

cavan & monaghan

20
Cn
Cavan

19
Mn
Monaghan

Sc
Fest

**SCIENCE
FESTIVAL**

science in everyday life

SCHOOLS PROGRAMME 2019



**FREE
EVENTS**



Bookings through

sciencefestival@monaghancoco.ie

9th-23rd NOV 2019

cavanmonaghansciencefestival.ie



SCHOOLS PROGRAMME 2019

Cavan Monaghan Science Festival 2019 will take place between 9th – 23rd November. It is proudly supported by both Monaghan and Cavan County Councils as well as Science Foundation Ireland. Our aim is to inspire an interest in everything STEM related and show that Science is around us in everyday life.

As well as our various Public Events, we are delighted to present our Schools Programme for 2019. In this leaflet you will find details of Free workshops for Primary Schools.



SFI DISCOVERY PROGRAMME

Throughout the school year, you can get involved in Science Foundation Ireland STEM weeks. These national week-long programmes aim to make STEM more interesting and accessible to children and adults and provide a great opportunity to get the whole school involved. This year, the STEM Weeks take place on the following dates:

- **Space Week** 4 – 10 Oct 2019
- **Maths Week** 13 – 21 Oct 2019
- **Science Week** 10 – 17 Nov 2019
- **Engineers Week** 29 Feb – 6 Mar 2020
- **Tech Week** 28 Mar – 3 Apr 2020

Remember that participating in one or more of the STEM weeks can count towards the criteria for your SFI Discover Science and Maths Award, so be sure to capture evidence (photos, video, child's written account, certificate of participation etc) of any activities you take part in!

BOOKING INFORMATION

All events **MUST** be booked via

Email: sciencefestival@monaghancoco.ie.

Bookings will be taken on a First Come First Served Basis.

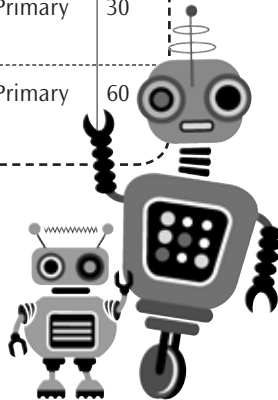
Initial Limit of 2 bookings per school. More slots may be assigned depending on Availability.

When making a booking please include the School Name, Teachers Name, Class group and number of Children attending.

SCIENCE IS MAGIC *with Michael Moylan*

Michael was such a hit last year we've invited him back for more! In this interactive show you will do the science experiments yourself. Why does static electricity make your hair stand on end? Can you hold a bucket full of water held upside down over your head and not get wet? How do you make a magnet with a wire, battery and a nail? How does a hot air balloon fly and how do I make my own one? The human body, sound, light, heat and many other subjects.

Dates	Location	Times	Age	Max
Mon 11th Nov	Clones Courthouse	10am, 11:30am, 1pm	Primary	80
Tues 12th Nov	Carrickmacross Library	10am, 11:30am, 1pm	Primary	60
Wed 13th Nov	Castleblayney Library	10am, 11.30am, 1pm	Primary	30
Thurs 14th Nov	Monaghan Library	10am, 11.30am, 1pm	Primary	30
Fri 15th Nov	Ballybay	10am, 11.30am, 1pm	Primary	60



UNDERSTANDING OUR EARTH - *iCrag Research Centre*

What are you standing on top of right now? The ground, soil, rocks? You're right, but have you ever thought about what actually makes up the ground beneath our feet? In this workshop, you will learn how to make the camera on your smart device into a microscope to investigate the constituent parts of rocks. Through this activity, you will discover the phenomenal processes that brought these rocks into being, throwing the ground we walk on into a whole new perspective.

Dates	Location	Times	Age	Max
Mon 11th Nov	Monaghan Library	10am, 11:30am, 1pm	4th-6th Class	30

HACK YOUR BRAIN *with Ginny Smith*

An introduction to the workings of your brain & nervous system. By creating a giant 'neuron' live on stage, this show explores the ways in which nerve cells send messages through the brain and body, and looks at how we can hijack these signals to allow one human to control the movements of another.

Dates	Location	Times	Age	Max
Wed 13th Nov	Carrickmacross Library	10am, 11:30am, 1pm	Strictly 5th & 6th Class	60

GO FLY YOUR KITE

Ever wonder how a Kite flies? Wonder no more. This STEM Workshop focuses on the history of kite flying, The physics of kites and forces of nature. Children will have the opportunity to design, assemble and take home a kite.

Dates	Location	Times	Age	Max
Wed 13th Nov	Clones Library	10am, 11:30am, 1pm	3rd Class +	30

INVISIBLE WORLDS - with Marty Jopson

Take a journey from everyday life, down into the realm of microscopical wonders with Marty Jopson, the BBC One Show's resident scientist. The adventure begins with things you can almost see but soon you will find yourself in a world totally invisible to the unaided eye. Marty will take you from the very beginnings of microscopy, through hugely magnified insects, bacteria and plants to the most up to date fluorescent techniques demonstrated live on the stage. A show not just full of stunning images, but interactive demonstrations and samples harvested from the audience. You have been warned!

Dates	Location	Times	Age	Max
Thurs 14th Nov	Iontas Theatre, Castleblayney	10am, 11:30am, 1pm	Ages 7+	300

SCIENCE – THE BEST BITS!

From Galileo dropping things, to rocks from space and singing dinosaurs by way of plants that kill and much more. Demonstrations to catch the attention, pictures to transport the mind and specimens to catch the imagination. The science show starts with some discussion on “What is Science” and then follows with an exploration of Gravity, Electricity, Space, Planet Earth, Plants, Animals and Dinosaurs— All within an Hour! It's a seat of your pants ride through the best bits of Science that will leave children in awe of the world around them. ‘The Best Bits’ is delivered by Ian B. Dunne who will be visiting from Southampton, UK.

Dates	Location	Times	Age	Max
Fri 15th Nov	Garage Theatre, Monaghan	10am, 11:30am, 1pm	Ages 7+	289

BUBBLY MATHS

Bubbly Maths Entertainers perform maths shows the UK and around the world, engaging audiences using mesmerising resources. The props? Magical soap bubbles and giant balloons. These are used to discover the maths & science of bubbles and to explore the mathematical fundamentals of shape and measurement.

Dates	Location	Times	Age	Max
Mon 18th Nov	Monaghan Library	10am, 11.30am, 1pm	Primary	30
Tues 19th Nov	Castleblayney Library	10am 11:30am, 1pm	Primary	30

BUBBLY MATHS (CONTINUED)

Dates	Location	Times	Age	Max
Thurs 21st Nov	Clones Library	10am, 11.30am, 1pm	Primary	30
Fri 22nd Nov	Carrickmacross Library	10am, 11.30am, 1pm	Primary	60

THE SCIENCE OF HARRY POTTER

Join us for some Harry Potter Science. This Includes classes in defence against the dark arts (aka lab safety), care of magical creatures (aka zoology - sure aren't all creatures magical...), herbology (looking at the medicinal properties of herbs and spices and designing herb bags), the children all make snot of some sort using slime recipes . We will also have a charm lesson where the children make a colour changing pH sensitive tea which bubbles, fizzes and changes colour a number of times. The children all make a special invisible ink, write on paper and leave the paper to dry, using special revealing liquid to rub on the paper. All of the science is explained and how we can use science to appear magic. Also special effects in movies are explored. There will be no foolish wand-waving or silly incantations in this class !!

Dates	Location	Times	Age	Max
Tues 19th Nov	Carrickmacross Library	10am, 11.30am, 1pm	8+	30
Wed 20th Nov	Clones Library	10am, 11.30am, 1pm	8+	30

EXPLAINING THE WORLD TO OURSELVES

- *Stories of Science with Fiona Dowling*

In this storytelling session, Fiona will share Origin Myths and Pourquoi Stories* from around the World which explain how the World began and why the creatures in it are the way they are. She will contrast these stories with the explanations that contemporary science offers and invite participants to use their spirit of enquiry, powers of observation and gift of imagination to formulate their own theories and stories. (**a fictional narrative that explains why something is the way it is*)

Dates	Location	Times	Age	Max
Tues 19th Nov	Monaghan Library	10am, 11.30am, 1pm	Ages 7-10	30
Wed 20th Nov	Castleblayney Library	10am, 11.30am, 1pm	Ages 7-10	30

ARE YOU A GUZZLER?

Junior pupils meet Guzzler the puppet who loves to waste energy. Through a series of games and activities they learn about where our energy comes from, the importance of saving energy and the various ways they can save energy. Presented by Sustainable Energy Authority of Ireland (SEAI)

Dates	Location	Times	Age	Max
Wed 20th Nov	Carrickmacross Library	10am, 11.30am, 1pm	Junior - 1st Class	30

SHARKS AND SHARK CONSERVATION *with Benny Joyce*

Diverse shark populations are important for healthy oceans - sharks play an integral role in keeping our oceans healthy. They do this by keeping other populations in check and preying on the sick and old. This prevents the spread of disease and improves the gene pool.. As this workshop is experiential, the participants will be given a first hand experience of life as a marine scientist. Benny has a wonderful way with children and adults alike. His genuine passion for science shines through and the children will be captivated by what he presents.

Dates	Location	Times	Age	Max
Thurs 21st Nov	Carrickmacross Library	10am, 11.30am, 1pm	1st - 6th Class	30
Fri 22nd Nov	Monaghan Library	10am, 11.30am, 1pm	1st - 6th Class	30

CLIMATE ACTION FOR (YOU)TH

Students will be presented with the most up-to-date climate science, and be asked to critically look at the issue of Climate Change. Students will discuss and debate their views on climate change, and take part in group activities which question the best ways to tackle the problem

Dates	Location	Times	Age	Max
Thurs 21st Nov	Monaghan Branch Library	10am, 11:30am and 1pm	3rd - 6th Class	30

HOW TO SAVE THE PLANET IN 45 MINS

with Dr. Ken

A sustainability science show exploring the what, why and how we reduce, reuse and recycle. Follow Dr Ken as he attempts to slim his bin with the appliance of science. Find out how you too can affect climate change one tree at a time. Then join him on his one wheel energy saving device as he bids to save money and mankind. He may well be talking (about) rubbish but it will make sense!

Dates	Location	Times	Age	Max
Fri 22nd Nov	Clones Courthouse	10am, 11.30am, 1pm	2nd - 6th class	80



OTHER ACTIVITIES

PRIMARY SCHOOL SCIENCE QUIZ

We are delighted to support a Science Table Quiz for 6th Class Primary School pupils which will take place at St. Macartan's College on Wednesday 13th November 2019. For further details, please contact Marie Smyth at 047 81642 or email msmyth@stmacartanscollege.ie



THINK GLOBAL, ACT LOCAL:

PRIMARY SCHOOL DEMONSTRATION PROJECT

Our Science Festival is organised as part of the national Science Week and this year it will focus on climate action, seeking to help people understand climate change, how science and technology can help us create a positive climate future and the impact we as individuals can have on climate change. While one person may feel unable to make a difference on their own, a collective effort to offset our carbon emissions will have a positive impact – Think Global, Act Local!

What is the Primary School Demonstration Project?

We are calling for primary school students attending a primary school in County Monaghan to come up with a project or to highlight a project already in development that demonstrates how we can Think Global, Act Local in terms of Climate Change. How can we in County Monaghan make changes that could have a positive impact in the global climate?

We are seeking young people's imagination, creativity and critical thinking as to how they would tackle climate change at a local level.

An Overall Winner will be selected by means of a Public Vote on Saturday 23rd November in Monaghan Institute

All participating schools will exhibit their project at our big Family Science Day on Saturday 23rd November 12-5pm in Monaghan Institute, where up to 2000 people attend and an opportunity for the students to engage in other science themed workshops and demonstrations on the day. All participating schools will be provided with refreshments on the day.

Each participating school will be awarded with the 'Think Global, Act Local' Certificate and participation in this project supports The Discover Primary Science and Maths Programme (DPSM), managed by Science Foundation Ireland, which provides a national focus on STEM education in schools to ensure that we have an engaged society and a highly-skilled workforce in place. Participation will also meet the criteria of the Greens School Programme accreditation.

Want to Get Involved?

Registration is open until Thursday 24th October 2019. To register, please forward the following details to sciencefestival@monaghancoco.ie with subject heading of 'Primary School Project Demonstration'

Name of School: | **Teacher:** | **Contact Details:**

Note:

Think Global, Act Local: Primary School Demonstration Project will take place on **Saturday 23rd November in Monaghan Institute 12-5pm.**

**PRIMARY SCHOOL TEACHERS CPD
- MINECRAFT AND MATERIALS:
Monaghan Education Centre, Armagh Road
Monday 18th November @ 4pm**

*****Please Note: Booking through the Education Centre
Telephone:047 74000 E-mail: info@metc.ie***

This teacher education workshop with AMBER brings real world materials science into the primary classroom. Use a bespoke MineCraft Extension (BetterGeo) to mine for different materials, learning about rocks and minerals along the way, followed by a realworld and virtual environment which explores materials, minerals and applications in our everyday lives. This teaching resource is particularly useful for 3rd – 6th class teachers, but all are welcome.

All participants will receive a free copy of teaching resources, access to MineCraftBetterGeoExtension for your class and a virtual tour with your class of an AMBER lab in 2020. The workshop is 2hours in duration.

Online bookings also available through www.metc-courses.com



