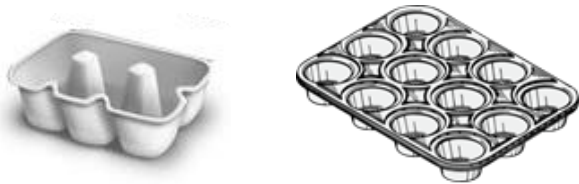


Stage 1

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**.

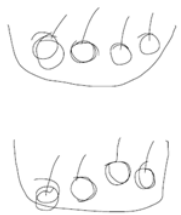


They may develop calculations using A child's jotting showing how they shared the apples at snack time between two groups.



ways of recording pictures. showing halving six spots between two sides of a ladybird.

A child's jotting showing how they shared the apples at snack time between two groups.

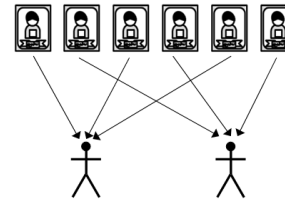


Stage 2

Children explore practical contexts where they share equally and group equally. $6 \div 2 = ?$

Equal sharing (6 shared equally between 2)

6 football stickers are shared equally between 2 people, how many do they each get? Children may solve this by using a 'one for you, one for me' strategy until all of the stickers have been given out.



Equal grouping (How many groups of 2 are there in 6?)

There are 6 football stickers, how many people can have 2 stickers each?



Stage 3

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.

$13 \div 4 = 3 \text{ remainder } 1$



Stage 4

$43 \div 8$

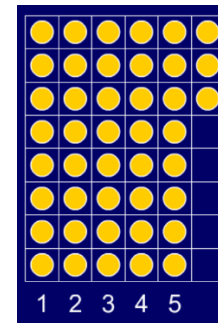


$43 \div 8 = 5 \text{ remainder } 3$

At this stage, children also learn if the remainder should be rounded up or down e.g. $62 \div 8 = 7 \text{ remainder } 6$

I have 62p. Sweets are 8p each. How many can I buy?
 Answer: 7 (the remaining 6p is not enough for another sweet)
 Apples are packed into boxes of 8. There are 62 apples. How many boxes do I need?
 Answer: 8 (the remaining 6 apples still need to be placed into a box)

Stage 4



$43 \div 8 = 5 \text{ remainder } 3$

Link this counting on in groups to the array. How many times can we count up in groups of 8 until we get to 43 and are there any extra?

Stage 5

This is the next stage, in which children use the 'chunking' method.

$72 \div 3$

$$\begin{array}{r}
 24 \\
 3 \overline{) 72} \\
 \underline{- 30} \\
 42 \\
 \underline{- 30} \\
 12 \\
 \underline{- 6} \\
 6 \\
 \underline{- 6} \\
 0
 \end{array}$$

10x
 10x
 2x
 2x
 ↓
 24

1x	3
2x	6
5x	15
10x	30

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

Answer :

Stage 5

As children grow in confidence and divide greater numbers, encourage them to find more efficient key facts to get as close to the number they are dividing, in as few steps as possible.

$196 \div 6$

$$\begin{array}{r}
 32 \text{ r } 4 \\
 6 \overline{) 196} \\
 \underline{- 180} \\
 16 \\
 \underline{- 12} \\
 4
 \end{array}$$

30x
 2x
 ↓

1x	6
2x	12
4x	24
5x	30
10x	60
20x	120

Answer : 32 remainder 4 or 32 r 4

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.