

Year 4	Division Year 5	Year 6
<p>Division Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>52–57 Understanding multiplication and division</u> 52, 54 Extend understanding of the operations of \times and \div, and their relationship to each other and to $+$ and $-$. 56 Find remainders after division. Divide a whole number of pounds by 2, 4, 5 or 10 to give $\pounds.p$. Round up or down after division, depending on the context.</p> <p><u>60–65 Mental calculation strategies (\times and \div)</u> 60 Use doubling or halving, starting from known facts. For example: double/halve two-digit numbers by doubling/halving the tens first; to multiply by 5, multiply by 10 then halve; find quarters by halving halves. 62 Use the relationship between multiplication and division. 64 Use known number facts and place value to multiply and divide integers, including by 10 and then 100 (whole-number answers).</p> <p><u>66–69 Pencil and paper procedures (\times and \div)</u> 68 Approximate first. Use informal pencil and paper methods to support, record or explain divisions. Develop and refine written methods for $TU \div U$.</p>	<p>Division Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>52–57 Understanding multiplication and division</u> 53, 55 Understand the effect of and relationships between the four operations. Begin to use brackets. 57 Begin to express a quotient as a fraction, or as a decimal when dividing a whole number by 2, 4, 5 or 10, or when dividing $\pounds.p$. Round up or down after division, depending on the context.</p> <p><u>60–65 Mental calculation strategies (\times and \div)</u> 61 Use doubling or halving, starting from known facts. For example: double/halve any two-digit number by doubling/halving the tens first; double one number and halve the other; to multiply by 25, multiply by 100 then divide by 4; find sixths by halving thirds. 63 Use the relationship between multiplication and division. 65 Use known facts and place value to multiply and divide mentally.</p> <p><u>66–69 Pencil and paper procedures (\times and \div)</u> 69 Approximate first. Use informal pencil and paper methods to support, record or explain divisions. Extend written methods to: short division of HTU by U (with integer remainder)..</p> <p>;</p>	<p>Division Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>52–57 Understanding multiplication and division</u> 53, 55 Understand and use the relationships between the four operations. Use brackets. 57 Express a quotient as a fraction or as a decimal rounded to one decimal place. Divide $\pounds.p$ by a two-digit number to give $\pounds.p$. Round up or down after division, depending on the context.</p> <p><u>60–65 Mental calculation strategies (\times and \div)</u> 61 Use related facts and doubling or halving. For example: double or halve the most significant digit first; to multiply by 25, multiply by 100 then divide by 4; double one number and halve the other. 63 Use the relationship between multiplication and division. 65 Use known number facts and place value to consolidate mental multiplication and division.</p> <p><u>66–69 Pencil and paper procedures (\times and \div)</u> 69 Approximate first. Use informal pencil and paper methods to support, record or explain divisions. Extend written methods to: short division of TU or HTU by U (mixed-number answer); division of HTU by TU (long division, whole-number answer); short division of numbers involving decimals.</p>

Year 4

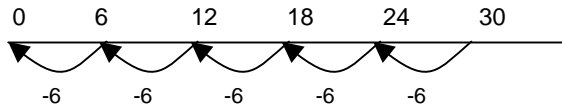
÷ = signs and missing numbers

Continue using a range of equations as in Year 2 but with appropriate numbers.

Sharing and grouping

30 ÷ 6 can be modelled as:

sharing – sharing among 6, the number given to each person
grouping – groups of 6 taken away and the number of groups counted e.g.

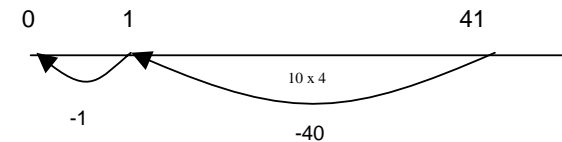


Remainders
 $41 \div 4 = 10 \text{ r}1$



0 40 41

OR



OR $41 = (10 \times 4) + 1$

Pencil and paper procedures

$72 \div 5$ lies between $50 \div 5 = 10$ and $100 \div 5 = 20$

$$\begin{array}{r} 72 \\ - 50 \quad (10 \times 5) \\ \hline 22 \\ - 20 \quad (4 \times 5) \\ \hline 2 \end{array}$$

Answer : 14 remainder 2

Division Year 5

÷ = signs and missing numbers

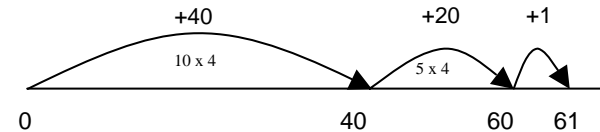
Continue using a range of equations as in Year 2 but with appropriate numbers.

Sharing and grouping

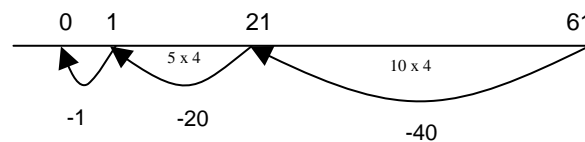
Continue to understand division as both sharing and grouping (repeated subtraction).

Remainders

Quotients expressed as fractions or decimal fractions
 $61 \div 4 = 15 \frac{1}{4}$ or 15.25



OR



Pencil and paper procedures

$256 \div 7$ lies between $210 \div 7 = 30$ and $280 \div 7 = 40$

$$\begin{array}{r} 256 \\ - 70 \quad (10 \times 7) \\ \hline 186 \\ - 140 \quad (20 \times 7) \\ \hline 46 \\ - 42 \quad (6 \times 7) \\ \hline 4 \end{array}$$

Answer: 36 remainder 4

Year 6

÷ = signs and missing numbers

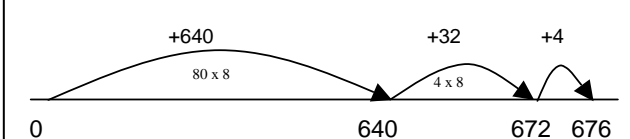
Continue using a range of equations as in Year 2 but with appropriate numbers.

Sharing and grouping

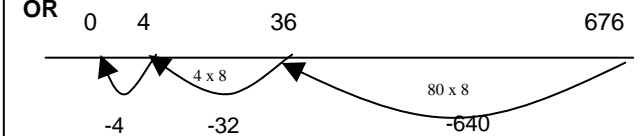
Continue to understand division as both sharing and grouping (repeated subtraction).

Remainders

Quotients expressed as fractions or decimal fractions
 $676 \div 8 = 84.5$



OR



Pencil and paper procedures

$977 \div 36$ is approximately $1000 \div 40 = 25$

$\begin{array}{r} 977 \\ - 360 \quad (10 \times 36) \\ \hline 617 \\ - 360 \quad (10 \times 36) \\ \hline 257 \\ - 180 \quad (5 \times 36) \\ \hline 77 \\ - 72 \quad (2 \times 36) \\ \hline 5 \end{array}$	<p style="text-align: center;">refine to</p> $\begin{array}{r} 977 \\ - 720 \quad (20 \times 36) \\ \hline 257 \\ - 180 \quad (5 \times 36) \\ \hline 77 \\ - 72 \quad (2 \times 36) \\ \hline 5 \end{array}$
--	--

Answer: $27 \frac{5}{36}$