Your child will be learning about fractions – halves (½) and quarters (¼) – over the coming days. Your child needs to know some of the mathematical language associated with fractions – half, quarter, fraction, part, bit, piece, whole, whole amount, equal, not equal, circle, bigger, less than, greater than, the same as, divide, cut, etc.

Share the items

Give your child 12 small items – marbles/cubes/counters/teddies/1c coins/clothes pegs, etc. Explain that s/he must share them out between you and him/her. Ask: *Did we both get the same amount?* Do this with different numbers of items.

Folding halves

Give your child an A4 sheet of paper. Ask him/her to fold it down the centre (vertically). Explain that each part is called a half (½). Now ask him/her to fold the sheet across (horizontally). Explain that each part here is also called a half (½).

Folding quarters

Give your child an A4 sheet of paper. Ask him/her to fold it down the centre (vertically). Now ask him/her to fold the sheet across (horizontally). Ask your child how many sections are in the sheet now. Explain that there are four equal sections (parts) and that each part here is called a quarter (¼).
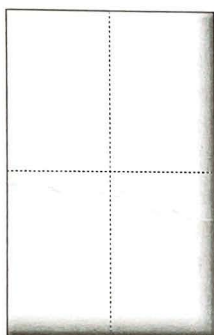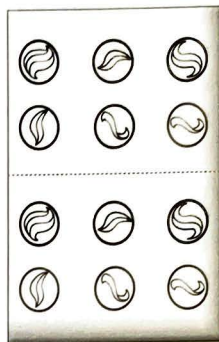

A4 sheet of paper

Ask your child to cut out the four quarters and to place them on top of each other to prove that they are all the same size (we won't use the phrase surface area until later in the book). Now ask him/her to make the four quarters into a complete sheet again.

Making halves and quarters (water)

Ask your child to fill a glass with water/sand so that it is roughly ½ or ¼ full.

Sharing equally – halves

Give your child a little problem to solve. For example: *You have 12 marbles. You want to share them between you and your friend. How many marbles will each of you get?* Explain to your child that you want him/her to share the marbles equally. Ask him/her to come up with some strategies (methods/ideas) to solve the problem. S/he may count out the numbers saying: *one for you, one for me, until they are all shared.* S/he may use the A4 sheet that s/he folded earlier and use it to count the marbles on to each half. S/he will see that ½ of 12 = 6 as there will be six marbles in each half of the sheet.

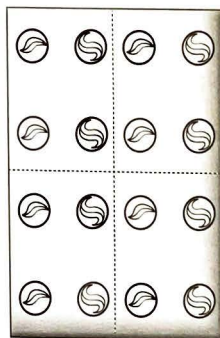**A4 sheet of paper**

Now ask your child to do the same to show that:
½ of 8 = 4,   ½ of 10 = 5,   ½ of 16 = 8, etc.

Sharing equally – quarters

Give your child a little problem to solve. For example: *You have 16 marbles (counters/cubes/clothes pegs/coins can act as the marbles). You want to share them among yourself and your three friends. How many marbles will each of you get?* Explain to your child that you want him/her to share the marbles equally. Ask him/her to come up with some strategies to solve the problem. S/he may count out the numbers saying: *one for you, one for me, until they are all shared.* S/he may use the A4 sheet that s/he folded earlier into quarters and use it to count the marbles on to each quarter. S/he will see that ¼ of 16 = 4 as there will be four marbles in each quarter of the sheet.

A4 sheet of paper

Now ask your child to do the same to show that:
¼ of 12 = 3,   ¼ of 8 = 2,   ¼ of 20 = 5, etc.