

Fun Maths Games for children to do at Home For Free!

All these educational games can be adapted for all KS1 and KS2 children. They are suitable as part of additional support you may need during any lockdowns and time away from school due to Covid-19, or generally for those families wanting fun ways to help their children with maths at home.

As well as providing some family fun, these maths games for kids have the added advantage of presenting learning opportunities in a way that means that children may not even realise they're learning! They are also fun way to practise a wide range of KS1 and KS2 mathematical skills, such as counting, place value, times tables and much much more.

Time is scarce as a parent, but it's important to make time for maths games & activities with your child!

We all know how rushed life can be and we can sometimes feel guilty we aren't spending enough time supporting our children with their learning at home, so here you've got:

- maths games that can be played at any time of day – over breakfast, on the walk to school or to the park, driving to football etc.
- maths games that need no setting up time or resources (as well as a few that need a bit of preparation using items you'll have at home)
- simple, short maths games to play when you have a quick few minutes
- longer maths games which everyone in the family can enjoy together

Maths game 1: Count Down!

This game is a simple at home version of the TV favourite and can be played with any number of players.

What you need to play:

- 4 'large number' cards with the numbers 25, 50, 75 and 100 on them
- A set of cards with the digits 1-10 on them, with at least two cards for each number

How to play:

Step 1: Set out 4 large number cards (25, 50, 75 and 100) face down and mixed up.

Step 2: Do the same with the 1 – 10 cards, making sure you have at least 2 cards for each number.

Step 3: Players take it in turns to select one of the big number cards or one of the small number cards, until there are 6 cards laid out all together.

Step 4: Someone who is playing the game needs to generate a 3-digit number. This can be by throwing a dice, or selecting cards from a pile of 0 to 9 cards.

Step 5: Once the number has been generated, turn over the six cards and players have to try and get to that total using any of the six number cards and any of the four operations.

Each card can only be used once and the winner is the first person to reach the total, or the player who is closest after a set length of time.

The game can be adapted for younger children, by choosing the numbers on the cards carefully and having them aiming to reach a 2-digit number, rather than a 3-digit number.

(There's an online version of it here, along with some other great free online games: <https://www.teachwire.net/news/maths-games-ks2>).

Maths game 2: Multiplication Bingo

Bingo is a perennially fun game that can be enjoyed by people of all ages, and this version puts a mathematical twist on this classic game, as a way to boost multiplication skills.

What you need to play:

- Paper to write numbers down on

How to play:

Step 1: In this mathematical version of the game, all players write down 5 numbers, which are multiples of a given times table. For example: if they were doing the 5 times table, they might write 10, 35, 45, 50 and 60.

Step 2: A third person can lead the game and call out multiplication questions from the chosen times table, or they can be written on cards, jumbled up in a pile for players to take turns picking and reading out.

Step 3: If the player has an answer to the question on their bingo board, they can cross it out. First person to cross out all their numbers is the winner.

This game can also be played as an addition game. For younger children, they can write 6 numbers between 1 and 10 and the caller could say, e.g. "6 plus 2".

Maths game 3: The Yes/No Game

This is another simple KS2 maths game that is loved by children in classrooms across the country! It's also a good way to get in practice of 2D shapes and 3D shapes, which as parents we can sometimes avoid. What you need to play:

- A series of cards/pieces of paper/post-it notes

How to play:

Step 1: Both players put a card on their head. It could have a number on it, a shape, etc.

Step 2: The first player asks a question that can only be answered with 'yes' or 'no', e.g. 'Am I odd?' 'Am I under 20?' 'Do I have 4 sides?' etc.

Step 3: They keep asking questions until they get the answer correct, or they run out of turns (you can set the number of turns they get at the beginning of the game). Then it is time for the other player to have a go.

Maths Game 4: The 24 Game

This is a very simple game that will help your child practice their arithmetic skills, and it is a game they can play with a group of friends.

What you need to play:

- A pack of playing cards (The number cards only)

How to play:

Step 1: Each player picks 4 number cards at random from the pile.

Step 2: They then need to find a way to manipulate the 4 digits using any of the 4 operations (+, -, x, ÷) so the end result is 24. For example, if they chose 4, 7, 8, 8, they could do $(7 - (8 \div 8)) \times 4 = 24$

Step 3: If nobody is able to reach 24, you can make it closest wins!

Younger (or even older!) children might prefer to play Pontoon, using addition only to reach as close to 21 as possible without going past it. Each player chooses 2 cards, which start face down. When it's the player's turn to turn over the cards, they can decide if they would like to 'stick' or 'twist' until they have a maximum of 5 cards. The closest player to 21 (without going past it) wins. If a player's total adds up to more than 21, they are out. If a player ends up with 5 cards that total less than or equal to 21, they are the winner.

Maths game 5: The Pig Dice Game

This game is similar to the skunk game, but there only needs to be one player and one die. However, even with only one die things will still get tense!

What you need to play:

- One die
- A sheet of paper

How to play:

Step 1: Throw the die and the player records the number that they roll. As long as a one isn't thrown, the player can roll again and add the number to their total.

Step 2: After each throw, the player has to decide whether to throw again or keep the points they've scored. If a one is thrown at any point, the player loses all the points scored so far.

Step 3: The first player to score 100 is the winner.

For younger children, choose a lower total to aim for.

Maths game 6: The Biggest Number

Place value is a crucial skill for children to grasp during primary school, and this simple card game will help them to do that in visual and fun way.

What you need to play:

- One place value grid (drawn onto a piece of paper)
- A deck of playing cards

How to play:

Step 1: Each player draws a place value grid, with an agreed number of places, e.g. thousands, hundreds, tens and ones.

Step 2: Using a deck of cards 2-10, Ace and picture cards, with 2-10 being worth their digit, Aces being worth 1 and picture cards being worth 0.

Step 3: Players take turns to draw a card from the pile, and each player chooses which column to record the number in. The winner is the person to have the biggest number recorded at the end of the game.

This game can easily be adapted for younger children. It could be as simple as taking a card each and seeing who has the biggest number, or taking 2 cards each and adding them together. The player with the biggest number/total takes the cards. If the numbers are equal, the cards go into a pile and the winner of the next round takes all the cards. The player with the most cards at the end is the winner. Don't forget to use language like 'greater than', 'less than' and 'equal to' to help your child understand those concepts.

Maths game 7: First To 100

This simple game is perfect during long car journeys (unless you're driving) or the 10 minutes before dinner, and it will get your children practising their maths skills in a fun and exciting way! What you need to play:

- A deck of playing cards
- A sheet of paper

How to play:

Step 1: Shuffle a pack of cards and place face down. Each player takes one card and turns it over in front of them.

Step 2: Record the number on the card (Ace is worth 1 and picture cards are worth 10). Step 3: Each player then takes a second card and adds the number to the first number, recording it on the paper.

Step 4: Keep taking cards until the first person reaches 100. They are the winner. Game extension idea

A variation on this game can be to start at 100 and keep subtracting until someone gets down to zero.

For younger children, aim for a lower total. For older children, instead of adding the cards together, they can be multiplied each time, with the winner being the first to reach 1000.

Maths game 8: Creative Counting

Simple counting games are great for younger children, with lots of opportunities for counting things they see – lorries, red cars, blue signs, etc.

This could be made more challenging by changing how many points each is worth, so children could count up in twos or threes, etc.

Maths game 9: Guess My Number

This game can be easily adapted for any age.

Think of a number for the children to guess. Players have to ask questions that have a yes or no answer in order to identify the number.

For younger children they could be given a range within which the number falls, they call out a number and are given 'higher' or 'lower' until they reach it.

50." If they guess 26, say, "OK, it's between 27 and 50," narrowing the range each time.

A more challenging version of the game would be to give players a range of clues, e.g. If the number was 50, they could give the clues, e.g. 'it's an even number', 'it's divisible by 2, 5, 10 and 25', 'it's equal to two quarters'. You could also require that the questions the children ask are of a similar nature, e.g. 'Is the number divisible by 3?' 'Does the number end in a 7?' etc.

Maths game 10: Guess My Rule

An alternative to guessing the number; in this game, players have to try and guess the rule.

Players give a number whilst the person leading the game applies a mystery rule and tells the players what the new number is.

For example: If the rule is multiply by 10, one player would give the number, e.g. 37 and they would be given the answer once the rule has been applied, so in this instance they would be given the answer of 370.

Maths game 11: The 21 Game

This is a fun strategy game, played with two or more players, who take it in turns to count up from 1.

Each player can call out one or two consecutive numbers, before it moves to the next player to carry on counting up.

The player who ends up saying '21' is out of the game.

To play it with more than 2 people, the game then continues, counting back up from 1 to 21, until there is only one person left. They are the winner.