

Division methods

Children are taught to understand division as sharing and grouping.

$$6 \div 2$$

More pictures! Drawing often gives children a way into solving the problem

6 Easter eggs are shared between 2 children. How many eggs do they get each?



There are 6 Easter eggs. How many children can have two each?



$$= 2$$

$$= 3$$

$$12 \div 4$$

Dots or tally marks can either be shared out one at a time or split up into groups.

4 apples are packed in a basket. How many baskets can you fill with 12 apples?

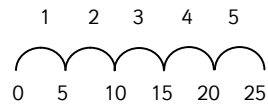


$$= 3$$

$$25 \div 5$$

To work out how many 5s there are in 25, draw jumps of 5 along a number line. This shows you need 5 jumps of 5 to reach 25.

A chew bar costs 5p. How many can I buy with 25p?



$$= 5$$

When faced with a calculation problem, encourage your child to ask...

- Can I do this in my head?
- Could I do this in my head using drawings or jottings to help me?
- Do I need to use a written method?

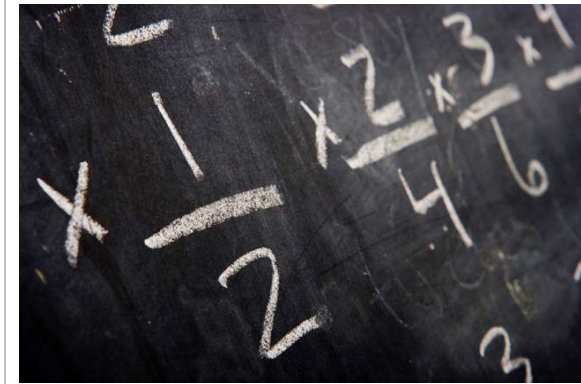
Here are some activities to try at home

- Find out which number facts your child is learning at school (times tables, doubles etc). Try to practise for a few minutes each day using a range of vocabulary.
- Have a 'fact of the day'. Pin this fact up around the house. Practise reading it in a quiet, loud, squeaky voice. Ask your child over the day if they can recall the fact.
- Play 'ping pong' to practise complements with your child. You say a number. They reply with how much more is needed to make 10. You can also play this game with numbers totalling 20, Encourage your child to answer quickly, without counting or using fingers.
- Throw 2 dice find the product (x). Can they do this without counting?
- Use a set of playing cards (no pictures). Turn over two cards and ask your child to multiply the numbers. If they answer correctly, they keep the cards. How many cards can they collect in 2 minutes?
- Play Bingo. Each player chooses five answers (e.g. multiples of 5 to practise the five times tables). Ask a question and if a player has the answer, they can cross it off. The winner is the first player to cross off all their answers

EYFS and Key Stage 1

Numeracy

Grouping and Sharing



Calculating



The maths work your child is doing at school may look very different to the way you were taught. This is because children are encouraged to work mentally, where possible, using jottings to help support their thinking. This leaflet will help you support your child, using the methods we use at school.

The objectives for reception are:

- Count repeated groups of the same size
- Share objects into equal groups and count how many in each group.

The objectives for year 1 and year 2 are:

- Solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups.
- Represent repeated addition and arrays as multiplication, and sharing and repeated subtraction (grouping) as division; use practical and informal written methods and related vocabulary to support multiplication and division, including calculations with remainders.
- Use the symbols , \times , \div and = to record and interpret number sentences involving all four operations; calculate the value of an unknown in a number sentence.



Children will learn to use the following vocabulary:

Reception

- Count
- Same size

Year 1

- Double
- Near double
- Half
- Halve
- Double
- Quarter



Year 2

- | | |
|-------------------|-----------------|
| • Count on | • Multiplied by |
| • Count back | • Multiple |
| • Lots of | • Share equally |
| • Groups of | • Divide |
| • Equal groups of | • Division |
| • Grouping | • Divided by |
| • Array | • Remainder |
| • Row | • Round up |
| • Column | • Round down |
| • Multiply | • Double |
| • Multiplication | • Halve |

Questions to ask


- How many ___?
- How many more to make ___?
- How many more is ___ than ___?
- How much more is ___?
- How many fewer is ___ than ___?
- How much less is ___?

Multiplication methods

Children are taught to understand multiplication as repeated addition and scaling. It can also be described as an array.

2 x 4

Again, a picture can be useful.



 $2 + 2 + 2 + 2 = 8$

Each child has two eyes. How many eyes do four children have?

5 x 3

There are 5 cakes in a pack. How many cakes in 3 packs?



 $1 \quad 2 \quad 3$

 $= 15$

Dots or tally marks are often drawn in groups. This shows 3 groups of 5.

4 x 3

A chew costs 4p. How much do 3 chews cost?

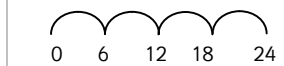


 $= 12p$

Drawing an array (3 rows of 4 or 3 columns of 4) gives children an image of the answer. It also helps develop the understanding that 4 x 3 is the same as 3 x 4.

6 x 4

There are 4 cats. Each cat has 6 kittens. How many kittens are there altogether?



 $= 24$

Children could count on in equal steps, recording each jump on an empty number line. This shows 4 jumps of 6.