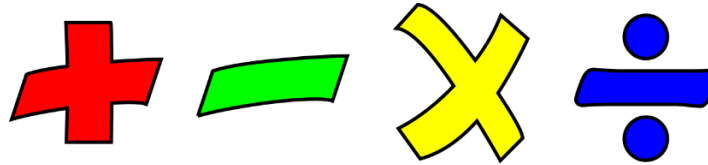


## Maths Games to do without a computer



Teaching maths to children can be challenging, particularly at young ages where they are still learning the core concepts. However, using games as an educational tool can be an effective way to keep children engaged in their learning.

Maths games allow children to use their knowledge of maths facts and concepts in new ways and environments, and ask them to apply what they know in a competitive game for entertainment. You can even make your own maths board games with your children to play.

Use game time wisely and plan to get the most benefit from maths games. Determine a specific purpose for the game based on educational goals and make sure the game matches the objective. Allow no more than four players per game so that turns come quickly. The amount of time it takes to complete a game should be short so children do not get bored or frustrated.

Here is a list of games for you to try:

### Noughts and Crosses

A noughts and crosses maths board game is one of the simplest math games to try, at home or in the classroom. The board game uses a regular noughts and crosses game card with squares that each contain a maths problem. The math problems must be appropriate for the math facts that the child is learning.

Two players play against each other with 1 noughts and crosses board to see who gets the Xs or Os in a row first. Every time a student answers the math fact correctly, they place his or her X or O on the square containing the solved problem. If a player fails to answer the maths problem right, they do not put anything on the square, and instead the turn goes on to the next player. Much like a traditional game of noughts and crosses, the first player to get three Xs or Os in a row wins the game.

### Maths Board Game Race

A board game race is a simple type of maths game, featuring a customised play board that contains spaces for the players' pieces to move on. You can create a board by drawing square spaces, that move around the board with a starting point and an end point.

The concept of the game is for the players to reach the end of the game board before their opponent does. Dice can be used as your prop for this board game. Each player takes turns rolling the pair of dice and adding the two numbers together to determine how many spaces to move forward.

Because these boards can be drawn out on paper, cardboard or even on the path with chalk, the game can be customised to suit the needs of your child.

### Simple Number Bingo

Bingo board games are an effective way for kids to learn how to identify numbers. This is most appropriate for younger children or children who are finding number recognition and place value difficult. As the bingo caller calls out a number, children must look for the number on their bingo boards and place a token on the square when they find the right number. The first player who has a column of tokens in a row wins the game.

### Four in a Row Multiply

Four in a Row Multiply is a multiplication board game that requires a pair of dice, the board game and tokens in different colours for each player.

The board game contains squares full of numbers. Players take turns throwing the dice and multiplying the numbers on the dice together. Then, the players must find the number on the game board. When the number is found, a token is placed on top of the square. The player who gets four squares in a row wins the game.

### **Ring Toss**

Throwing rings onto bottles is a classic carnival game. You can easily add a maths aspect to it by painting or taping numbers onto the bottles. Place the bottles close together and let your child throw rings at them. There are many possibilities for using the numbers for math activities. You can have your child either add, subtract or multiply the two numbers they ring to see who ends up with the highest answer. Another option is to create a criteria for winning. For example, you might say the total must equal more than 25.

### **Ball Toss**

A series of buckets or laundry baskets can serve as targets for this game. The buckets are placed at different distances from the throwing line. The further from the throwing line, the more points the target is worth. Each child gets three balls. They toss balls at the targets, keeping track of the corresponding point value. After throwing all three balls, the child adds up the total for their final score. You can also have the child multiply their numbers.

### **Leapfrog**

For this activity, you will need a large blue tarpaulin, tablecloth or dyed sheet. Cut out some "lily pads" from green cardboard or fabric. Spread the tarpaulin outside on a grassy area. Scatter the lily pads around the blue "pond" and secure them with fabric glue or safety pins. Either cut out and stick large sequential numbers, starting from one, onto the lily pads, or write them on with a marker. Decorate the rest of the pond with toy frogs and ducks. The game ideally needs two or more participants. Shout a number to whoever is "it." Children have to jump to the number and shout it out themselves. Have them leapfrog over each other to get to their number. This activity helps with number recognition.

### **Flashcard Toss**

This is a simple game that can entertain and educate a lone child or can be a timed competitive game between two or more children. Cut up some cardboard into squares and write an appropriately difficult maths puzzle on each with a marker. These are your flashcards.

Scatter the flashcards either around the house or garden, the point is, do something to make the cards harder for the child to fetch. The children take turns to race and pick up the card, solve the puzzle and run back as fast as they can. Time them with a stopwatch.

### **Stair Hopping**

Teach the concept of addition and subtraction to younger children with an active maths game. Place stickers or labels on the steps to number them from 1 to 10. If you're outside, try marking the steps with colourful chalk. Give your child a simple maths problem and tell them to start on the step that corresponds with the first number. If the problem is "three plus five," for example, have your child stand on the number three step and hop up five steps to reach number eight. If you're working on subtraction, show them how to start on the high number and walk down the steps to find the correct answer.

### **Food Fractions**

Introduce the concept of fractions with edible manipulatives that will hold your child's attention. For example, use a cheese pizza or a cake or fruit to conduct the maths learning activity. Cut the food item into two to ten pieces (you can cut into more if you want to) and create a game by removing different combinations of slices/cuttings to see if your child can identify fractions such as  $\frac{1}{4}$ ,  $\frac{3}{4}$ ,  $\frac{1}{6}$  and  $\frac{1}{2}$ .