

Maths Week Scotland

First Level

Welcome to Maths Week Scotland!

Maths Week Scotland is taking place 28 September – 4 October with events online plus activities and ideas for you to do.

This pack contains ways to celebrate and enjoy Maths Week Scotland with your children, either at home or school. Online versions are available at www.mathsweek.scot

We would love to see what you get up to! Share your celebrations with us on [Twitter @edscot_maths](https://twitter.com/edscot_maths) #MathsWeekScot or @MathsWeekScot

ACTIVITY IDEAS

Playful Pennies

A puzzle using four coins which can be played by individual children or in pairs. You can use any type of coins or counters, as long as they have different sides.

Place four coins in a row, all 'tails' side up.

Turn three different coins over. This counts as one move.

How many moves will it take to have all the coins on 'heads'?
Play with a partner if you can.
Who can move all the coins to 'heads' in the least moves?

Remember that you have to turn three coins over each move.

Conkers Counting

A maths puzzle for children to complete individually or working with others. You may want to write, draw or recreate the puzzle with other items for children.



A group of five children have five different coloured bags.

On a walk, the children collect **19 conkers** and put them into the bags.

The red and yellow bags contain **9 conkers** between them.

The yellow and blue bags contain **6 conkers** between them.

The blue and purple bags contain **8 conkers** between them.

The purple and pink bags contain **5 conkers** between them.

How many conkers are in each bag?
Solution can be found [here](#).

Calculator Challenge

Work in pairs or groups of three using a calculator.

Use the digits 2, 4, 6 and 8, the multiply sign, the add sign and the equals sign. What is the largest number you can make?

Press each digit and sign once but you do not have to use all of the signs.

The winner is the group who can create the largest number.



OUTDOORS

Sticky Situation

Challenge children individually or in teams to find four sticks which, when placed together, are exactly one metre in length..

Children can only measure the sticks once they have placed them together.

The winning child or group are those with the closest to one metre.

Give it a go through the week with different objects or lengths and see if estimation skills improve!

Natural Art

Children can work individually, or with others, to create amazing symmetrical patterns using only natural resources.

Children could collect the materials on a walk around the local area, looking out for symmetry as they go. Try making artwork with one, then two lines of symmetry.



Hide and Seek

This is a whole class activity. Before you start work out how many squares your grid will need in order to fit more than half of your class.

Draw two grids that size on the playground using chalk. Each grid point should be large enough for one child to stand in. You will also need to create a set of letter and number cards which match up with the coordinates on your grid.

Split the class into two equal groups. Each group should be allocated one of the grids.

6						
5						
4						
3						
2						
1						
	A	B	C	D	E	F

All children should choose a coordinate to stand on within the grid their group has been allocated. The teacher should then draw a random letter and number from the letters and numbers pile and shout out the coordinate that they make, e.g. 'B5'.

If there is a child standing on that coordinate they have to leave the grid and stand at the side.

The winners are the group which are the last to have anyone left on their grid.

6						
5						
4						
3						
2						
1						
	A	B	C	D	E	F

Number Challenge

This activity can be done in pairs. Each learner to draw a grid similar to the layout shown.

Each learner takes turns to throw the dice six times. As they roll each number they should record it in one of the boxes.

They can decide which box they would like to place it in. Whoever has the closest total to 100 is the winner.

Make easier or more difficult using more dice, different operations or more complex targets.

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MATHS AT WORK

Maths is important in a huge range of jobs and careers. Invite family members to share stories of maths in their work as part of Maths Week Scotland to discover the ways maths is important in your local community.

Computer Game Designer

Coders and designers use logic and mathematical skills to create computer games.

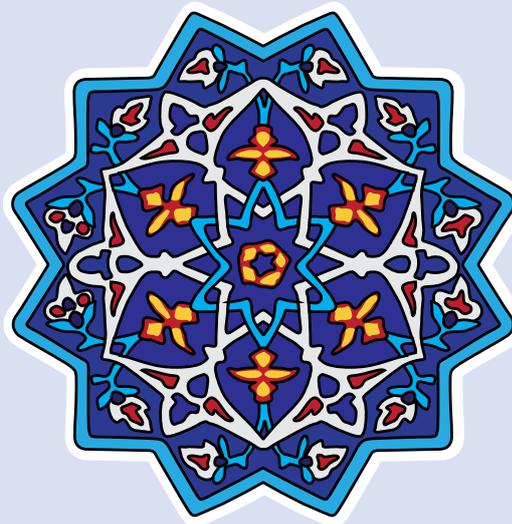
This activity can be carried out in the playground or any large space.

Children work in pairs and give each other directions to follow; for example 'forward 4, turn left, forward 5, turn right, forward 3'. This can be made more challenging by placing items on the playground that they have to direct each other to.

Artist

Many artists use symmetry in their creations including M.C. Escher and Alex Kohanin. Islamic geometric design also has many examples of intricate symmetrical patterns.

Create your own examples by drawing, painting or cutting out 2D shapes.



STEM Ambassadors

STEM Ambassadors are people working in STEM industries or with an interest in STEM available to talk to classes, run activities or help you plan sessions related to their work. All ambassadors are volunteers so sessions are free!

Browse [STEM Ambassador offers](#) or [request support](#) to bring maths at work to life.

Story Time

Read a STEM themed book with the class featuring a particular job or topic, such as *How to Build a City* or *Rosie Revere Engineer*.

Discuss with the class the maths used by the characters.

Ask them to think of other jobs they know which use maths.

MATHS WEEK SCOTLAND COMPETITIONS

Maths Inside

Get your cameras ready to get out and about and find the *Maths Inside* your daily life.

The Maths Inside photography competition has categories for early years up to adult so teachers and parents can enter too!

Enter at <https://mathsinside.com/#about>

FIND MORE

Head to the Maths Week Scotland website www.mathsweek.scot for more activities for First Level and free online CLPL opportunities.

You can find more resources at:

- [Scotland Learns](#)
- [Outdoor Maths for Parents](#)
- [Family Learns Maths Games](#)
- [Code.org](#)



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