

Maths Week Scotland

Secondary Level

Welcome to Maths Week Scotland!

Maths Week Scotland is taking place 22nd – 28th September 2025

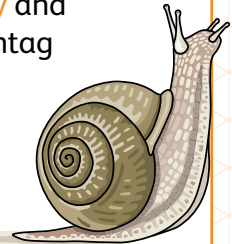
Maths Week Scotland takes place during the last week of September every year with a whole host of activities, events and resources to allow you to celebrate the joy of maths in your Secondary School and wider community.

The 2025 Maths Week Scotland theme is Wild Maths, exploring the maths hidden in animals, plants, weather, space, and the natural world all around us!

This pack will provide you with lots of ideas on how you can celebrate Maths Week Scotland 2025, including activities, resources and additional support available.

More resources and ideas can be found [here](#).

We would love you to share your Maths Week celebrations with us. Tag us on [Facebook](#), [Bluesky](#) and [Instagram](#) and use the hashtag #MathsWeekScot



Estimating the Wild Unknown



How often do we pause and take the opportunities to consider the maths in the world around us? Why not take the opportunity during Maths Week

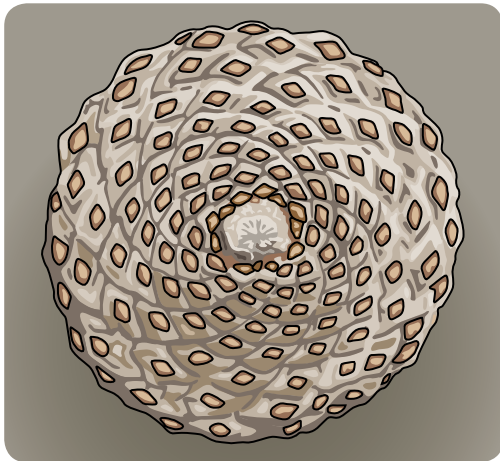
Scotland to explore some Wild Maths themed [Fermi problems](#) with your classes. These can be a great way to encourage their logical reasoning, critical thinking and creativity skills whilst encouraging them to understand the impact of estimation and error. You might even challenge them to create their own problems.

- How many daisies are there on the playing fields?
- How much water flows down our local river in a year?
- How many trees are there in Scotland?
- What volume of rain fell on our town last week?

Fibonacci Poems

Just as maths and poetry connect through patterns and sequences, such as the 5-7-5 syllable structure of a haiku, maths also intertwines with the natural world. The Fibonacci sequence, first described by Indian mathematicians over 2000 years ago and named after Italian mathematician Leonardo Bonacci, demonstrates this link.

This sequence (0,1,1,2,3,5,8...) where each number is the sum of the two preceding numbers, appears surprisingly often in nature – from the petals of flowers to the spirals on pinecones. Examples of the Fibonacci sequence can be found [here](#).



Explore the connection between maths, poetry and nature with your class, by writing Fibonacci Poems! Popularised by Gregory K. Pincus, these poems follow a syllable structure based on the Fibonacci sequence. Most common are six-line poems with a 1-1-2-3-5-8 syllable count.

This structure encourages careful word choice and creative expression within a mathematical framework:

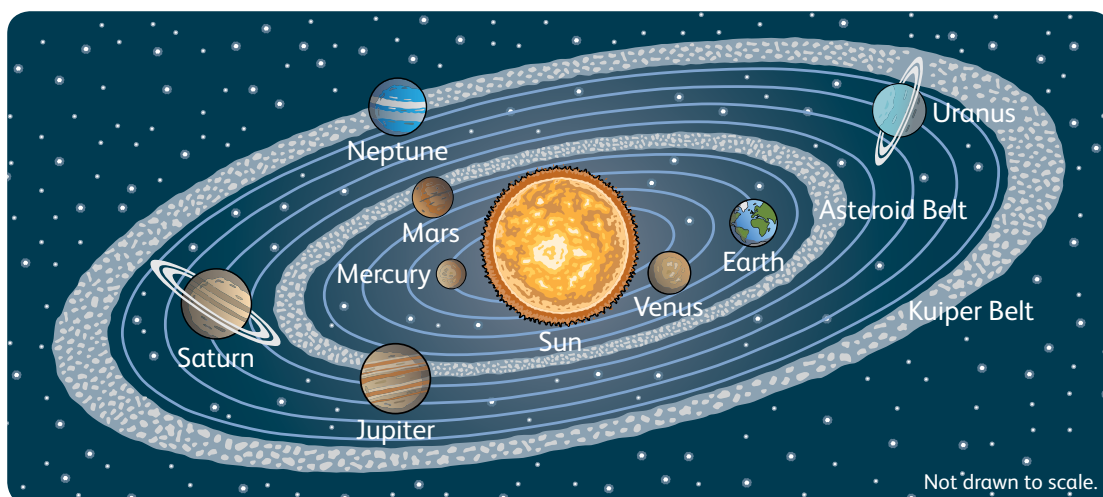
Wild Maths

- (1) Maths
- (1) Here
- (2) With us!
- (3) Numbers, shapes,
- (5) Angles and patterns.
- (8) Counting, measuring, codes revealed.
- (13) Plants, wildlife, weather, astronomy; maths guides our world.
- (21) Look again, see maths anew – curious minds find it all around, hidden in plain sight!

Consider exploring the natural world for inspiration and entering our Fibonacci Poems competition!

This competition welcomes entries from everyone of secondary school age and above. Prizes will be awarded in two distinct categories: young people of school age (i.e. S1-S6); and adults (teachers, parents, independent adults and others beyond school).

To find out more about Fibonacci Poems and how to enter our competition click [here](#).



Finn Finity Meets...

New for Maths Week Scotland 2025, Maths Communicator Tom Briggs has created five profiles of Scottish mathematicians. Each profile includes linked activities, detailed information, and teacher notes.

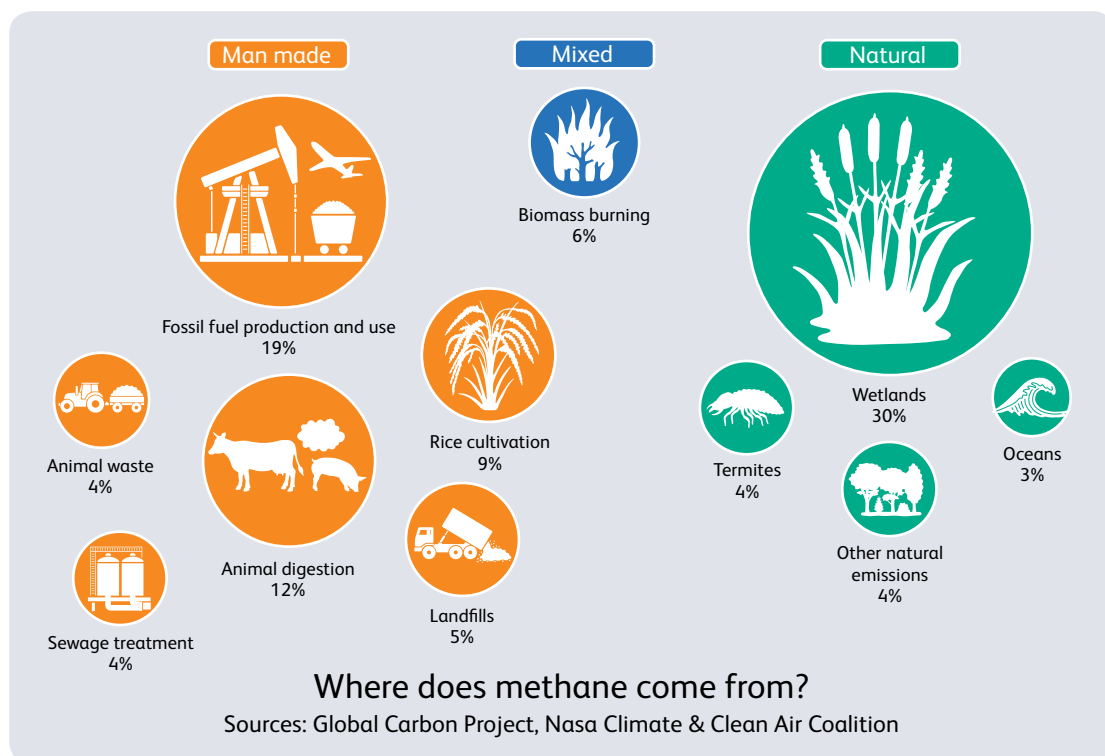


Discover Mary Somerville and learn how she contributed to our understanding of the solar system. Take part in Finn Finity's Mary Somerville Challenge, where your class can build their own model solar system. Using creativity, calculations, and some outdoor learning space, watch their ideas come to life!

Explore how D'Arcy Wentworth combined maths and biology to study the shapes of living creatures. Encourage your class to observe nature around them by drawing and redrawing images using a skewed grid, helping them compare and contrast similarities and differences – just as D'Arcy Wentworth did in the 1900s.



Learn about more Scottish Mathematicians and their linked activities by clicking [here](#).



Wild Data: Where Nature and Numbers Collide

Maths Week Scotland can be a great opportunity to encourage your classes to consider data on topics that are important to them. Ask them to collate and review data on their chosen topic such as wildlife conservation, recycling or climate change and encourage them to create a data visualisation that helps to emphasise the key messages from the data. Sites such as

Nature & Climate — Information is Beautiful, Climate Action Tracker and U.K. Indicators For The Sustainable Development Goals might be helpful starting points.

This activity from Data Education in Schools is a great way to help your learners think about data visualisations: [Data Viz Quiz - Data Education in Schools](#). They also have a great range of data visualisations which you can explore with classes: [Data Visualisations I Trello](#).

Trees as Air Purifiers

Find out the impact trees can have in your local area.

A mature tree can absorb up to 22kg of CO₂ a year as part of the photosynthesis process. The CO₂ is exchanged for oxygen which can

help the process of rebalancing our atmosphere and slowing climate change. Ask your class to estimate how much carbon dioxide is absorbed within your school grounds or local area each year.

Find out more [here](#).

Biodiversity in your Backyard

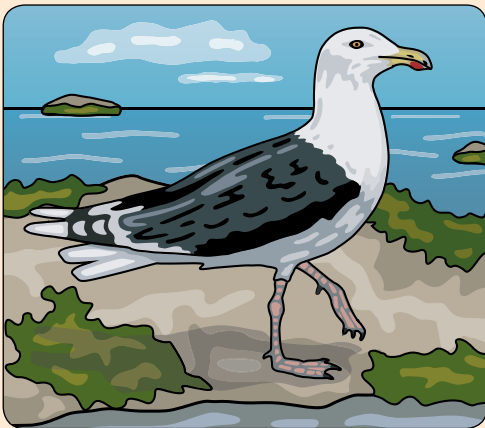
Explore the biodiversity on your doorstep. Follow this [link](#) to find out how your class can survey a small area of grassland to identify the

species present. Explore how random sampling can make your observations more robust.

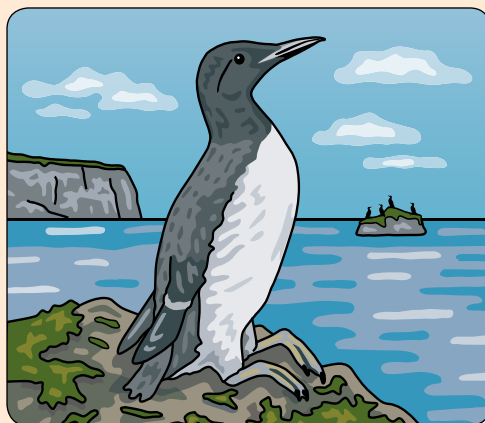


Marine Data

Analyse survey data to learn about marine life.



The data in the table was taken from [a survey of sea-birds in Scotland by Marine Scotland](#). It shows two different types of seabirds observed in four different regions over three seasons. Understanding this data helps inform future wildlife plans.



Ask your class to look at the data below. What do they notice? What do they wonder? They could write about what the data tells them, displaying some of the data graphically, either on paper or using technology.

Summary of SEAPOP at-sea bird estimates for two species by region and season.

Species	Region	Season	N	Density per km ²
Great Black Billed Gull	Region 1	Autumn	418	0.044
		Summer	17	0.002
		Winter	639	0.067
	Region 2	Autumn	451	0.024
		Summer	140	0.007
		Winter	1095	0.058
	Region 3	Autumn	846	0.031
		Summer	156	0.006
		Winter	1680	0.061
	Region 4	Autumn	1285	0.010
		Summer	403	0.003
		Winter	4169	0.034
Common Guillemot	Region 1	Autumn	67490	7.104
		Summer	73054	7.690
		Winter	19875	2.092
	Region 2	Autumn	62084	3.302
		Summer	104050	5.535
		Winter	26561	1.413
	Region 3	Autumn	125468	4.562
		Summer	172324	6.266
		Winter	44779	1.628
	Region 4	Autumn	193688	1.561
		Summer	238193	1.919
		Winter	73146	0.589

Navigating Our World

Discover how maths helps us explore and understand the world around us! The Navigating Our World activities, made in partnership with Dynamic Earth, link maths to geography, navigation, and technology.

From using coordinates and compasses to calculating distances and map scales, these resources support learning across the curriculum and bring maths to life in new and exciting ways.

Click [here](#) to find out more.

Bringing Maths to Life in your Classroom

STEM Ambassadors are a great way to bring maths to life in your classroom. STEM Ambassadors are people working in STEM industries or with an interest in STEM who volunteer to inspire the next generation and come into

classrooms to give career talks, run workshops or help you plan sessions! Visit the [STEM Ambassador website](#) to find out more.

There are a whole host of amazing resources available on the [Maths Week Scotland website](#) from maths in history, art and space there is something to interest every learner!

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 the [Maths Inside website](#).

Maths Week Scotland Daily Challenges

Try out Daily Challenges created by the Scottish Mathematical Council. Head to the [Maths Week Scotland website](#) to take part.

Maths Wi Nae Borders

Maths Wi Nae Borders, inspired by the annual Mathématiques sans Frontières contest, is a mini competition for any class to compete together. Find details and enter [here](#).

Useful Links

The links below might be useful for additional Wild Maths inspiration and lesson planning:

[The Big Earth Data Project – MEI](#)
[Issue to action: Maths – Scotdec](#)
[MetLink – Royal Meteorological Society Climate Change Secondary Maths Resources](#)