



Maple
 Children are encouraged to develop a mental image of the number system in their heads to use for calculation. They should experience practical calculation opportunities involving **equal** groups and **equal** sharing.
 They may develop ways of recording calculations using pictures.


Holly
 Children explore practical contexts where they share equally and group equally. $6 \div 2 = ?$
Equal sharing (6 shared equally between 2) **Equal grouping (How many groups of 2 are there in 6?)**




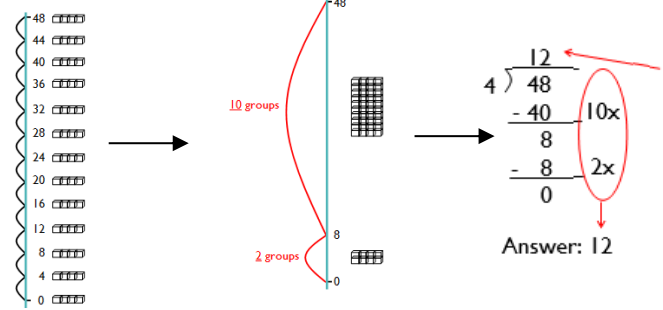
Elm
 Children continue to use practical equipment to represent division calculations as grouping (repeated subtraction) and use jottings to support their calculation.



$12 \div 3 = ?$ Children begin to read this calculation as, 'How many groups of 3 are there in 12?'
 At this stage, children will also be introduced to division calculations that result in remainders.
 $13 \div 4 = 3$ remainder 1

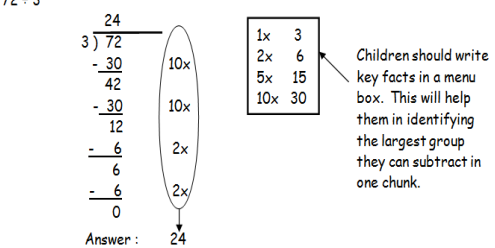


Willow
 $43 \div 8$

 $43 \div 8 = 5$ remainder 3 (This could be rounded up or down)
 The previous method of repeated subtraction is continued, but using a vertical number line alongside practical equipment.



Beech
 This is the 'chunking' method of division in which children use key facts of the multiplication tables of the divisor.

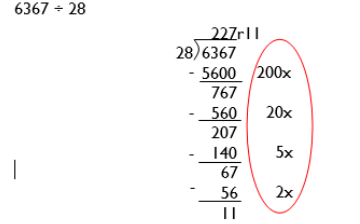
$72 \div 3$



Children should write key facts in a menu box. This will help them in identifying the largest group they can subtract in one chunk.

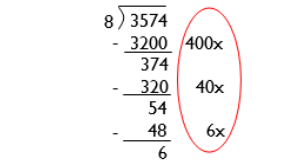
Oak 1
 To develop the chunking method further, it should be extended to include dividing a four-digit number by a two-digit number, e.g.

$6367 \div 28$



Oak 2
 In addition, children should be able to represent a remainder as a fraction.

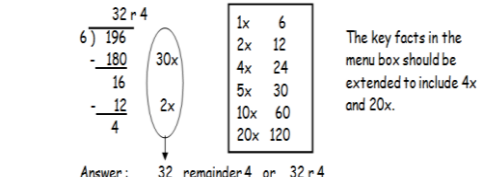
$3574 \div 8$



So $3574 \div 8$ is $446 \frac{6}{8}$ (when the remainder is shown as a fraction)

Children should become more efficient when using the chunking method by not having any subtraction steps that repeat a previous step.

$196 \div 6$



The key facts in the menu box should be extended to include 4x and 20x.

Answer: 32 remainder 4 or $32 \text{ r } 4$

Oak 3
 In addition, children should also be able to use the chunking method and solve calculations interpreting the remainder as a decimal up to two decimal places. To show the remainder as a decimal relies upon children's knowledge of decimal fraction equivalents. Eg.

Half: $\frac{1}{2} = 0.5$

Quarters: $\frac{1}{4} = 0.25, \frac{3}{4} = 0.75$

Fifths: $\frac{1}{5} = 0.2, \frac{2}{5} = 0.4, \frac{3}{5} = 0.6, \frac{4}{5} = 0.8$

Progression in

Children should not be made to go onto the next stage if:

- 1) they are not ready.
- 2) they are not confident.

Children should be encouraged to consider if a mental calculation would be appropriate before using written methods.