



## Non-Verbal Reasoning Skills

Non-verbal reasoning is problem-solving based around pictures, diagrams and shapes, rather than words. A good mathematical knowledge is important for non-verbal reasoning tests, so encourage your child to work on learning number bonds and times tables and practising addition and subtraction.

Number bonds are often referred to as 'number pairs'. They are simply the pairs of numbers that make up a given number, for example:

Number bonds 1 to 10:  $1+9$   $2+8$   $3+7$   $4+6$   $5+5$

Number bonds 1 to 20:  $1+19$   $2+18$   $3+17$   $4+16$   $5+15$

and so on.

You can also boost non-verbal reasoning skills by:

- Playing games like spot the difference and Sudoku.
- Developing spatial awareness and understanding of how shapes interconnect with jigsaws and construction toys like Meccano and Lego.
- Using a pack of cards to practise addition and subtraction, for example by dealing out five cards and getting your child to add them all together, subtract the smallest number from the largest, and so on.
- Playing maths games when out and about, such as asking your child to add together all the numbers from the registration plate of the car in front.
- Drawing shapes on a piece of paper and getting your child to draw their mirror image, using a mirror to check the results, or cutting them out and folding them in half to see how they look.
- Using the computer: the ideal way to practise non-verbal reasoning skills. Try the Khan Academy website; it has some useful tutorials your child could work through which will help to develop maths reasoning skills:

<https://www.khanacademy.org/math/>