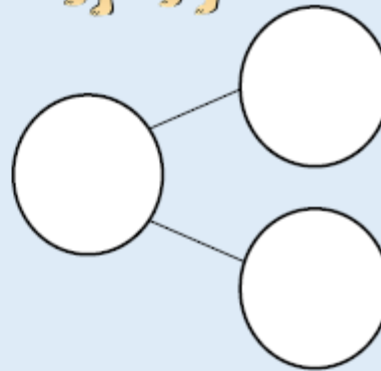
Finding a part, breaking apart

There are 7 party hats altogether. 5 of them are red. The rest are blue.

How many are blue?

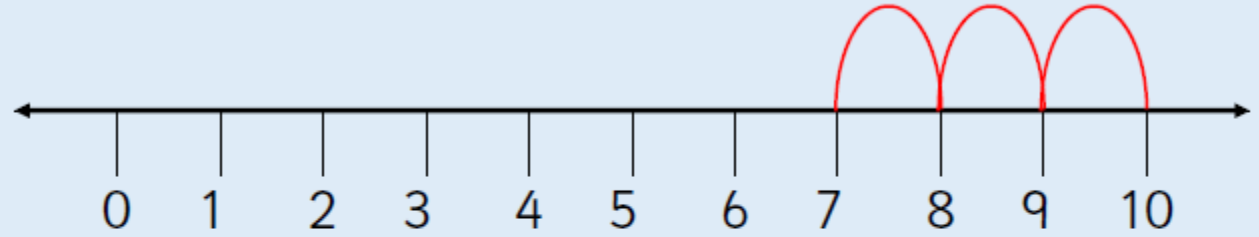


$$\boxed{8} - \boxed{3} = \boxed{}$$

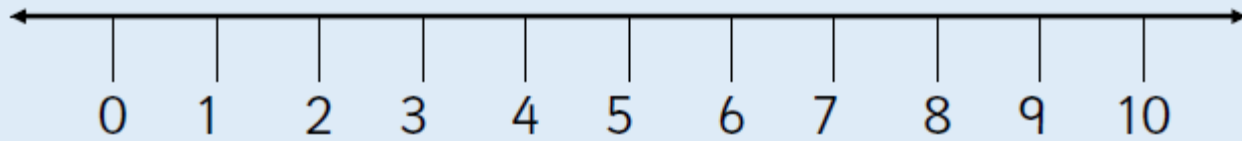


There are ____ dogs that do not have spots.

Counting Back



$$\boxed{10} - \boxed{3} = \boxed{}$$



$$8 - 4 = \boxed{}$$

$$6 - 6 = \boxed{}$$

$$3 - 2 = \boxed{}$$

$$9 - 8 = \boxed{}$$

Finding the Difference

How many more cakes does Charlotte have than Kat?



Charlotte

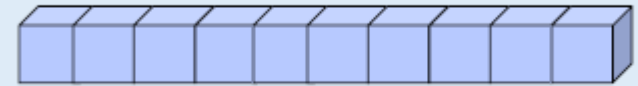


Kat



Charlotte has _____ more cakes than Kat.

What is the difference between 10 and 8?



The difference between 10 and 8 is _____

$$10 - 8 = \underline{\hspace{2cm}}$$

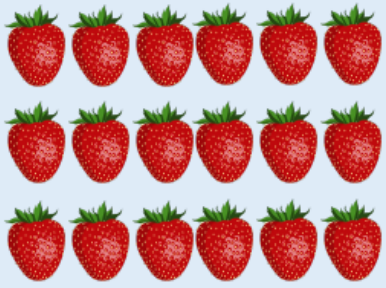
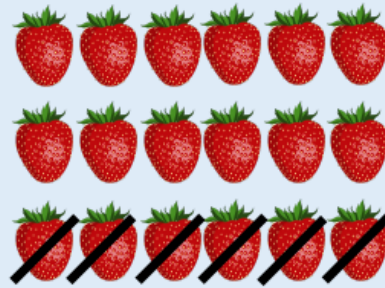
Mohamed has 5 sweets and Catherine has 2 sweets.

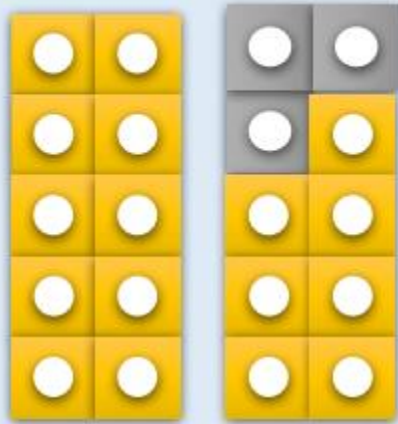
How many more sweets does Mohamed have?

$$5 - 2 = \underline{\hspace{2cm}}$$

Subtraction: Not Crossing 10

There were 18 strawberries on a plate and Josie ate 6 of them.

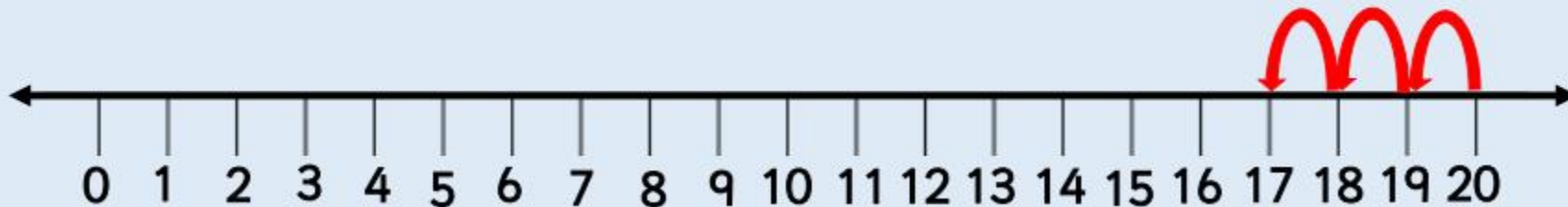
First	Then	Now
		



$$20 - 3 = \underline{\quad}$$

Use this method to calculate:

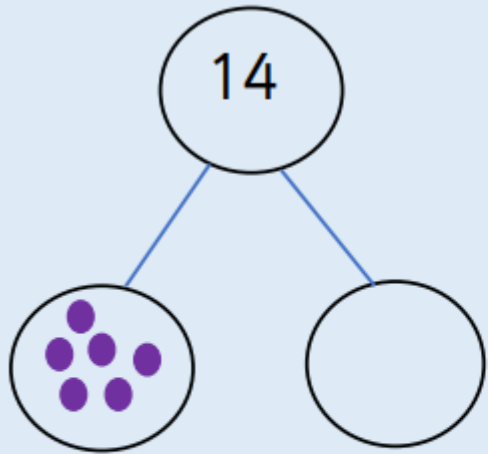
- $18 - 5$
- $20 - 7$
- $19 - 3$



Subtraction: Crossing 10

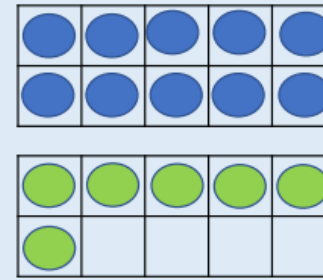
There are 14 pink and purple flowers in a vase.

6 of them are purple.
How many are pink?

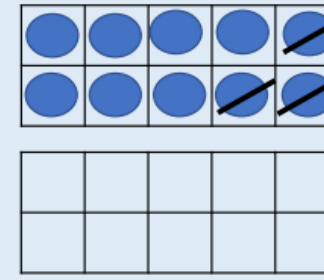


$$\square - \square = \square$$

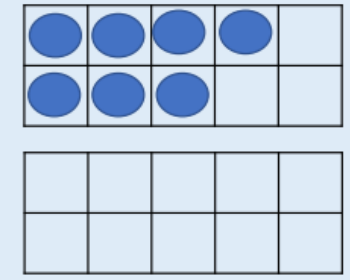
_____ of the flowers are red.



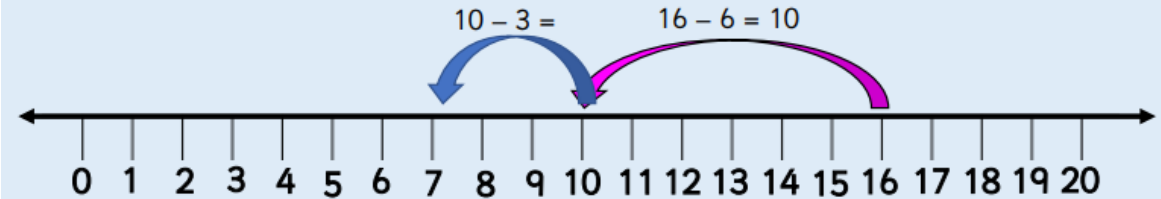
$$16 - 6 = 10$$



$$10 - 3 =$$

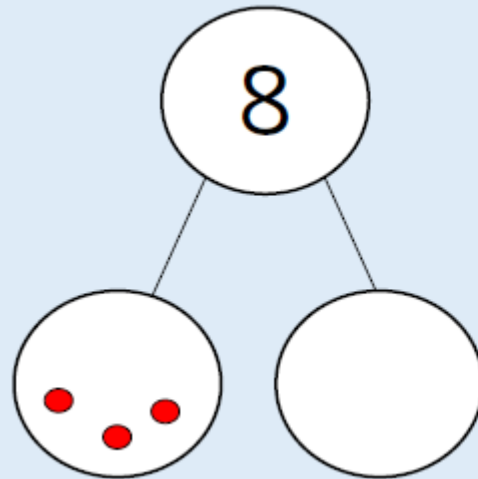
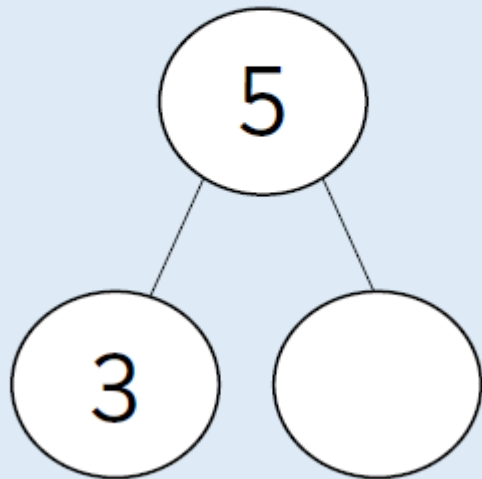


$$10 - 3 = 7$$



Missing Numbers

My story is:
There are 5 sweets. 3 of them are red
and 2 of them are blue.

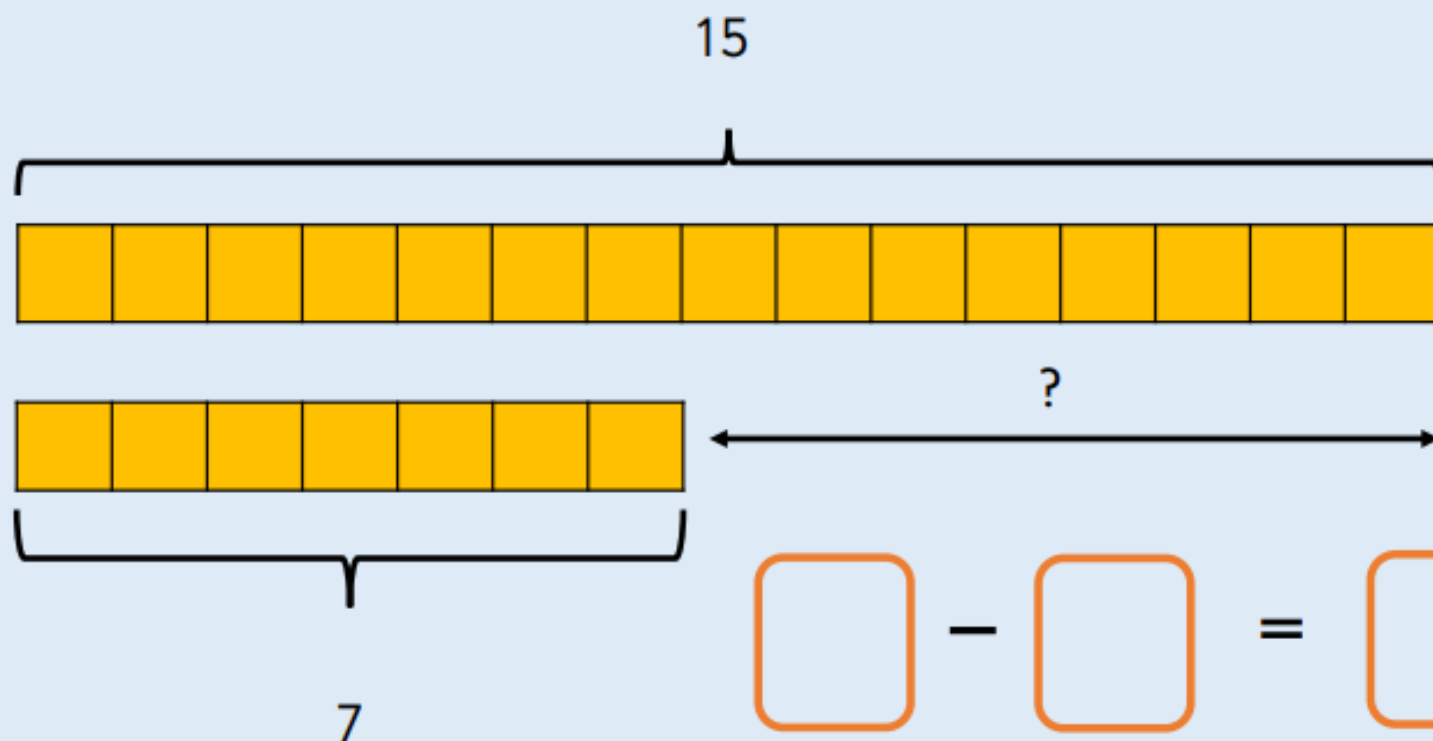


$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$



Jensen has 15 chocolate coins.
Tilly has 7 chocolate coins.
How many more coins does Jensen have?



At home support

- Mental recall: number bonds up to 20
- Addition and subtraction facts
- Board games
- Maths in the environment
- Logical reasoning games (e.g. jigsaws, Sudoku, lego, construction)
- Online games (e.g. mathletics, top marks, see Year 1 booklet)