## Activities using your dice

Children need to recognise the numbers of dots on each dice side, without counting. They need to be able to say, 'I have thrown a six' or 'You have thrown a three' without pausing to count the dots.
When you play these dice games, encourage your child to find totals by remembering rather than working out where possible. We really want children to memorise the answers to small number additions, such as four and two, without having to work them out.

## Dice predictions

You will need

- two dice
- two players!
- One player throws two dice. They say both the numbers thrown, e.g. a two and a four.
- They add the numbers and say the total, e.g. six.
- They write down their total, e.g. 6.
- Then they pass the dice to the other player.
- Before that player does the same thing they must say whether their total will be greater or smaller than the total just said. E.g. will their total be greater or smaller than six?
- They predict. E.g. my total will be greater than six.
- They then throw the two dice and add the numbers.
- Is their total greater or smaller than the first?
- Were they correct in their prediction?
- If so, they can take a raisin.
- Play again, changing roles so that the second player goes first this time and the other person has to predict!
- Continue playing until someone has six raisins!

NB. Help your child to add the two dice numbers as quickly and efficiently as possible. They do NOT need to count the dots on both dice. They can say the larger number, e.g. five, and then count on the number on the second dice. E.g. five, and three more... five, six, seven, eight.

## Making ten!

You will need

- some raisins or crisps
- two dice
- paper and felt pens each
- Take turns to play.
- Throw the two dice.
- Choose one of the numbers to 'keep' and write it down, drawing a circle round it like a balloon.
- Explain that the aim is to collect sets of numbers that add to make ten.
- So the game might go like this:
- Your child throws the two dice and gets a 6 and a 3. They keep the 6, writing it in a balloon.
- You throw the dice and get a 5 and a 4. You keep the 4, writing it in a balloon.
- Your child next throws a 3 and a 2. They keep the 2, writing it in a second balloon.
- You throw a 1 and a 2, and you keep the 2.
- Your child throws a 3 and a 4. They keep the 4 and they now have two balloons which make ten (a 6 and a 4).
They also have a 'spare' balloon which is a 2.
- Keep playing until one person has made three sets of balloons which make ten. They are the winner!
NB. This game practises adding several small numbers and it also, importantly, helps
children to memorise the pairs of numbers which make ten $(6+4,5+5$, etc.)


## Magic seven

You will need

- some raisins or crisps
- two dice
- Take turns to play.
- Throw both the dice and say each of the numbers thrown.
- If the two dice numbers add up to seven, take a raisin. Don't eat it - yet!
- Keep playing like this, taking turns to throw the dice and taking a raisin if the two numbers add up to seven.
- After seven turns each, count your raisins.
- Who has the most raisins? They are the winner!
- Now eat your raisins!

NB. This activity helps children to add two small numbers fast and accurately.

## Dicey grid!

You will need

- A felt-tip pen
- two dice
- a copy of the grid below each
- Players choose odd numbers or even numbers. One player has 'odd' and one has 'even'.
- They then take turns to play.
- They throw the two dice and say the total.
- They then find this number along the bottom of the grid below and colour an oblong above that number. E.g. if the total is 7, the player colours a space above the number 7 on the bottom of the grid below.
- Stop when one column reaches the top of the grid.
- Is the first number to reach the top of the grid odd or even? The player collecting that type of number wins!

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| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

## Dice towers

You will need

- some raisins or crisps
- two dice
- Your child throws one dice. They say the number thrown. E.g. four.
- You write this number, e.g. 4.
- They throw the second dice.
- Then they lift the second dice and place it carefully on top of the first dice.
- Without touching the dice, they look all round the top dice and decide what number of dots is touching the bottom dice. E.g. if there is a 6 on top, and a 2 , a 3 a 4 and a 5 round the sides, then they know there is a 1 underneath touching the bottom dice.
- Ask your child, 'How many dots are on the two faces that are touching?' Can they work this out.
- E.g. there were four on the top of the first dice and there is one on the bottom of the top dice.
- Take the dice apart to see if they were right. If they were, they eat a raisin!
- Repeat this so that they get good at it!

NB. This activity really helps children become familiar with a dice. Some children may notice that opposite faces of a dice always add up to seven dots.

## How many more?

You will need

- some raisins or crisps and an egg cup to put them in
- two dice
- Take turns to play.
- Throw both the dice.
- Say each of the numbers thrown, e.g. 5 and 2.
- Find how many more dots the larger number has than the smaller. E.g. five is three more than two.
- Take that many raisins and add them to your egg cup.
- After seven turns each, count your raisins.
- Who has the most raisins? They are the winner!
- Now eat your raisins!

NB. This activity helps children to find the difference between two small numbers as well as familiarising them with the dice numbers.

## Starry dice

You will need

- some raisins or crisps
- two dice
- Take turns to throw both the dice.
- Say the total of the numbers thrown.
- Colour a star with that number.
- Keep taking turns until someone has coloured nine stars.
- Help your child when it is their turn.


