

TECHFEST

Promoting Science, Technology, Engineering and Mathematics

Scottish Charity No SC010349

TEACHER LED CATALOGUE 2025

For enquiries, please contact:

Jenny Taylor, Operations Manager

E: jennytaylor@techfest.org.uk

THANK YOU TO OUR SPONSORS, WHO MAKE PRIMARY OUTREACH POSSIBLE

WE WOULD LIKE TO THANK OUR SPONSORS AND SUPPORTERS*

JOINT PRINCIPAL SPONSORS



SPONSORS

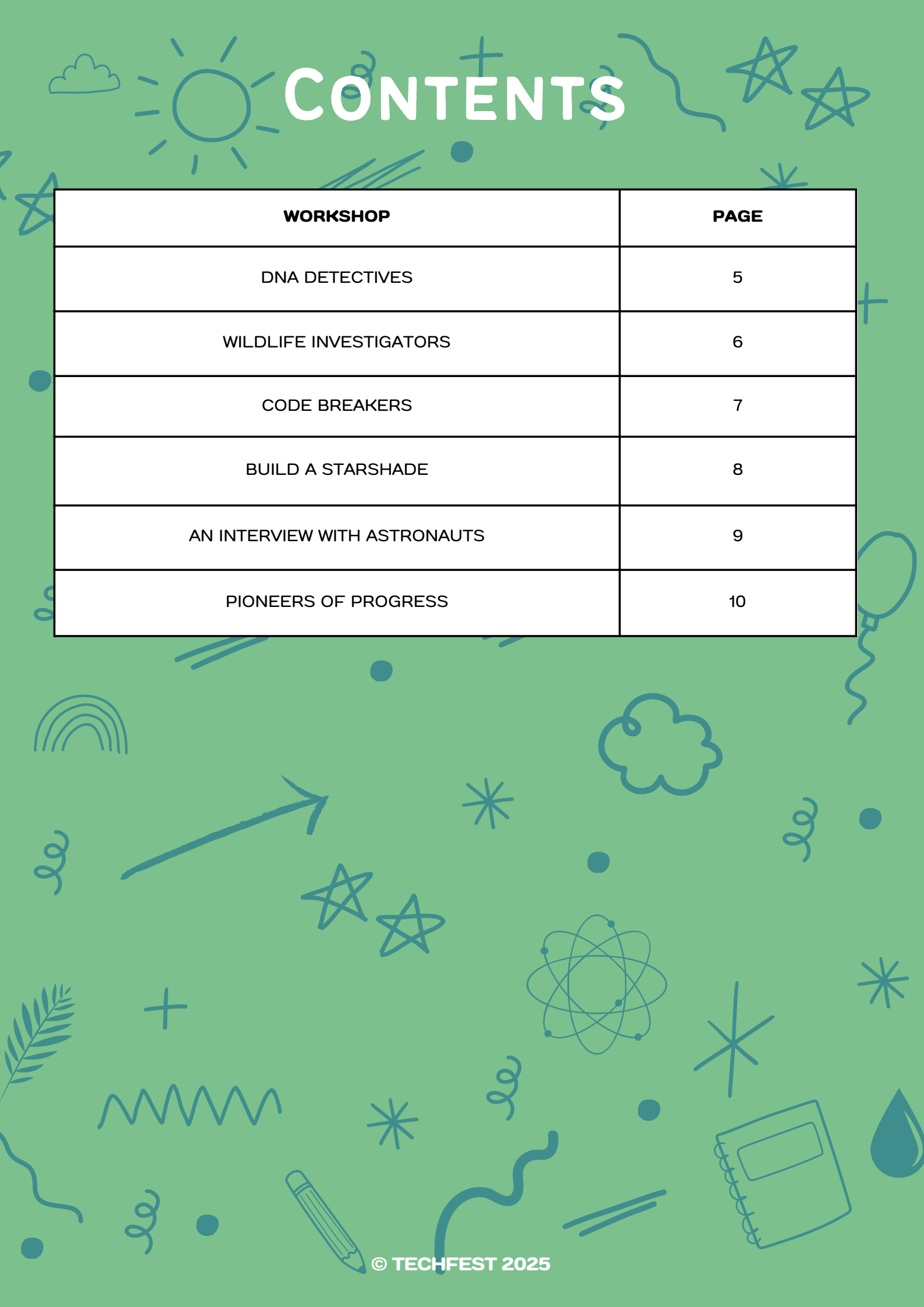


STRATEGIC PARTNER



SUPPORTED BY





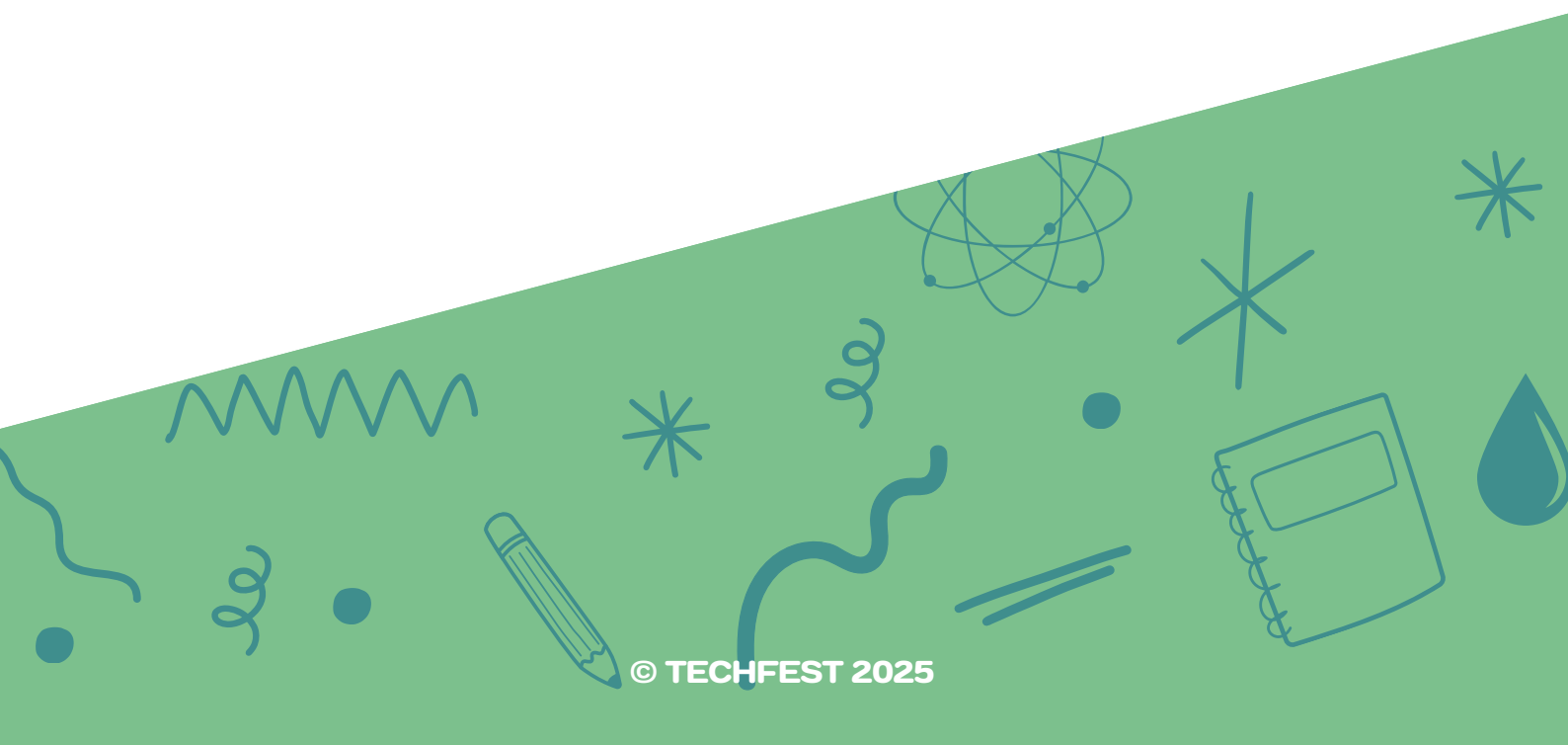
CONTENTS

WORKSHOP	PAGE
DNA DETECTIVES	5
WILDLIFE INVESTIGATORS	6
CODE BREAKERS	7
BUILD A STARSHADE	8
AN INTERVIEW WITH ASTRONAUTS	9
PIONEERS OF PROGRESS	10

Booking Information:

To receive the resources sign up [here](#).

All registered teachers will then have the resource sent to them. If you have not received an email, please contact:
jennytaylor@techfest.org.uk



DNA DETECTIVES



KEY CONCEPTS

Dive into the wonderful world of genetics! Learn about DNA, the marvellous molecule that contains the instructions for all life on earth! You can even try your hand at translating some DNA sequences to find the hidden meaning. Find out what your DNA says about you!

AGE RANGE:	P5-7
RUNNING TIME:	45 MINUTES/1 HOUR
CFE LINKS	SCN 1-14A, SCN 2-14B,
WORKSHOP REQUIREMENTS:	• TABLES AND CHAIRS FOR EACH PUPIL • PAPER, PENS, PENCILS, COLOURING PENCILS • AV TO WATCH VIDEO AND ACTIVITY INSTRUCTIONS

WILDLIFE INVESTIGATORS

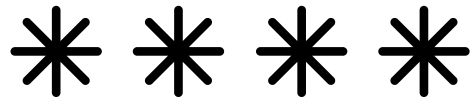


KEY CONCEPTS

Growing tired of going on the same daily walk? Need to add in more excitement? Well, why not put on your investigators hat and find out how much biodiversity is just outside your door! Plus, take part in some fun DIY projects to make your outdoor area even more wildlife friendly!

AGE RANGE:	P5-7
RUNNING TIME:	CAN BE TAILORED TO FIT TIMETABLE
CFE LINKS	SCN 2-02A, SCN 0-01A
WORKSHOP REQUIREMENTS:	• TABLES AND CHAIRS FOR EACH PUPIL • PAPER, PENS, PENCILS, SCISSORS, STRING • AV TO WATCH VIDEO

CODE BREAKERS



KEY CONCEPTS

Put your problem-solving skills to the test and see if you can crack the code! You'll learn about different types of codes and ciphers as well as creating your own code to send your own secret messages. Will you be able to get a coded message to TechFest's team of secret agents before it's too late?!

AGE RANGE:	P5-7
RUNNING TIME:	CAN BE TAILORED TO FIT TIMETABLE
CFE LINKS	TCH 2-13A, MNU 3-03B
WORKSHOP REQUIREMENTS:	• TABLES AND CHAIRS FOR EACH PUPIL • PAPER, PENS, PENCILS, • AV TO WATCH VIDEO

BUILD A STARSHADE – ORIGAMI IN SPACE



KEY CONCEPTS

This workshop explores principles of engineering with the example of NASA using origami to transport vital equipment into space. This workshop will be done in your own time and consists of watching a video and building origami star shades.

AGE RANGE:	P4 – P7
RUNNING TIME:	45 MINS
CFE LINKS	TCH 1-05A, TCH 1-06A, TCH 2-07A, TCH 1-09A, TCH 2-09A, TCH 2-10A, TCH 2-12A
WORKSHOP REQUIREMENTS:	• TABLES AND CHAIRS FOR PUPILS TO WORK AT • SCREEN/SMARTBOARD FOR PLAYING VIDEO

AN INTERVIEW WITH ASTRONAUTS - INTERACTIVE VIDEO



KEY CONCEPTS

This activity involves watching a video interview with astronauts, who share their experiences of living in space. Throughout the video, interactive activities appear at relevant points to complement the content.

Each activity is self-contained, so they can be completed in any order. Teachers have the flexibility to select the activities that best suit their classroom needs and teaching context.

AGE RANGE:	P6 – P7
RUNNING TIME:	AS MUCH AS YOU NEED
CFE LINKS	SCN 1-03A, 1-04A, 1-05A, SCN 2-04A, SCN 2-04B, SCN 2-08A, SCN 2-08B, SCN 3-04A, 3-08B, SCN 1-15A, MNU 1-20A, 2-20A, MNU 2-11c & 3-11A, MTH 1-21A, 2-21A & 2-16A
WORKSHOP REQUIREMENTS:	• SCREEN/SMARTBOARD FOR PLAYING VIDEO • EACH ACTIVITY IN THE VIDEO REQUIRES DIFFERENT EQUIPMENT.

STEM INTO INNOVATION: PIONEERS OF PROGRESS



KEY CONCEPTS

This programme is designed to engage students in exploring the evolution of instant communication technologies, tracing the history, present, and future of communication devices - from early landlines to advanced brain implants.

Through three video episodes and 15 modular activities, students apply their STEM skills across areas such as mathematics, writing, design, teamwork, and marketing.

The activities are flexible in duration and can be easily integrated into a variety of subject areas.

More information about the programme [here](#).

AGE RANGE:	P7 - S2
RUNNING TIME:	AS MUCH AS YOU NEED
CFE LINKS	LIT 3-04A, LIT 4-04A, LIT 3-07A, LIT 4-07A, MNU 3-03A, MNU 4-03A, MNU 3-10A, MNU 4-10B, MNU 3-20A, SCN 3-20B, SCN 4-20A, SCN 4-20B, TCH 3-05A, TCH 4-05A, TCH 3-07A, TCH 3-08A
WORKSHOP REQUIREMENTS:	• SCREEN/SMARTBOARD FOR PLAYING VIDEO



THE **CREST AWARDS** SCHEME IS THE BRITISH SCIENCE ASSOCIATIONS FLAGSHIP PROGRAMME FOR YOUNG PEOPLE, PROVIDING SCIENCE ENRICHMENT ACTIVITIES TO INSPIRE AND ENGAGE 5 – 19 YEAR OLDS.

CREST AWARDS ARE NOW FREE IN SCOTLAND. PLEASE USE THE CODE **T22ECHFEST56** TO ORDER YOUR CERTIFICATES AT NO COST, WHICH ALSO SUPPORTS TECHFEST.

It is the only nationally recognised accreditation scheme for project work in science, technology, engineering and mathematics (STEM) subjects.

In addition to giving young people the opportunity to undertake hands-on science, CREST Awards are designed to help develop skills that are transferrable to other subjects, further education and future employment.

To find out more about CREST Awards and to see how you can get involved visit the TechFest website: www.techfest.org.uk/education/crest or email: kirstycranna@techfest.org.uk

TECHFEST
digital

TechFest is your Regional CREST Support Organisation for Scotland..

TechFest.org.uk

To find out more information about CREST and how to register for awards follow the link below:

www.crestawards.org

EARLY YEARS CATALOGUE



Our mission is to promote STEM (Science, Technology, Engineering and Mathematics) to young people and wider communities. We seek to demonstrate kids as young as 3 years old that science is FUN and sparkle their interest in STEM fields from early age.

TechFest offers a variety of outreach workshops suitable for nursery & early years. All the workshops are led by experienced presenters with a teaching or science background and provide an excellent opportunity for children to engage in enjoyable activities.

Click here for more information:

<https://techfest.org.uk/education/ages-under-11/nursery-early-years>

PRIMARY OUTREACH CATALOGUE

Delivering Science, Technology, Engineering and Mathematics workshops in line with the Curriculum for Excellence.

TechFest offers a variety of outreach workshops suitable for primary schools and early years. All the workshops are led by experienced presenters with a teaching or science background and provide an excellent opportunity for pupils to engage in enjoyable and challenging activities.

click here for more information:

<https://techfest.org.uk/education/ages-under-11/primary-outreach>



ENGINEER 'N' OUR LIVES

The Engineer'n' Our Lives (EOL) Programme has, over a decade, introduced school-aged children to engineering through interactive, curriculum-linked challenges. Now partnered with Energy Transition Zone Ltd (ETZ), the programme highlights how engineers contribute to the energy transition with skills in areas like hydrogen, drones, and carbon reduction. Pupils from P1-P7 take part in hands-on challenges—covering materials, design, prototyping, and processes—that connect school subjects with real-world engineering. Supported by over 100 industry professionals, EOL not only develops pupils' problem-solving, teamwork, and meta-skills but also offers teachers sustainable classroom resources while giving students insight into how engineering shapes everyday life and future careers.



For more information and to sign your school up to our waitlist visit

<https://www.techfest.org.uk/education/ages-under-11/engineer-n-our-lives>

STEM ON THE FARM



Supported by
STEM
Ambassadors
Partner

'TechFest's STEM on the Farm' is a five-day programme (delivered one day per week over five weeks) that invites P6 pupils from schools across the North East of Scotland to participate in project-based, curriculum-linked learning and explore each stage of the food production supply chain.

Aimed at P6 pupils, each day of the programme addresses a part of the food production process, including the work of agricultural engineers, farm workers, food scientists, logistics experts, etc. Guided by expert STEM Ambassadors from each section of the supply chain, pupils develop their STEM knowledge through immersive workshops and discover the impact agricultural innovations have on food production.

The knowledge they gain from the programme is then used to create eye-catching display boards and instruct the script for an end-of-project assembly attended by parents, carers, and the school community.

By participating in 'TechFest's STEM on the Farm', pupils learn about food security, climate impact, health & nutrition, modern agricultural innovations, animal care, and how STEM plays a vital role in all of these.

For more information and to sign your school up to our waitlist visit

<https://www.techfest.org.uk/education/ages-under-11/techfest-s-stem-on-the-farm>

24 DAYS OF STEM



Our '24 Days of STEM' advent calendar offers exciting activities designed for all interests and skill levels. Participants will develop science, design, and coding skills while enjoying festive surprises.

For more information and to sign up visit:

<https://www.techfest.org.uk/news-events/upcoming-events-new/event/332-24-days-of-stem>

RI SHOWS



State schools are eligible to apply for a free visit from the Ri worth £800, which includes three science show performances and a CPD session for teachers.

Click here for more information and for the next funding rounds.

<https://www.rigb.org/learning/grants-schools>