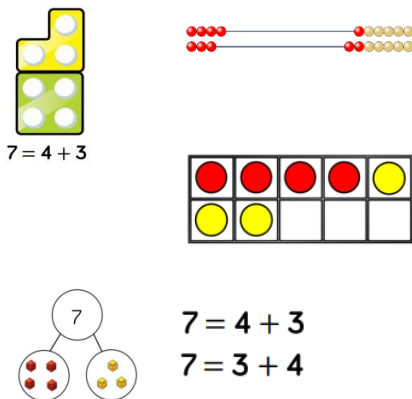
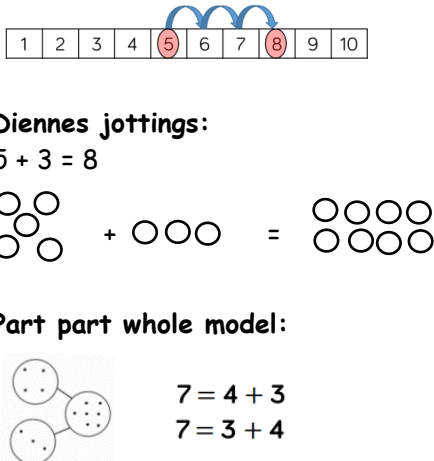
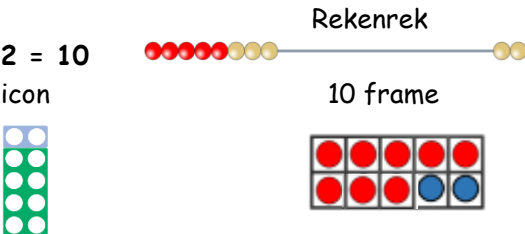
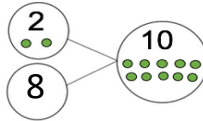
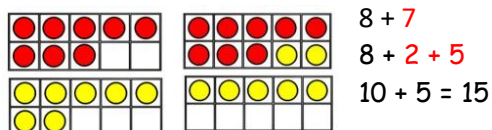


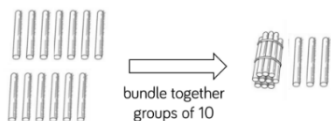
YEAR 1	Addition	
Vocabulary: Addition, add, forwards, put together, more than, total, altogether, equals, same as, greater than, most, pattern, odd, even, digit, counting on, part, whole.		
Concrete	Pictorial	Abstract
<u>Add numbers within 10 including number bonds to 10</u> $4 + 3 = 7$ $3 + 4 = 7$  $7 = 4 + 3$ Plus using place value mats and diennes.	<u>Add numbers within 10 including number bonds to 10</u> Number line (counting on): $5 + 3 = 8$  Diennes jottings: $5 + 3 = 8$ Part part whole model: $7 = 4 + 3$ $7 = 3 + 4$	<u>Mental facts to 10</u> <u>Number facts</u> Recall and use addition facts to 10 fluently the total of 6 and 3 6 plus 2 4 more than 5 <u>Near doubles:</u> Instantly recall doubles to 10 and use this to calculate near doubles. $4 + 5 = 4 + 4 + 1$ OR $4 + 5 = 5 + 5 - 1$ <u>One and two more:</u> Of numbers up to 10. $8 + 1 = 9$ (consecutive numbers) $5 + 2 = 7$ (Consecutive odd or even numbers) $4 + 2 = 6$
<u>Number bonds to 10:</u> $8 + 2 = 10$ Numicon  Rekenrek 10 frame	<u>Number bonds to 10:</u> 	<u>Instant recall of facts</u> <u>Number bonds to 10:</u> $0 + 10 = 10$ $1 + 9 = 10$ $2 + 8 = 10$ $3 + 7 = 10$ $4 + 6 = 10$ $5 + 5 = 10$ $6 + 4 = 10$ $7 + 3 = 10$ $8 + 2 = 10$ $9 + 1 = 10$ $10 + 0 = 10$

Add numbers within 20 including number bonds to 20:

Partitioning:



$$7 + 6 = 13$$



Counting on:



Number bonds to 20:

$$16 + 4 = 20$$

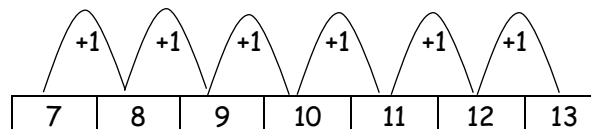
$$4 + 16 = 20$$

Cubes

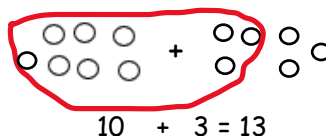


Add numbers within 20 including number bonds to 20:

Partitioning: 7 + 6



Moving on to partitioning 6 into 3 and 3
(7 + 3 = 10 then 10 + 3 = 13)

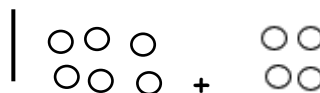


Counting on:

$$8 + 7 = 15$$



Number bonds to 20:



Mental facts to 20

Partitioning (bridging through 10):

$$5 + 7$$

$$5 + 5 + 2 \text{ (partition 7 into 5 and 2) OR}$$

$$7 + 3 + 2 \text{ (partition 5 into 3 and 2)}$$

Using known facts and place value

$$15 + 4$$

$$5 + 4 = 9 \text{ so } 15 + 4 = 19$$

Number facts

Know number pairs with a total of 20

$$16 + \square = 20 \quad 20 = 3 + \square$$

One and two more:

Of numbers up to 20.

$$18 + 1 = 19 \text{ (consecutive numbers)}$$

$$15 + 2 = 17 \text{ (Consecutive odd or even numbers)}$$

$$14 + 2 = 16$$

Instant recall of facts:

Number bonds to 20

Redistribution:

$$12 + 5 \text{ redistributes to } 10 + 7.$$

Commutativity and Inverse

$$16 + 4 = 20 \quad 20 - 16 = 4$$

$$4 + 16 = 20 \quad 20 - 4 = 16$$

Missing Number/Inverse

$$\square - 5 = 12 \quad 12 - \square = 4$$

