
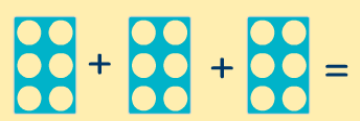


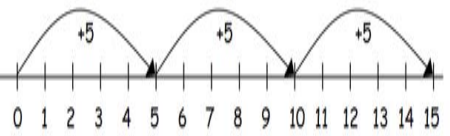
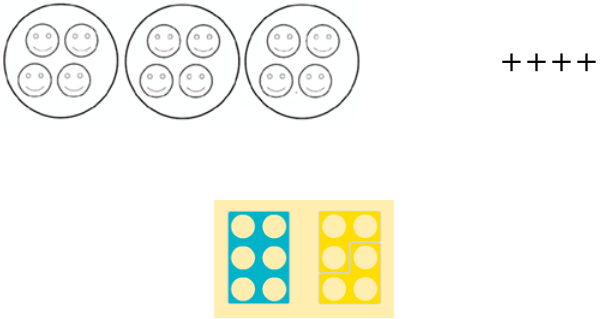

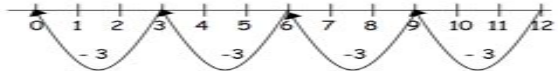
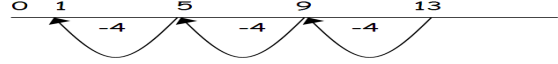


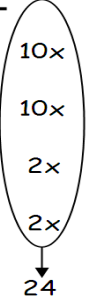

Milestones for Multiplication

MULTIPLICATION	WRITTEN METHOD	VOCABULARY	RESOURCES
Pictorial representation of multiplication	 $2 \times 2 = 4$ 	Multiples of 2, 5, 10 Lots of Sets of Array Array	Cubes Numicon Counters Objects
Arrays	 $2 \times 3 = 6$ $3 \times 2 = 6$ 	Array Times Lots of Same as/equals	Numicon Arrays
Repeated addition Start with number line Moving to mental recall of 2,5,10 and mental number line (Show understanding of multiplication as commutative)		Lots of Repeated addition Counting up/back Multiples	Number lines- labelled and blank Rulers Metre Sticks
Multiplying by 10/100 Moving to mental calculations	$2 \times 3 = 6$ $20 \times 3 = 60$ $200 \times 3 = 600$	Language of place value Digits Multiply	Grid method Visual strategies of recording (looking for patterns)

DIVISION	WRITTEN METHOD	LANGUAGE	RESOURCES
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Milestones for Division

<p>Pictorial representation of division</p>		<p>Sharing Grouping</p>	<p>Cubes Numicon Counters Objects</p>
<p>Arrays (Grouping)</p>	 <p>$6 \div 3 = 2$ $6 \div 2 = 3$</p>	<p>Grouping Dividing Groups of</p>	<p>Numicon Counters Cubes</p>
<p>Repeated subtraction</p> <p>Moving to mental calculation using multiplication facts</p> <p>Moving to $TU \div U$ with remainders</p>	<p>$12 \div 3 = 4$</p>  <p>$13 \div 4 = 3 \text{ r } 1$</p> 	<p>Repeated subtraction on Groups of Remainder</p>	<p>Number lines- labelled and blank</p>

<p>Chunking (Short division taught alongside)</p> <p>TU ÷ U HTU ÷ U ThHTU ÷ U</p> <p>** Give remainders as fractions</p>	<p>72 ÷ 3 Method</p> $ \begin{array}{r} 3 \overline{) 72} \\ \underline{- 30} \\ 42 \\ \underline{- 30} \\ 12 \\ \underline{- 6} \\ 6 \\ \underline{- 6} \\ 0 \end{array} $ <p>Answer : 24</p>  <p>5 $\overline{) 136}$ r1</p>	<p>Repeated subtraction Place value Groups of/chunks of Remainder Fraction Dividend Division</p>	<p>Place value charts Dice Number cards</p>
<p>Chunking</p> <p>TU ÷ TU HTU ÷ TU ThHTU ÷ TU</p> <p>Moving to decimals TU.t ÷ U</p>	$ \begin{array}{r} 24 \overline{) 3268} \\ \underline{2400} \\ 0868 \\ \underline{240} \\ 628 \\ \underline{240} \\ 388 \\ \underline{240} \\ 148 \\ \underline{120} \\ 028 \\ \underline{24} \\ 04 \end{array} $ <p>136 r4 = $136 \frac{4}{24} = 136 \frac{1}{6}$</p> 	<p>Repeated subtraction Place value Groups of/chunks of Remainder Fraction Dividend Divisor</p>	<p>Place value charts Dice Number cards</p>

Short division
(dividing by any
number up to 12)

ThHTU ÷ (1-12)

$$448 \div 8 = 56$$

$$\begin{array}{r} 4^4 4^4 8 \\ 8 \overline{) 056} \\ \underline{056} \\ 000 \end{array}$$

Multiplication squares