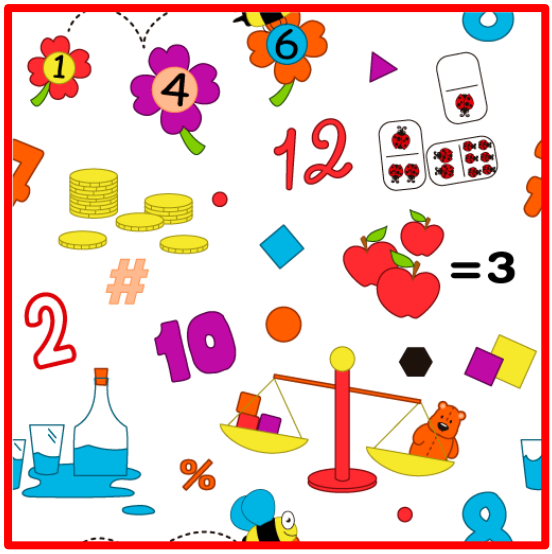


## Maths games and activities for the whole class #1

*Maths games and activities involving the whole class can be a fun way of progressing children's learning. Many games and activities can be adapted to suit the concepts that children are learning. They don't have to take long and many are great for transition or waiting times. Others can form the introductory lesson focus or concluding review.*

This resource suggests a variety of games and activities, some that require no equipment, minimal equipment, or use of the internet and interactive white board. Some can be played in the classroom. Others are better played outdoors with lots of space.

### No equipment required

*Count around the circle*

Children form a circle and count in ones around the circle. Nominate a secret number; for example, 5, and give it a silly name; for example, *banana.* The child who would normally say a number that is counted in 5s; for example, 5, 10, 15, 20 … says the silly name and sits down. Continue counting until all are sitting.

*Addition combinations*

- Choose a number to ten. Five is a good number to begin with.
- Choose a combination; for example, 2 + 3.
- Select a group of any five children to come to the front. Children find as many ways of arranging the children to show the given combination. For example:
    - two boys and three girls
    - two with white socks, three with grey socks
    - two with collars, three with no collars
    - two with brown eyes, three with blue eyes
    - two with curly hair, three with straight hair

*Note:* The interactive resource Exploring number combinations can be used to introduce the idea.

*I'm thinking of a number*

Start the game by telling children that you are thinking of a number. They must figure out the number by asking questions. You can answer the questions with only *Yes* or *No*. Explain that there are better questions than others, and that they must remember all the information to be able to identify the number. Good questions are things like:

- Is it an odd number?
- Is it a 2-digit number?
- Is it bigger than x?
- Is it smaller than x?
- Is it between x and x?
- Is the first digit odd or even?

*Lining up*

*Odd or even?* Have the children line up with a partner. Does everyone have a partner? Is there an odd number or an even number? Repeat for the boys, and for the girls? Is there an odd or even number of boys? Girls?

*Tallest to shortest* requires the children to work cooperatively. Without speaking is an additional challenge.

*Living graphs*

Children stand in lines (like a bar graph) to show the number. Discuss questions such as:

- How many in x line?
- Which has most? Least?
- How many more?

Starting suggestions:

- *Birthday months* Children form lines to show how many born in each month.
- *Number in family*
- *Favourite colours*
- *Favourite sport*
- *First name initial*

*Making groups*

Count the number of children in the class.

Explain to the children that you will call a number and they must quickly form a group of that number. As soon as they have formed the group, they should sit. For example:

- Call “Three”.
- Children form groups of three and sit down in their groups.
- If there are any left out. Discuss.
- Count the number of groups. Discuss the number of groups of three that can be made with x children.

Repeat with other numbers.

*Odd and even* (Definitely outdoors)

Like ship to shore. Nominate one end of the space for odd and the other for even. Call a number. If odd, children run to the odd end. If even, children run to the even end. Call numbers randomly and in quick succession to keep children alert and moving.

## Some equipment required

*Walk the plank*

Great for counting on and counting back practice.

Children need a number line and a counter (a number line to 20 is good, but a ruler can be used)

You need a dice marked: +1, +2, +3, -1, -2, -3

Children place their counters on the same number at the middle of the number line. Their goal is to stay on the plank. Your goal is to get them to fall off one of the ends of the plank.

You roll the dice. Children follow the instruction, each time counting aloud what they are doing.

You can also discuss how close they are getting to the end, and what you need to roll to get them to fall off.

*Escape the troll*

Play this the opposite way to *Walk the plank*. You are the troll. Your goal is to get the children into the water. Their goal is to stay safely on the bridge.

## Other resources

**Internet and interactive whiteboard**

There are many readilearn games and activities that can be used with the whole class using the interactive white board. The games focus on the development of concepts and are designed to stimulate discussion between teacher and children so that concepts can be explained and adjusted to learning needs. There are also games and activities, including class surveys, that can be printed and used by the whole class. Many of these resources are free. Others are available for a small annual subscription.

**Books to stimulate mathematical discussion and thinking**

*The Doorbell Rang* by Path Hutchins

*The Rabbit Problem* by Emily Gravett

**Software for problem solving**

The Land of Um by Greygum Software

**Purchased Board games**

There are many games available on the market which involve children in using mathematical thinking and skills.