



Dice Games



1. Roll 100!

This is a great game for developing mental addition or subtraction

Players take it in turns to throw two 1-6 dice and add up their total to be their score. They can have as many goes as they wish on their turn, building their score higher and higher. However, if a 1 is thrown they lose the points they have accumulated in that turn; if two 1's are thrown at the same time, all points they have accumulated in the game are lost and they start again from 0! Players can choose when to save their points (ideally before any 1's are thrown!) and carry this total into their next go.

The first person to reach 100 is the winner. Children can be supported with hands-on equipment such as beads/cubes/counters or a 100-bead string. There are plenty of opportunities to talk about mental strategies such as doubling, adding 10 and adjusting etc. The game can also be extended by starting with 100 and using subtraction to be the first person to reach 0.

2. Nasty Numbers

A game that secures knowledge of place value to whatever size number your child is confident with.

The nice version first: Players draw boxes for digits in their number (I play this with anything from 4-digit to 9-digit numbers). They then throw a 0-9 dice. If you don't have this size dice, you could always use digit cards instead. They must choose the place value column that they would like to place the digit, with the aim of being the player to get the largest total. Play then passes to the opponent and they continue until their digit boxes are full. It's good practise to make sure your child can say the number confidently and compare it to their opponents to see who has won. A subtraction calculation could also be completed to see just how big the difference between the numbers was. Why not play a few games and then use the symbols $<$ $>$ to compare the different numbers made.

Nasty version: The set up of the game is the same, but this time, if you throw a digit you do not want, you can put it into your opponent's number instead! The only box belonging to your opponent that you cannot use is the largest value digit.

3. Up the ladder

A game that gives your child an opportunity to practise all four operations $+$ $-$ $\times$ $\div$, or you can focus on just addition and subtraction with younger children.

Each player creates a ladder of numbers starting from 0 up to 12. They take turns to throw 3 dice and using any of these three dice they must make the numbers from 1-12 in sequence. For example, if a 5, 3 and 2 are thrown, they can make 1 ($3-2$), 2 and 3 by using these dice by themselves, they can also make 4 ($5+3 \div 2$) etc. Their turn ends when they are unable to make a number and play passes to their opponent. Each player carries on up their own ladder and the winner is the first person to reach 12.

There is also the scope of writing the calculations and using BODMAS, the order of operations to write them accurately.

