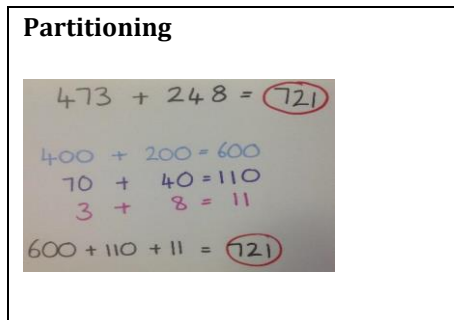
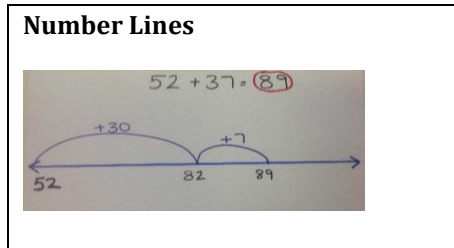
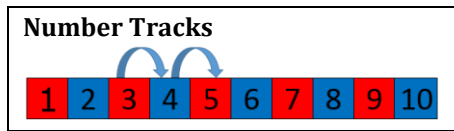


Addition: finding the total by combining two or more numbers/amounts.

Early skills	Visual representations	Mental calculations	Written calculations	Noticing
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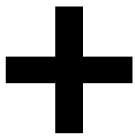


Compensation/constant difference

138 + 59 could be changed to 137 + 60

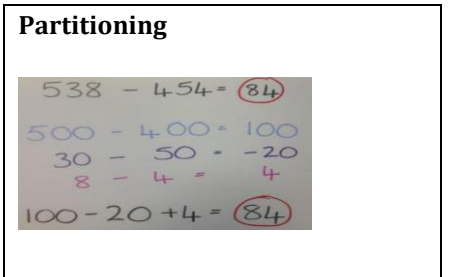
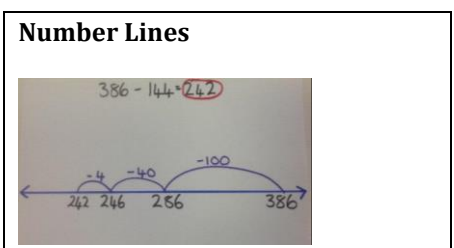
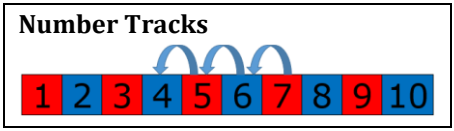
Vocabulary

Add
 Total
 Sum
 Altogether
 More
 More than?
 Plus
 Increase
 How many more?
 Double
 Inverse



Subtraction: taking away or finding the difference.

Early skills	Visual representations	Mental calculations	Written calculations	Noticing
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Compensation/constant difference

119 - 89 could be changed to 120 - 90

Vocabulary

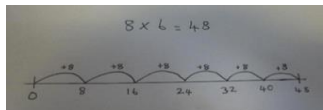
Subtract
 Take away
 Difference
 Leave
 Fewer than?
 Minus
 Decrease
 How many left?
 Halve
 Half
 Inverse



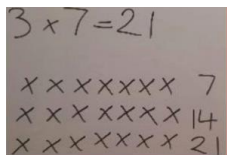
Multiplication: repeated addition or scaling.

Early skills	Visual representations	Mental calculations	Written calculations	Noticing
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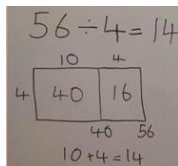
Grouping through Number Lines



Grouping through Arrays



Grouping through Grids



Using multiples and factors

Use multiples to solve 30×700
Use factors to solve 18×20

Vocabulary

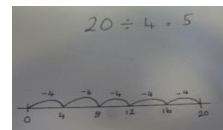
- Lots of
- Groups of
- Times
- Multiply
- Multiple
- Factor
- Product
- Repeated
- Addition
- Array
- Row
- Inverse



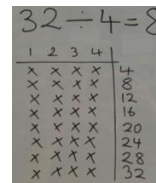
Division: grouping or sharing.

Early skills	Visual representations	Mental calculations	Written calculations	Noticing
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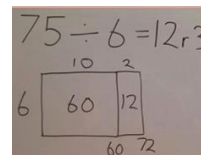
Grouping through Number Lines



Grouping through Arrays



Grouping through Grids



Using multiples and factors

Use multiples to solve $222/3$
Use factors to solve $96/6$

Vocabulary

- Divide
- Division
- Factor
- Halve
- Share
- Group
- Divided by
- Divided into
- Divisible by
- Remainder
- Left over
- Quotient
- Inverse

