Addition and Subtraction: Key Skill 9

Demonstrate that numbers can be added in any order. This is the commutative law e.g. 3 + 4 = 7 and 4 + 3 = 7





The **commutative law** shows that numbers can be added in any order or multiplied in any order and the answer will be the same. Commutativity and turn-around facts all mean the same thing.



This is a maths skill needed for mental maths strategies (working out answers in your head). Children can spin the numbers around to answer questions faster and easier! Remember that this works only for addition and multiplication - not subtraction or division.

 $20 + 5 = 5 + 20 \qquad 20 - 5 \neq 5 - 20$

This is very handy when teaching children to start with the bigger number first and then add the smaller number. For example, with 3 + 16 it is easier start from 16 and count on 3 (16 + 3) than start from 3 and count on 16 (3 + 16).



Play a dice game! Roll 2 dice, put them next to each other, and add up the results. Switch the order, and add up the results again. Explain that, even though they're in a different order, the result is the same.

Play with dominoes and take turns to add up the 2 numbers on each domino. Swap the order you add them to check the answer is always the same!

Investigate the commutative law for yourselves! Make some tricky questions and see if you can stump the law. Some examples to help you on your way:

5+6+3= = 3+2+8 = 3+6+1 2+6+7+3=



WEB LINKS go to:

Notes: Turn-around facts Video: Commutative law of addition explained Video: Commutative law of addition

Addition and Subtraction: Key Skill 10



Write maths questions using drawings, words, numbers and the symbols +, - and = (e.g. 1 + 1 = 2, five minus three equals 2)



Being able to read and write maths symbols, words and drawings helps children to create their own maths questions and understand how to use each in the right way.



Act out a story or a problem and then draw the question and answer in pictures.

Play Mr Squiggle and turn maths symbols, words, numbers into drawings to help your child become familiar with the symbols.

Play a game where you use a combination of symbols, pictures, numbers and words all together to make maths questions. Fold a piece of paper in 5 strips and take turns adding the next part of the question hiding the part before it. Play around with all the options and at the end reveal your question and answer the question together.



WEB LINKS go to: <u>Video: Making equations</u> <u>Video: Mr Squiggle</u>