Multiplication and Division: Key Skill 11



Create answers using drawings, words and numerals



Children learn all kinds of multiplication and division strategies so that they can visualise and understand the meaning of multiplication and division. Working with drawings is the easiest with words and numerals being harder.



Children are encouraged to:

1 **Read** the problem many times.

2 **Draw** a picture that shows the information given. During this step children ask themselves: Can I draw something from this information?

What can I draw?

What is the best way to show the information?

3 Write your answer based on the drawings. This can be a number sentence or a statement.



WEB LINKS go to:

Video: Using pictures to divide Video: Division using arrays Video: Dividing using pictures Video: Multiplying using pictures

Fractions and Decimals: Key Skill 12



Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections



A fraction is part of a whole that has been broken into equal parts. It has a:

- **numerator** (the top number)
- fraction bar (the line in the middle)
- denominator (the bottom number)

A **numerator** is the number above the line in a fraction which shows how many parts are being considered.

A **denominator** is the number below the line in a fraction. It shows the number of parts a whole has been divided into.

The line in between the numerator and the denominator is called the **fraction bar**. Division bar and vinculum mean the same thing.

It will help your child to use these words when talking about fractions.

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Fractions are often the first introduction to numbers smaller than 1 or a whole. Remembering that a fraction is a whole broken into *equal parts* is extremely important. If the parts are not equal, it is not a fraction. The whole could be an object, a group of objects or a number.

When making fractions, look for fraction pieces that are *equal*. Children sometimes break a whole into unequal parts e.g. drawing 4 parallel lines down a circle for quarters. Pictures are hugely helpful when making fractions.

When reading fractions, look for a double count, counting the number of parts shaded and then the total number of parts to make the fraction.

A common mistake is thinking the larger denominator creates a larger fraction. It is the opposite for early fraction work. The smaller the denominator, the larger the fraction.



When parents are preparing meals demonstrate fractions with food. Cut a cake into quarters, a sausage roll in half and many more!

Lego blocks can be used to make fraction walls – where the bottom is 1, the next row is 2 halves etc.

Read "The Great Divide" by Dayle Ann Dodds or "Give Me Half" by Stuart J Murphy.

WEB LINKS go to:

<u>Video: Explaining fractions</u> <u>Video: Showing real life examples of fractions</u> <u>Video: The great divide book reading</u>