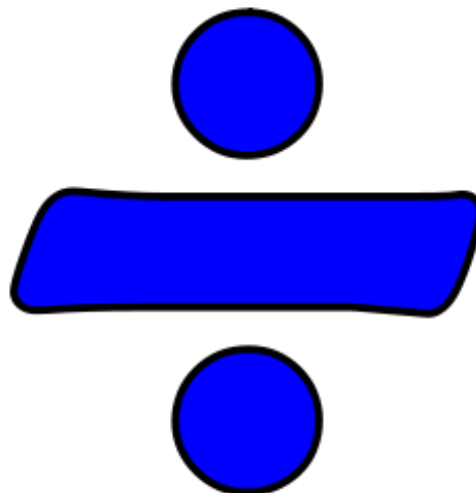# Dundonald Primary School's Parent Guide to:

Division

Your child is learning about division. In order for you to help at home it is important that you are familiar with the words and methods your child's teacher will be using in the classroom.

Equal Sharing / Grouping

Firstly the children are introduced to the concept of sharing. This is achieved through a series of practical lessons where the children will get the opportunity to share objects between groups.

For example:

6 cubes shared into 2 groups
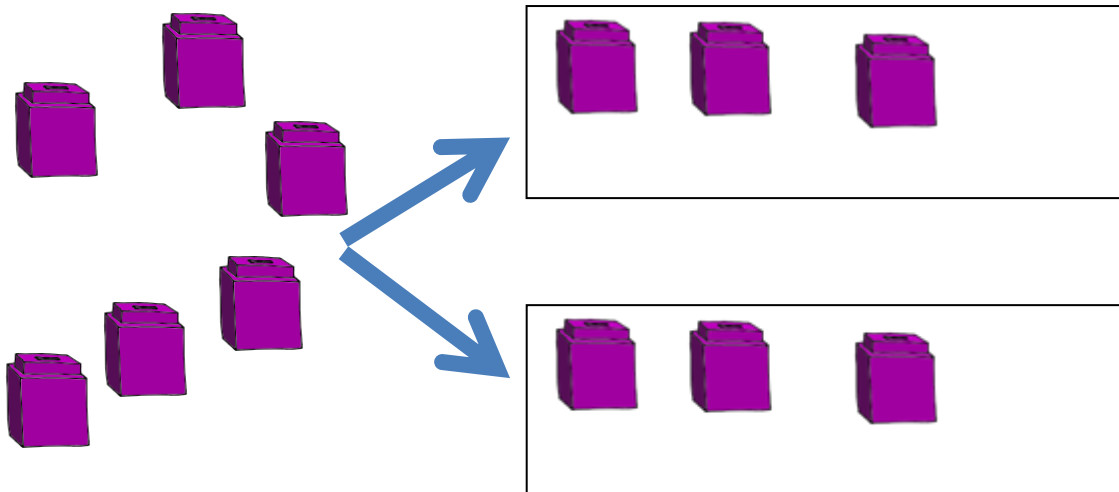
The children initially learn to share between 2 and then move onto sharing between 3, 4, 5 etc. The practical examples have no remainders at this stage.

Example of how a question may be worded:

Share 8 apples equally between two boys. How many does each receive?

The answer is found by sharing the apples, giving one to each alternately until none are left, and then counting how many are in each share.

Introducing the division symbol

Having carried out practical sharing activities it is now explained how this can be written using symbols.

"4 cubes shared equally among 2 plates gives 2 cubes on each plate"
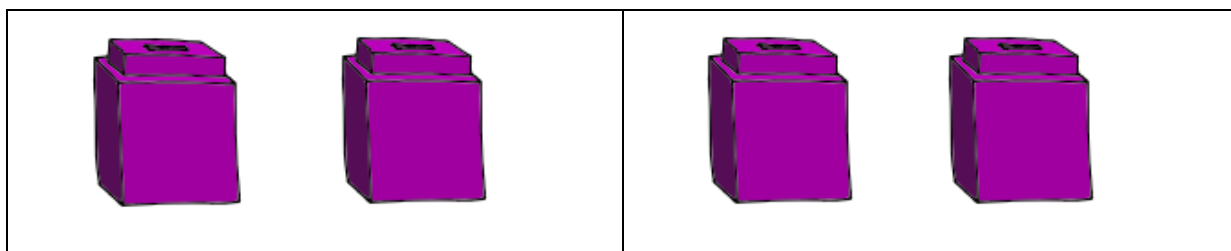
This could be written as:

4 divided by 2 = 2

OR

4 ÷ 2 = 2

The pupils would then record examples using the division symbol.

Practical activities would also be used to allow the children to become familiar with sharing language and to be able to find the answer practically.

Sharing with remainders

The children would firstly be introduced to division with remainders through practical tasks, using concrete materials.

"Share 7 cubes between 2 plates. How many cubes are on each plate?"
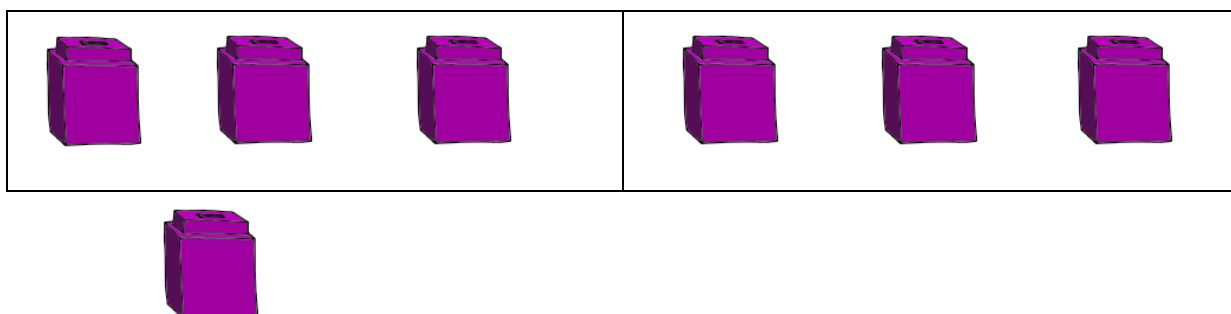
The children would then place 1 cube on each plate until there are not enough cubes left to give another 1cube to each plate.

"7 cubes shared equally among 2 plates gives 3 to each plate with one cube left over".

It would then be explained that the number left over is called the remainder.

7 shared equally among 2 is 3 remainder 1

OR

7 divided by 2 = 3 r 1

Further examples would then be used to reinforce the use of a remainder.

Linking division and multiplication

The link between division and multiplication should firstly be shown practically.

Share 6 cubes equally between 2 plates

6 divided by 2 = 3

is the same as:

2 X 3 = 6

Many more practical activities would then be undertaken to highlight the link between division and multiplication.

The children will be asked further questions such as:

6 divided by 2 is the same as 2 lots of what?

This is used to reinforce the link between division and multiplication to help build up the child's confidence.

Recording

It would also be explained that a division need not necessarily be written using the division symbol.

For example, 6 divided by 2 is sometimes written as:

```
      3
   ┌─────
 2 │ 6
```

This form of recording is generally used for larger numbers, beyond the multiplication tables. The answer should always be correctly placed in the tens or units columns.

Recording with remainders

If the number could not be shared equally into the groups then that would mean there would be remainders in the calculation. This would be laid out slightly different.

For example, 7 divided by 2 would be written as:

```
      3 r 1
   ┌─────
 2 │ 7
```

R means remainder

This method changes slightly when the numbers start to get bigger and when children start to experience dividing 2 and 3 digit numbers. The children follow the same strategy but it changes slightly as children need to carry numbers over into the next columns.

Example 1

42 divided by 3 would be written as:

```
              1   4
        _____
      3 |  4   2
        ┌───┐
        │ 1 │
        └───┘
```

Step 1: divide the tens column by 3 (4 ÷ 3 = 1 r 1).

Step 2: write 1 above the line and then you need to display the remainder under the line in the units column.

Step 3: you now have 1 ten and 2 units in the units column which makes it 12 (12 ÷ 3 = 4).

Step 4: display the answer on top of the line.

Example 2

323 divided by 6

```
              0   8   1
        _____
      4 |  3   2   4
        ┌───┐
        │ 3 │
        └───┘
```

Step 1: divide the hundreds column by 4 (3 ÷ 4 = 0 r 3)

Step 2: display 0 on the top line and then put the remainder 3 below the tens column

Step 3: divide 32 by 4 which gives you 8

Step 4: complete the rest of the calculation as normal

Helping at home

Children will be experiencing division from the early stages of primary school in a range of different ways.

Engaging in practical activities where your child is being encouraged to share objects amongst groups will help to build up their confidence with division.

We hope you find this parent leaflet helpful.
We have created other Numeracy and Literacy leaflets to help you when supporting your child at home.