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| **Board games**  Games like Snakes and Ladders, Shut the Box and the dice games all support maths skills. Snakes and Ladders: work out how many places you need to move forward, what number you need to throw to get to the biggest ladder, and what to avoid so that you don’t slip down the snake. Dice games also involve probability, figure out how likely it is that you’ll throw a six, or do sixes come up less frequently than other numbers. Other board games that are good for building maths skills include Scrabble, where you need to add up the points for their word – including double and triple letter and word scores – and Battleship, which helps you practise using coordinates. | **Art**  Colouring pictures with geometric patterns, or painting butterflies where you paint one wing on one side of the paper and then fold it in half so it transfers to the other side, are really good opportunities to use mathematical language around shapes and symmetry. |
| **How heavy?**  You will need some kitchen scales that can weigh objects in kilograms. Ask your child to find something that weighs close to 1 kilogram. Can they find something that weighs exactly 1 kilogram? Find some things that weigh about half a kilogram. Add weights together. |
| **Baking**  Weight and [volume](https://www.theschoolrun.com/what-is-volume) as well as other mathematical challenges. Help with weighing ingredients and reading the numbers on the scales, make it more challenging by, for example, making a larger batch of cakes by doubling the recipe, or getting them to calculate the volume of your cake tin and work out how much of each ingredient you’ll need or adding together the total mass of the ingredients. | **Shape**:  Paper plates, paper hats, flowers and boats. Origami paper folding involves making sense of, and using, precise instructions – a form of problem-solving – with links to understanding symmetry and 2D and 3D shapes. |
| **Cards**  Card games teach children new strategies for using mathematical information, categorising patterns, sequencing and sorting.   * deal a pack between players. Each turns over two cards, multiplies them together and shares the answer – the highest number wins all the cards played. (To make this a simpler game for younger children, get them to add the two cards together instead of multiplying.) |
| **Dice number facts:**  Number facts You need a 1–6 dice.  Take turns. Roll the dice. See how quickly you can say the number to add to the number on the dice to make 10, e.g. \_\_and 6  If you are right, you score a point. The first to get 10 points wins. You can extend this activity by making the two numbers add up to 20, or 50.  Try making other numbers for example \_\_ and 5 = 7 or \_\_ and 5 = 9 |
| **Shopping**  Make a shop. Choose 6 different items each costing less than £1. Make a price label for each one, e.g. 39p, 78p. Shuffle the labels. Then ask your child to do one or more of these.   * Place the labels in order, starting with the lowest. * Say which price is an odd number and which is an even number. * Add 9p to each price in their head. * Take 20p from each price in their head. * Say which coins to use to pay exactly for each item. * Choose any two of the items, and find their total cost. * Work out the change from £1 for each item. | **Speedy pairs to 10**  Make a set of 12 cards showing the numbers 0 to 10, but with two 5s. If you wish, you could use playing cards. Shuffle the cards and give them to your child. Time how long it takes to find all the pairs to 10. Repeat later in the week. See if your child can beat his / her time  Could change this to make other numbers e.g speedy pairs to 12. |
| **Straight lines**  Choose 4 toys and lay them on the table in order of length. Use a ruler to measure each toy to the nearest cm or half cm. |
| **Pasta subtraction**  For this game you need a dice and some dried pasta or buttons.   * Start with a pile of pasta in the middle. Count them. * Throw a dice. * Say how many pieces of pasta will be left if you subtract that number. * Then take the pieces of pasta away and check if you were right! * Keep playing. * The person to take the last piece wins !   Or  You need two dice and a pile of dried pasta.   * Take turns to roll the two dice. * Multiply the two numbers and call out the answer. * If you are right, you win a piece of pasta. * The first to get 10 pieces of pasta wins. |
| **Piggy bank:**  Tip out your piggy bank. What coins are there? Which coins or notes are missing? How much have you got in total? How much more would you need for £10? £20? £25. |
| **Secret sums**   * Ask your child to say a number, e.g. 43. * Secretly do something to it (e.g. add 30). Say the answer, e.g. 73. * The child then says another number to you, e.g. 61. * Do the same to that number and say the answer. * The child has to guess what you are doing to the number each time! * Then they can have a turn at secretly adding or subtracting something to each number that you say to them. |
| Roll two dice. Make two-digit numbers, e.g. if you roll a 6 and 4, this could be 64 or 46. If you haven’t got two dice, roll one dice twice. Ask your child to do one or more of the activities below.   * Count on or back from each number in tens. * Add 19 to each number in their head. (A quick way is to add 20 then take away 1.) * Subtract 9 from each number. (A quick way is to take away 10 then add back one.) * Double each number |
| **Timetables**:  One person has the 2x table and the other has the 5x table. Write six numbers in that table on your piece of paper, e.g. 4 8 10 16 18 20.  Roll one or two dice. If you choose to roll two dice, add the numbers, e.g. roll two dice, get 3 and 4, add these to make 7.  Multiply that number by 2 or by 5 (that is, by your table number, e.g. 7 x 2 or 7 x 5). If the answer is on your paper, cross it out. The first to cross out all six of their numbers wins. |
| **Can you tell the time?**  Whenever possible, ask your child to tell you the time to the nearest 5 minutes. Use a clock with hands as well as a digital watch or clock. Also ask: What time will it be one hour from now? What time was it one hour ago? | **Fractions**  Use 12 buttons, or paper clips or dried beans. Ask your child to find half of the 12 things. Now find one quarter of the same group. Find one third of the whole group. Repeat with other numbers or other fractions. You could cut up items too. |