

Use the fact that division is the inverse (opposite) of multiplication to help you!

This method makes the division more simple. Don't forget the place value!

The '2' is what's left over. This 20 is added to the 8. Now how many 7s are in 28?

Formal division methods

Year 4:

- Pupils should be taught to recall multiplication and division facts for multiplication tables up to 12×12
- Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers

Short division

$98 \div 7$ becomes

$$\begin{array}{r} 14 \\ 7 \overline{) 98} \\ \underline{7} \\ 20 \\ \underline{14} \\ 6 \end{array}$$

Answer: 14

$432 \div 5$ becomes

$$\begin{array}{r} 86 \text{ r} 2 \\ 5 \overline{) 432} \\ \underline{40} \\ 32 \\ \underline{30} \\ 2 \end{array}$$

Answer: 86 remainder 2

The inverse!

This is the same as 90 divided by 7 or how many 7s in 90?

We write a '1' as there are 10 7s in 90 with a remainder. There can't be a 2 here as $20 \times 7 = 140$ which is much higher than 90.

Can you write remainders as fractions or decimals? How do they relate to each other?

Bronze

Varied Fluency

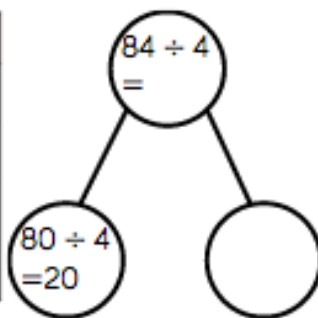
Jack is dividing 84 by 4 using place value counters.



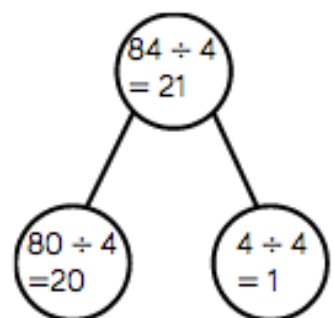
First, he divides the tens.

Then, he divides the ones.

Tens	Ones
10	
10	
10	
10	



Tens	Ones
10	1
10	1
10	1
10	1



Use Jack's method to calculate:

$69 \div 3$

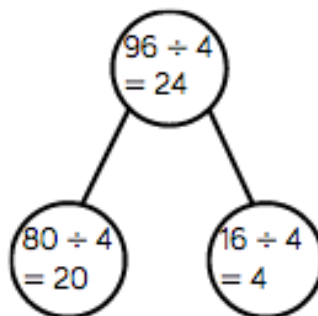
$88 \div 4$

$96 \div 3$

Rosie is calculating 96 divided by 4 using place value counters.

First, she divides the tens. She has one ten remaining so she exchanges one ten for ten ones. Then, she divides the ones.

Tens	Ones
10	1
10	1
10	1
10	1



Use Rosie's method to solve

 $65 \div 5$
 $75 \div 5$
 $84 \div 6$

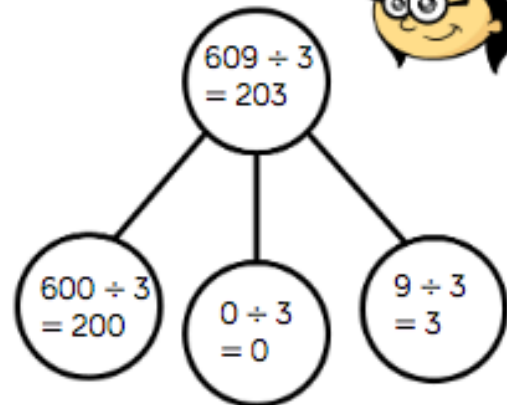
Silver

Varied Fluency

Annie is dividing 609 by 3 using place value counters.



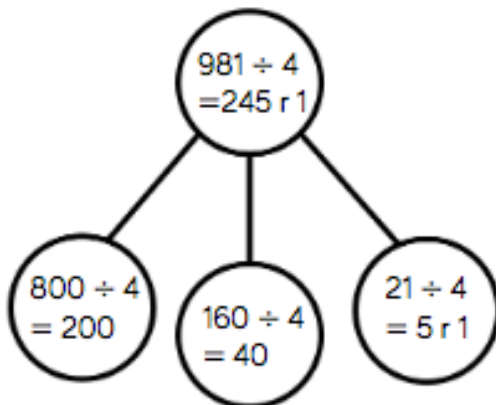
Hundreds	Tens	Ones
100 100		1 1 1
100 100		1 1 1
100 100		1 1 1



Use Annie's method to calculate the divisions.

$906 \div 3$ $884 \div 4$ $884 \div 8$ $489 \div 2$

Rosie is using flexible partitioning to divide 3-digit numbers. She uses her place value counters to support her.



Hundreds	Tens	Ones
100 100	10 10 10 10	1 1 1 1 1 1 1 1
100 100	10 10 10 10	1 1 1 1 1 1 1 1
100 100	10 10 10 10	1 1 1 1 1 1 1 1
100 100	10 10 10 10	1 1 1 1 1 1 1 1



Use Rosie's method to solve:

$726 \div 6$

$846 \div 6$

$846 \div 7$

Silver - Consolidation

$$1) \quad 2 \overline{) 426}$$

$$2) \quad 3 \overline{) 132}$$

$$3) \quad 4 \overline{) 108}$$

$$4) \quad 3 \overline{) 246}$$

$$5) \quad 2 \overline{) 564}$$

$$6) \quad 5 \overline{) 135}$$

$$7) \quad 4 \overline{) 152}$$

$$8) \quad 3 \overline{) 342}$$

$$9) \quad 4 \overline{) 532}$$

$$10) \quad 2 \overline{) 646}$$

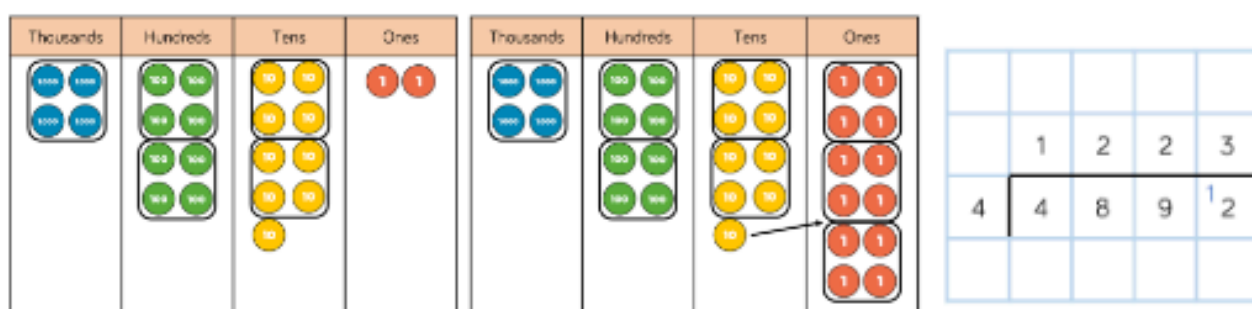
$$11) \quad 3 \overline{) 381}$$

$$12) \quad 4 \overline{) 608}$$

Gold

Varied Fluency

- Here is a method to calculate 4,892 divided by 4 using place value counters and short division.



Use this method to calculate:

$$6,610 \div 5$$

$$2,472 \div 3$$

$$9,360 \div 4$$

- Mr Porter has saved £8,934. He shares it equally between his three grandchildren. How much do they each receive?

- Use $<$, $>$ or $=$ to make the statements correct.

$$3,495 \div 5 \quad \bigcirc \quad 3,495 \div 3$$

$$8,064 \div 7 \quad \bigcirc \quad 9,198 \div 7$$

$$7,428 \div 4 \quad \bigcirc \quad 5,685 \div 5$$

Challenge

A farmer is packing eggs.

Each box holds **six** eggs.



The farmer has 980 eggs to pack.

How many boxes can the farmer **fill** using 980 eggs?



full boxes

How many eggs will be left over?



left over