

Maths Week Scotland

First Level

Welcome to Maths Week Scotland!

Maths Week Scotland is taking place 26 September – 2 October 2022 with events online plus activities and ideas for you to do.

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

We would love to see what you get up to. Share to your celebrations with us on Twitter @MathsWeekScot and #MathsWeekScot and @edscot_maths.

ACTIVITY IDEAS

All About Me

Create a poster all about your important numbers. Work out numbers that are meaningful to you such as:

- Age
- Shoe size
- Number of pets
- Year of birth
- Time you wake up
- Height
- Letters in your name
- Favourite number

Once you have a list of these numbers write maths problems to represent them and display them on your poster.

I was born on a day that has 9 letters in it.

The numbers of letters in my name is equal to $20 - 16$.

My favourite number is odd, greater than 65 but less than 69.

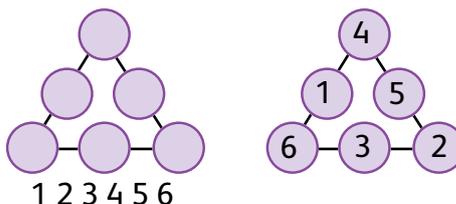
My shoe size is $8 + 1$.



I am _____?

Magic Triangle

Place numerals 1-6 in the circles so that each side of the triangle adds up to the same number like in the example. Find more than one way to solve the problem.



Discuss your strategy. Try it with numerals 1-9 in a larger triangle.

BEAUTY OF MATHS

Using Shapes for Art!

The artist Paul Klee created over 10,000 pieces of art. He loved to create city landscapes with buildings, bridges and other structures using 2D shapes, such as squares and rectangles.



Can you create a piece of art using coloured 2D shapes? Try your hometown, or a favourite city anywhere in the world! Could you recreate the Eiffel Tower?

Once finished, name all the shapes you have used. Discuss how the shapes are the same and how they are different and which shapes fit better together.

Musical Maths

Musicians use maths skills such as counting and playing in time. Listen to different songs and see if you can clap in time to the beat of the music.

Explore musical beats and patterns using different types of actions and instruments. For example; count to the beat of 4 over and over at a steady pace. Then clap every time you hear 1.

Use symbols to show other types of actions such as a ting on 3, a stamp on 4. Experiment with different types of patterns for example clap, clap, ting, ting. This could be extended into counts of 8. This activity could be extended further by exploring the link between musical notation and fractions.

1



2



3

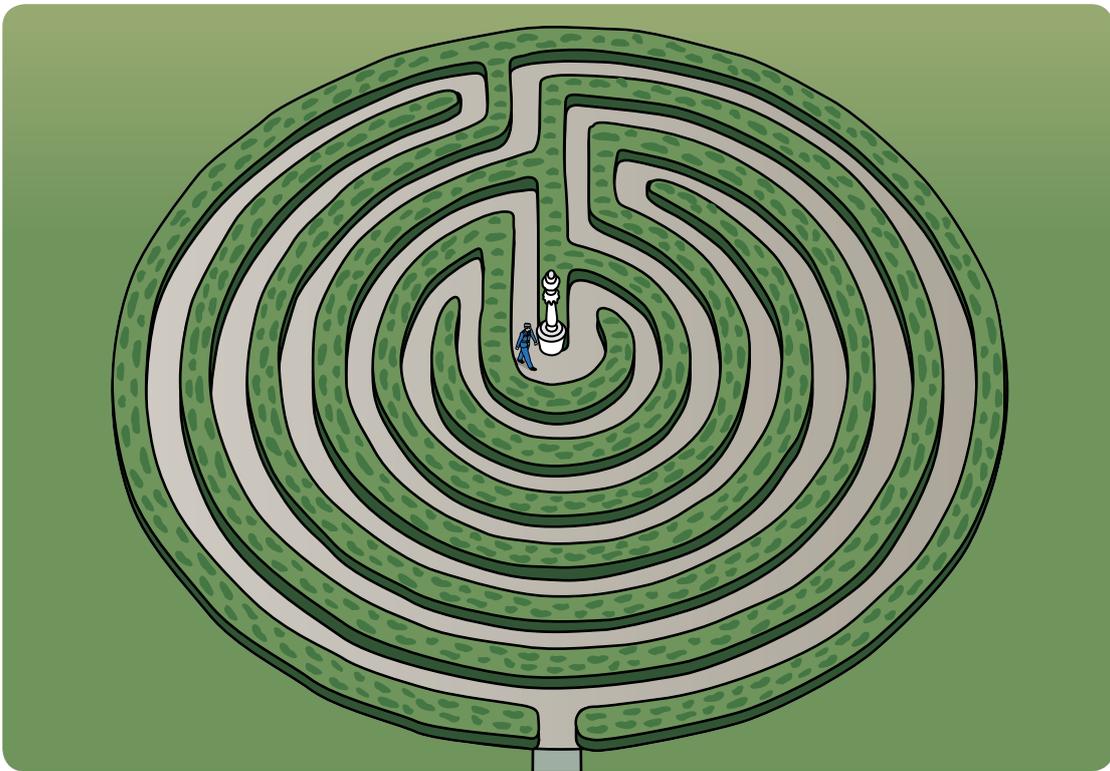


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Mazes and Labyrinths

Mazes have many branching paths, with only one path leading to the centre or exit, whereas *labyrinths* are unicursal (or single-pathed).



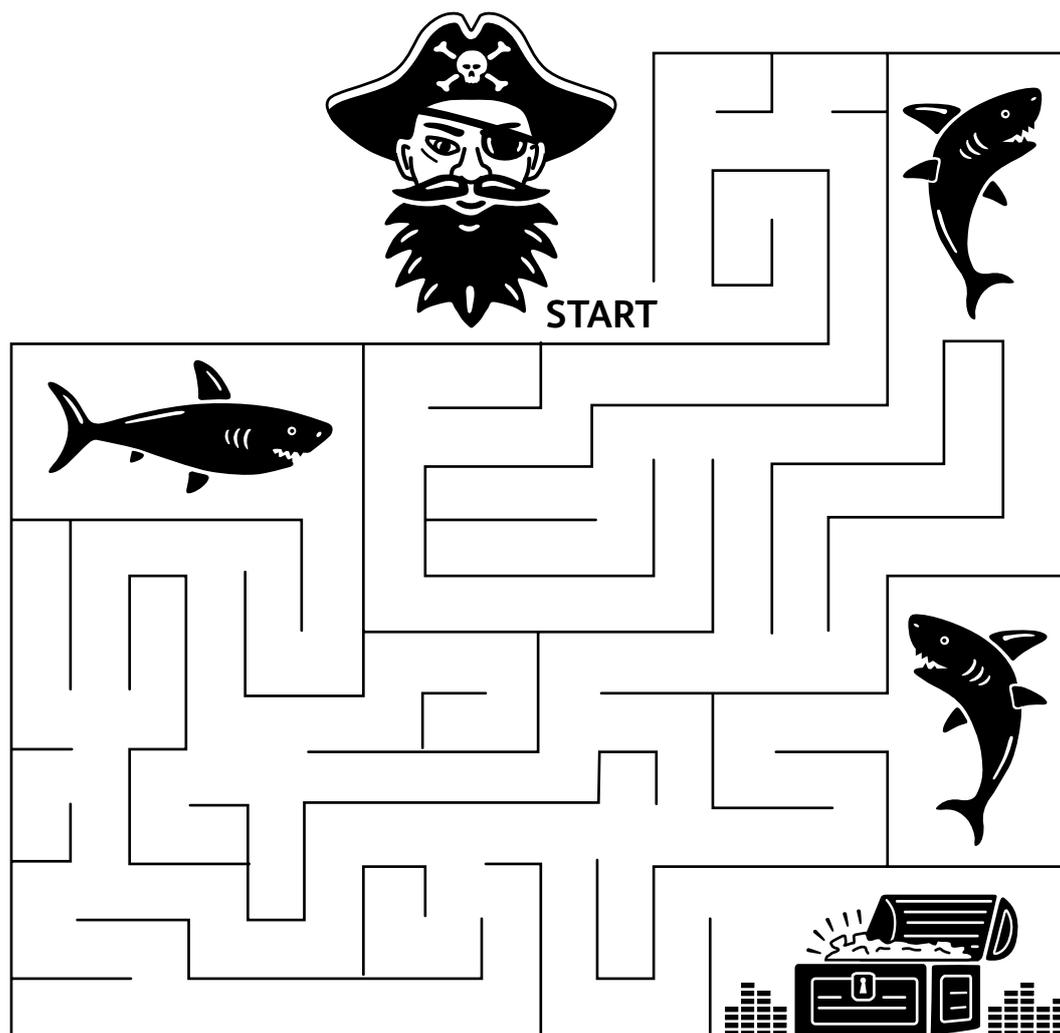
Some of the earliest mazes and labyrinths we know of were found in Egypt and in Crete, dating back over 4000 years.

Mazes are still very popular today, with many large ones found in the grounds of parks and stately homes. Spend time researching different types of mazes and labyrinths.

Use the maze to help Pete the Pirate find his way to the treasure.

Give accurate directions to navigate through the maze and help find the gold avoiding the shark.

Use language such as forward, backward, North, South, East and West, left and right.



Extension Activity

Can you create your own maze or labyrinth? You might like to draw this out on squared paper, with chalk on the ground or create it using 3D objects. Once you have finished share this with your friends to see if they can navigate their way around correctly.

MATHS AT WORK

Maths is important in a huge range of jobs and careers. Take on the role of sports reporter or lighting designer to explore the maths they use in their jobs.

Show Your Working

In groups, discuss and identify different jobs that use maths and what aspects of maths they may use on a daily basis.

Each group should select one job and record an audio or video clip, or create a poster, about the maths in that job.

Share your work with us on Twitter [#ShowYourWorking](#) or email info@mathsweek.scot.

Be a ... Sports Reporter

The FIFA World Cup takes place in Qatar in 2022. In the last World Cup final, France beat Croatia to lift the trophy. Here are the statistics from the match:



You are a sports reporter creating the final match report. What are the important statistics that you could include in your report? For example:

*There was 6 goals scored in the match.
The first goal was scored in the 18th minute.*

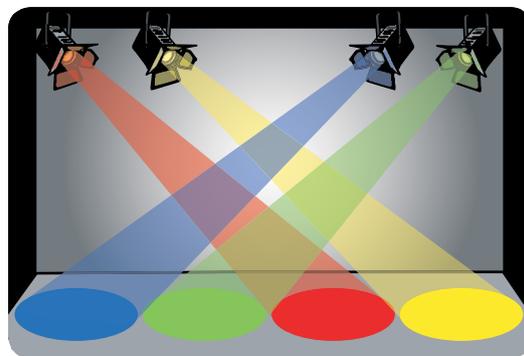
What other statistics could you add? Share your report with a friend to see what they included. You might like to video record these.

Investigate the maths skills involved in other sports such as football, golf, darts, tennis, rugby, snooker, gymnastics or judo. For example how are points scored? Can you lose points? How is the winner decided? Are the teams/players ranked against each other? Is there a length of time that a game, match or round is played for? Find some ideas [here](#).

Be a ... Lighting Designer

In this video Kate talks about her job as a lighting designer: [Women in Maths – Maths Week Scotland](#). Part of her work involves setting up lights for different shows and events.

Use problem solving skills to make decisions about different colour combinations for these lights.



These lights can shine as red, blue, yellow or green. Kate is trying to find out how many different colour permutations she could use if each colour is used once, for example red, yellow, blue, green or green, blue, yellow, red. Work in pairs or groups to explore different colour permutation. Use coloured counters, beads or blocks to help. Try to find as many permutations as you can.

MATHS IN THE WORKPLACE

There are many different roles in the theatre such as costume designers, set designers and props makers who all use maths.

Why not invite someone from a theatre or a STEM Ambassador to talk about their job.

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. Visit the [STEM ambassador website](#) to find out more.

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 www.mathsinside.com.

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 suggested activities at:

- 3, 2, 1 Go! – BBC Learning Zone
- Women in Maths (Maths Week Scotland) – Kate Bonney Lighting Designer
- Paul Klee – Maths On Toast

Follow us on social media for more activities and ideas [@MathsWeekScot](#) and [@edscot_maths](#).



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