## Dice Games

## Don't get a double !

In this game you roll two dice and continue adding the totals until you record a double. You record your total then try again to see if you can beat your highest score

Eg

| A | 1 | 4 | 2 | 6 | 5 |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| B | 5 | 3 | 3 | 4 | 5 |  |  |  |  |  |  |  |  |  |
| tot | 6 | 13 | 18 | 28 | out |  |  |  |  |  |  |  |  |  |

Total 28

| A | 6 | 4 | 2 | 2 | 5 | 3 | 6 | 2 | 3 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| B | 3 | 2 | 1 | 4 | 1 | 2 | 3 | 3 | 3 |  |  |  |  |  |
| tot | 9 | 15 | 18 | 24 | 30 | 35 | 44 | 49 | out |  |  |  |  |  |

New highest total 49

## Dice Cricket

In this game you can use real people to act as batsmen in an imaginary cricket match. In cricket you often score 1 run and can also score 2,3,4 or 6 but hardly ever score a 5 . In this game your batsman keeps scoring runs until he or she rolls a 5 . Rolling a 5 means he/she is out. You can have imaginary teams to play against each other such as children against adults, Plymouth Argyle against Manchester United, Eastenders against Coronation St or even superheroes against villains. You can encourage your child to keep a running total as they keep rolling the dice or just record each shot individually and then add the stream of numbers when the batsman is out. A tip to use when adding the list is to look for combinations of numbers that make 10 and cross each number off as you have used it

Eg
Total
Mrs Watts 3,4,1,1,1,3,5 13
Mrs Spry 4, 6, 2, 1, 5 13
Miss Melley $\quad 3,2,4,6,2,4,2,1,4,2,6,2,1,4,65 \quad 49$
Mr Gill 5 0
Mrs Penman 3, 4, 2, 6, 2, 4, 15 27
Miss Welsh 4, 2, 5 6
Miss Hill $3,2,6,1,3,2,4,6,3,5 \quad 30$
Total 138
You then choose 7 children's names to bat against the teachers. It is amazing how many times the children manage to baffle the laws of probability and beat the teachers!

## Get them all

In this game you try to get every total possible with two dice in as few rolls as possible. Just have the totals 2 to 12 on a sheet and tick each one off (or even take a sweet off each one as it appears) while keeping a tally chart of how many rolls you have used. Lots of questions should arise from this game eg " Why is one not on the sheet?" "Why do I get some totals lots of times and others hardly ever"

You can of course play this game against an opponent with the winner being the one who manages to tick off all the totals first.

## Dice Darts

Choose a total to start from, maybe 101, and play against an opponent trying to get down to 0 as soon as possible by taking the total of your roll away from your previous roll.

Eg

| Player A | Total |  | Player B | Total |
| :--- | :--- | :--- | :--- | :--- |
|  | 101 |  |  | 101 |
| $4,3,2$ | 92 |  | $1,3,6$ | 91 |
| $5,1,3$ | 83 |  | $6,6,4$ | 75 |
| $3,5,4$ | 71 |  | $1,1,2$ | 71 |
| $6,3,4$ | 58 |  | $5,3,6$ | 57 |
| $1,4,6$ | 47 |  | $2,2,2$ | 51 |
| $3,4,1$ | 39 |  | $2,1,4$ | 44 |
| $4,2,5$ | 28 |  | $6,3,5$ | 30 |
| $1,2,1$ | 24 |  | $5,3,5$ | 17 |
| $3,1,1$ | 19 |  | $4,3,4$ | 6 |
| $4,2,1$ | 12 |  | 4,32 | winner |
|  |  |  |  |  |

This game can be adapted in many ways by changing the total, changing the number of dice used, going up to a total rather than down.

Younger children could have a number line that they move a counter along as they roll a single dice and see can they get to 20 before you can.

To make the game quicker you could multiply the numbers instead of adding them.

## Traditional Games

Traditional board games involving dice such as Snakes \& Ladders and Ludo can all help with improving children's number recognition and skills. Yahtzee is a game that does not necessarily demand much in terms of number manipulation but in terms of thinking skills, planning and probability it really does get the brain working!

