Engage Teacher Conference

Save time and money: free secondary resources from leading providers

Leaders from the STEM sector are coming together to showcase their top free secondary resources. Find inspiration for your lessons.

Ross Dempster-Johnson, Apps for Good
Ruth Mackay, The British Science Association
Elizabeth Chambers, The Royal Society
Kelly Murfet, IRIS
Scott Atkinson and Rebecca Lindsay, Royal Academy of Engineering
Caitlin Brown, Sutton Trust
Katie Haylor, Royal Society of Chemistry
Dr Sarah Rhodes, Queen Elizabeth Prize for Engineering
Victor Heng, National Education Nature Park

Engage Teacher Conference

Engage

Welcome, please be aware:

- Talks are recorded
- You can ask questions in the chat throughout
- There will be time for questions at the end

Engage

Apps for Good

Ross Dempster-Johnson
Head of Programmes

www.appsforgood.org

Apps for Good

Our Mission and Aims

We believe that all young people can shape their future through technology.

We provide free tech innovation courses to schools, giving teachers ready-made education content, so young people from all backgrounds can develop computing and essential skills to create a brighter future through technology.

Our work is powered by:

1: Tech for Good

2: The need for essential skills

3: What matters to students

4: Industry engagement

www.appsforgood.org

The Apps for Good Journey

1 Choose your theme

Will you choose Innovate for Climate Change App for Social Action or AI for Good?

2 Bookmark courses

Keep track of the course you are delivering and access the latest content

3 Arrange Industry Engagement

Our Industry Volunteers will inspire students and feedback on their ideas

4 Enter Showcase

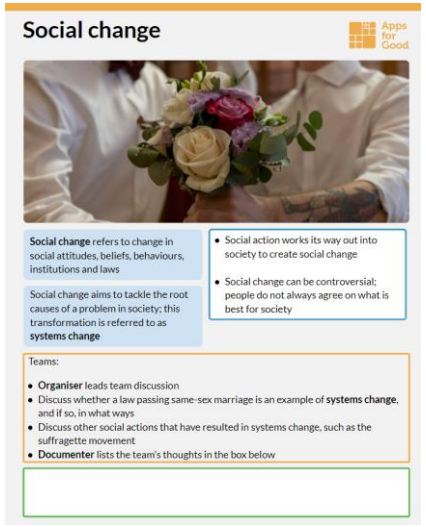
Celebrate their awesome achievements in our annual Showcase!

5 Share feedback

Help us demonstrate the positive impact on your students

Apps for Good

Course eWorkbook



Course overview – App for Social Action

- Encourage students to utilise technology to act
- Students experience the app development process from ideation to creating an app prototype using the programming environment App Lab
- Computing content focuses on supporting beginners whilst offering exploration activities for more confident programmers

CONTENT	SESSIONS	ESSENTIAL SKILLS	APP LAB	COMPUTING	DIGITAL LITERACY
INTRODUCTION TO SOCIAL ACTION	1. Technology for Social Good	TEAMWORK	DESIGN MODE	USE-MODIFY	
DEVELOPING IDEAS FOR SOCIAL ACTION APP	2. Ideation 1	SPEAKING, LISTENING			
	3. Ideation 2	CREATIVITY, LEADERSHIP	CODE MODE	USE-MODIFY	
PRESENT APP IDEAS TO INDUSTRY PROFESSIONAL	4. Industry Engagement	SPEAKING, AIMING HIGH			
CREATE AND REFINE PROTOTYPE APP	5. Prototype App Development 1	PROBLEM SOLVING, CREATIVITY	CODE MODE	CREATE	
	6. Prototype App Development 2	PROBLEM SOLVING, STAYING POSITIVE			
PREPARE SUBMISSION FOR SHOWCASE	7. Prep for Showcase	TEAMWORK, CREATIVITY			

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The British Science Association – CREST Awards

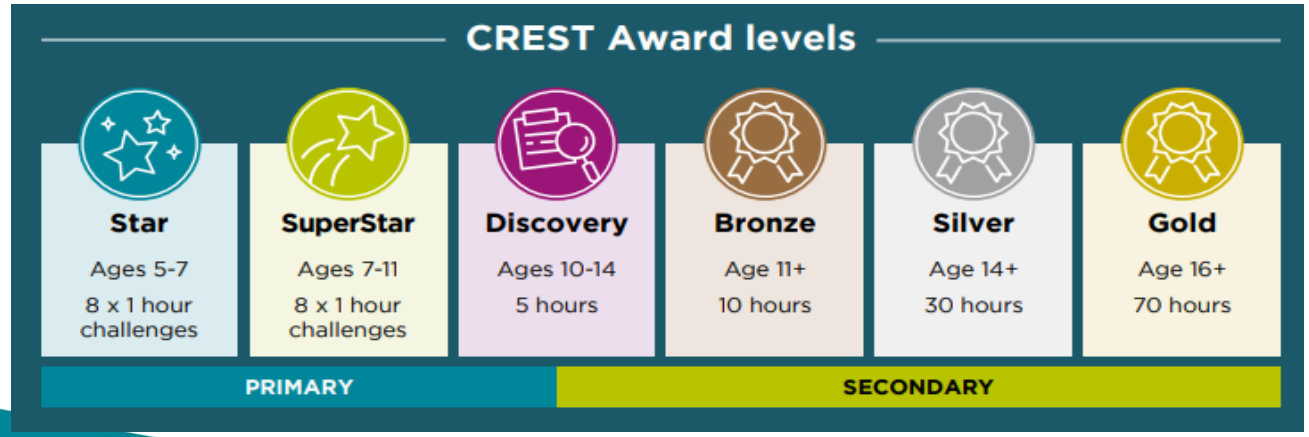
Ruth Mackay
Education Officer

www.crestawards.org

> **(This project) has given me more confidence, as it is physical proof that you can achieve something.**
> *George, student from Lighthouse School in Leeds*

- Inspire young people to think and behave like scientists and engineers
- Activities are hands-on, practical and engaging, covering a broad range of STEM topics and themes, as well as making cross-curricular links
- Activities are open-ended and student-led, using an enquiry-based learning approach with real-world contexts
- Free, easy to use resources to support you to deliver practical science in the classroom.

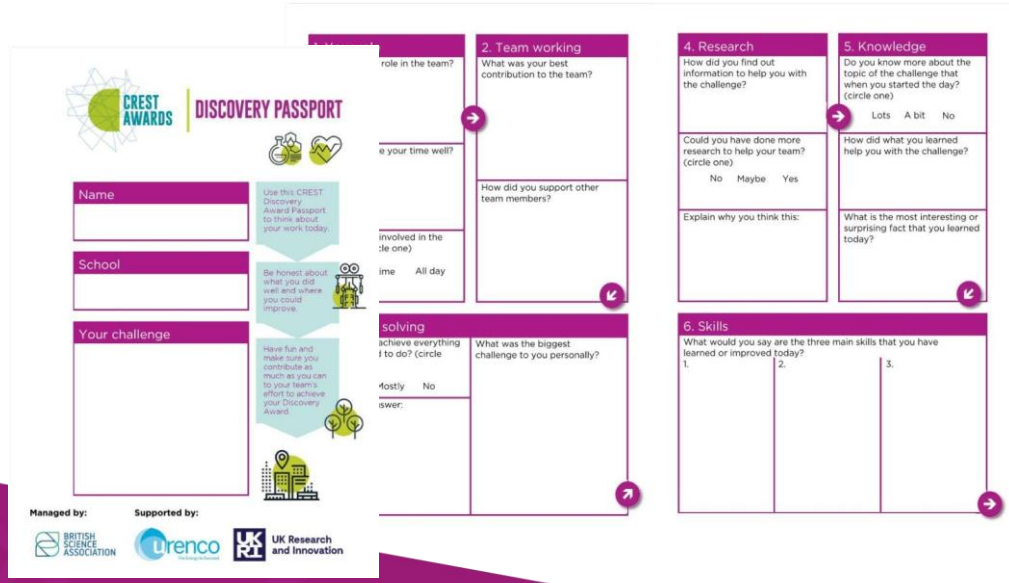
> **I think it brings a new sense of curiosity and discovery to students who have not been afforded the chance to really engage in science.**
> *Secondary school teacher, 'Machines of the future' pilot project participant*



crestawards.org

Discovery Awards

Pupils work in teams to learn about a topic then develop their own idea and present their findings before reflecting on their learning.



DISCOVERY

10-14 years typical age

5 hours (or 1 day)

Discovery assessment objectives:

Self-management

Team-working

Problem solving

Research

Communication

Reflective practice

Bronze, Silver or Gold

				GOLD
Typical age				ical age
Time commitmen				
Assessmen				CREST
Key benefit				AS personal d is well mployers
Key stage (suggested)				/ L3 L3 nd: KS5

crestawards.or

is most suitable

Next steps

- Explore our Resource library

https://secondarylibrary.crestawards.org/

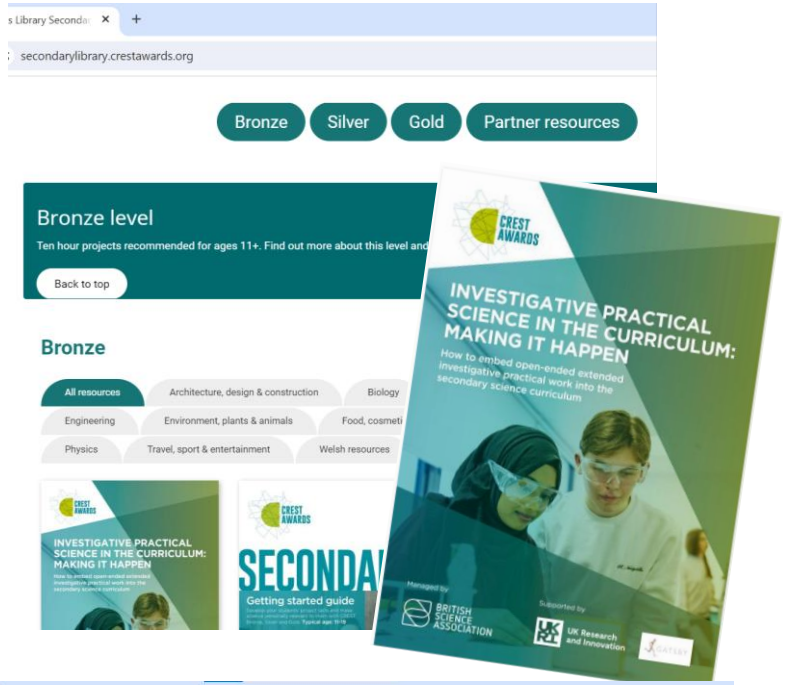
- Join us on Thursday 12 June for 'Get funded! Explore STEM grant opportunities for schools'.
- Get in touch with us at

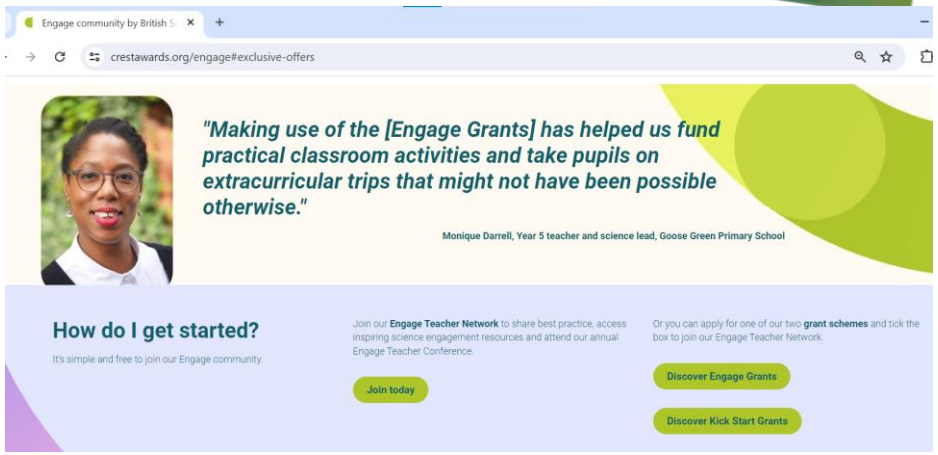
crest@britishscienceassociation.org

- Apply for an Engage grant

https://www.crestawards.org/engage

- Check out our new website – launching in the Autumn term!





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The Royal Society

Elizabeth Chambers
Schools Engagement Officer

www.royalsociety.org

The Royal Society's Partnership Grants

The Partnership Grants scheme supports:

- UK schools and colleges to develop a sustained partnership with STEM professionals from academia or industry.
- A grant of up to £3,000, used by the school/college to enable the running of an open-ended investigative project, undertaken by the students with support from the STEM professionals.
- The scheme is open to any registered school or college covering 5-18 education.
- Tomorrow's Climate Scientist is an extension to the Partnership Grants scheme, funding projects researching into climate change and biodiversity loss locally.

THE ROYAL SOCIETY

What are the benefits of the Partnership Grants?

Projects funded between 2021 - 2024

- £3,000 funding – can use equipment purchased for other things.
- Support the curriculum – choose your own topic including cross-curricular projects to support your curriculum and/or interests.
- Develop students' skills – scientific process/working scientifically, communication, teamworking and data skills etc.
- Support your careers targets – help students meet a range of STEM professionals and learn what they do in their jobs.
- Not a standardly competitive process – lots of support for schools and colleges interested in applying.
- Opportunities to raise your profile – share your grant work wider at events, in-person and online or with support from the Society's press team.

Brian Cox school experiments

- Free to download from our website (no login needed).
- Supports the curriculum – a range of topics that link to UK curricular and supports careers provision.
- Covers primary and secondary (7-14) – access our primary or secondary pack.

THE ROYAL SOCIETY

royalsociety.org/schoolexperiments | education@royalsociety.org

General resources

- Climate Change and Biodiversity Q&A cards and classroom posters

- Why Science is for me animation and posters

- Young People's Book Prize 2024

All Bodies Are Wonderful | Can You Get Rainbows in | Engineers Making a | Mission: Arctic

Engage

IRIS

The Institute for Research in Schools

Kelly Murfet
Head of Engagement

www.researchinschools.org

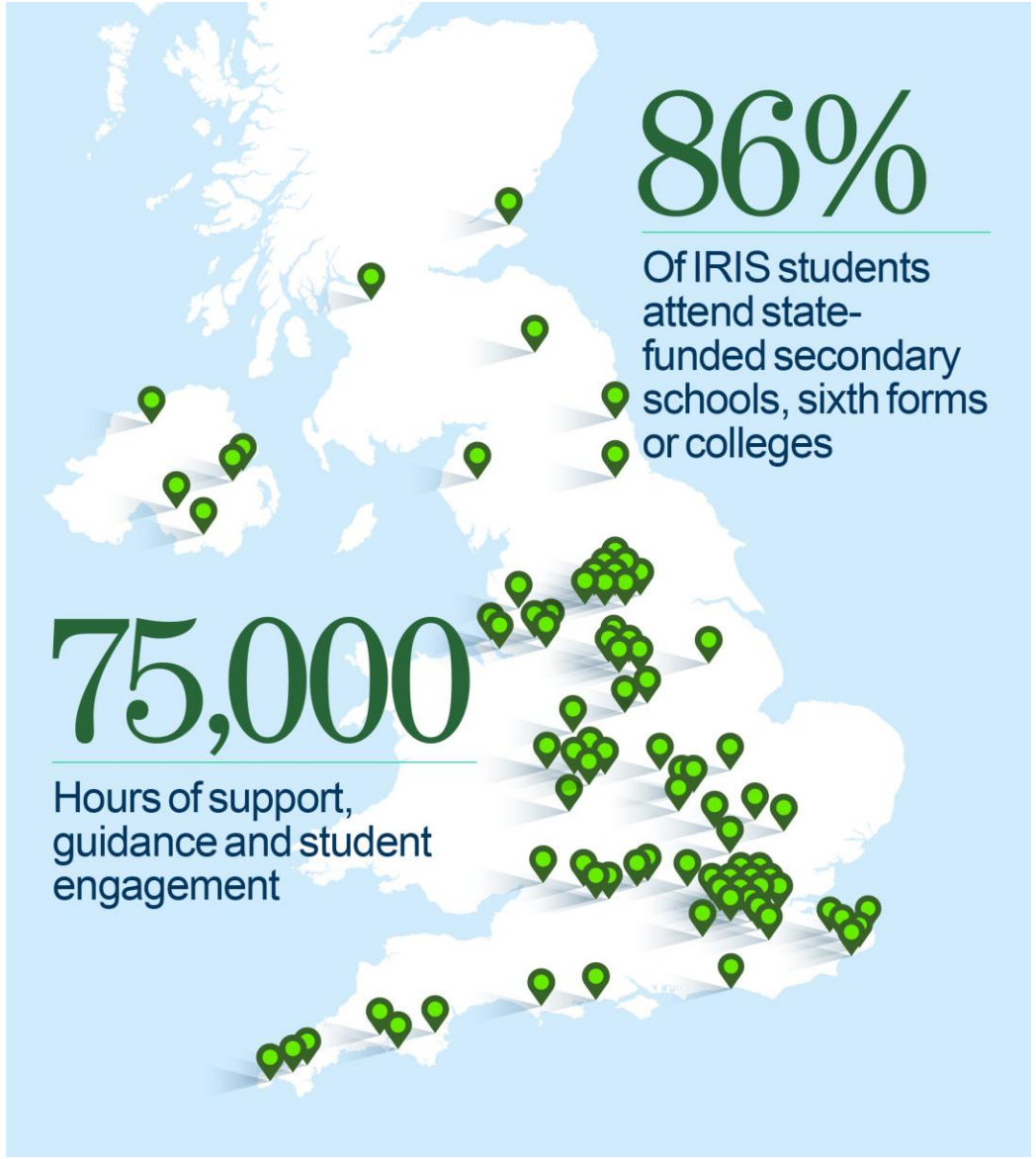
2023/24 academic year

1923
Students took part in IRIS research

101
Schools ran IRIS projects

242
Research projects carried out

52%
Of students carrying out research through IRIS were female



86%
Of IRIS students attend state-funded secondary schools, sixth forms or colleges

75,000
Hours of support, guidance and student engagement

Projects

Wild Things

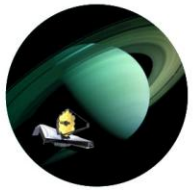
Age suitability: 11+

Carbon Researchers

Age suitability: 12+

DNA Origami

Age suitability: 14+



Cosmic Mining

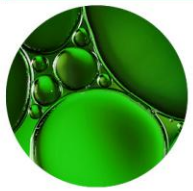
Age suitability: 14+

Earth Observation

Age suitability: 14+

Future Flight

Age suitability: 14+



Original Research

Age suitability: 14+

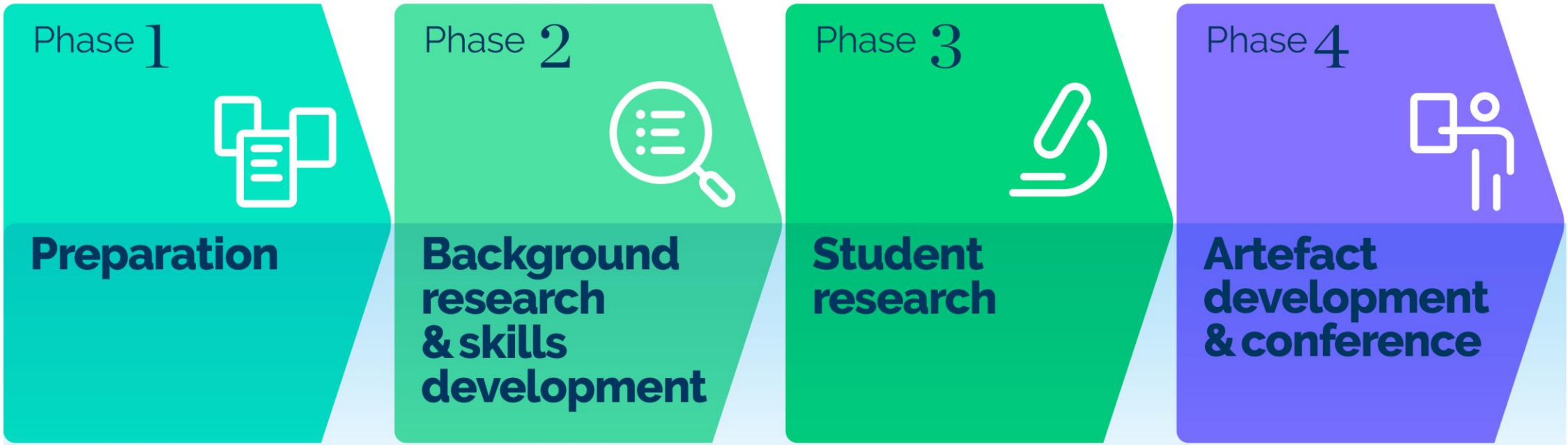
Big Data: ATLAS

Age suitability: 16+

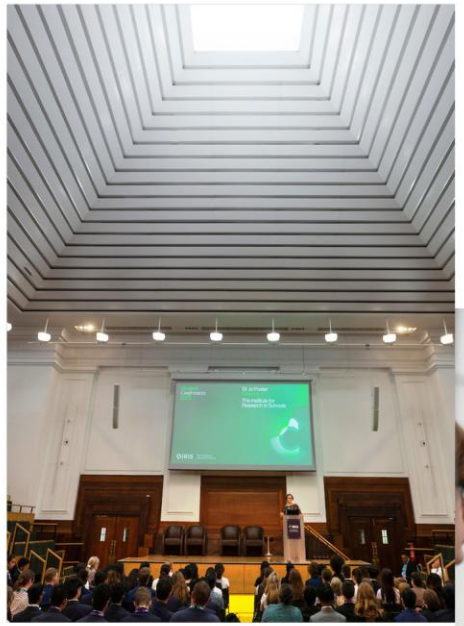
Greener Fragrances

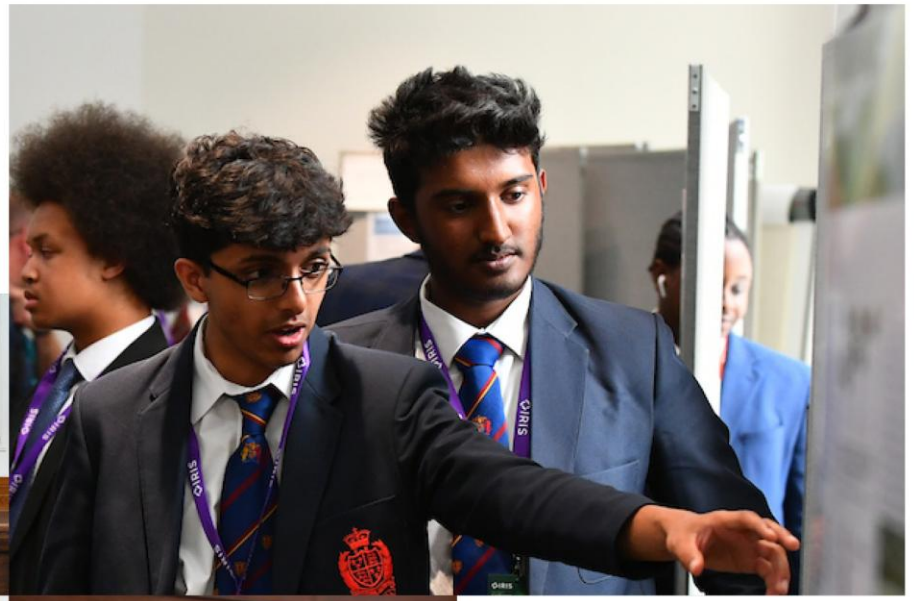
Age suitability: 16+

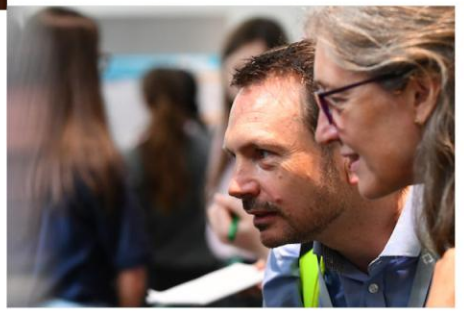
Phased project structure



IRIS Conferences







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Royal Academy of Engineering

Scott Atkinson
Education Programmes Manager
Rebecca Lindsay
This is Engineering Campaign Manager

www.thisisengineering.org.uk

OUR CORE PRINCIPLES

Search: *This is Engineering*

TALK TO TEENS
WHERE THEY ARE
ABOUT WHAT INTERESTS THEM.

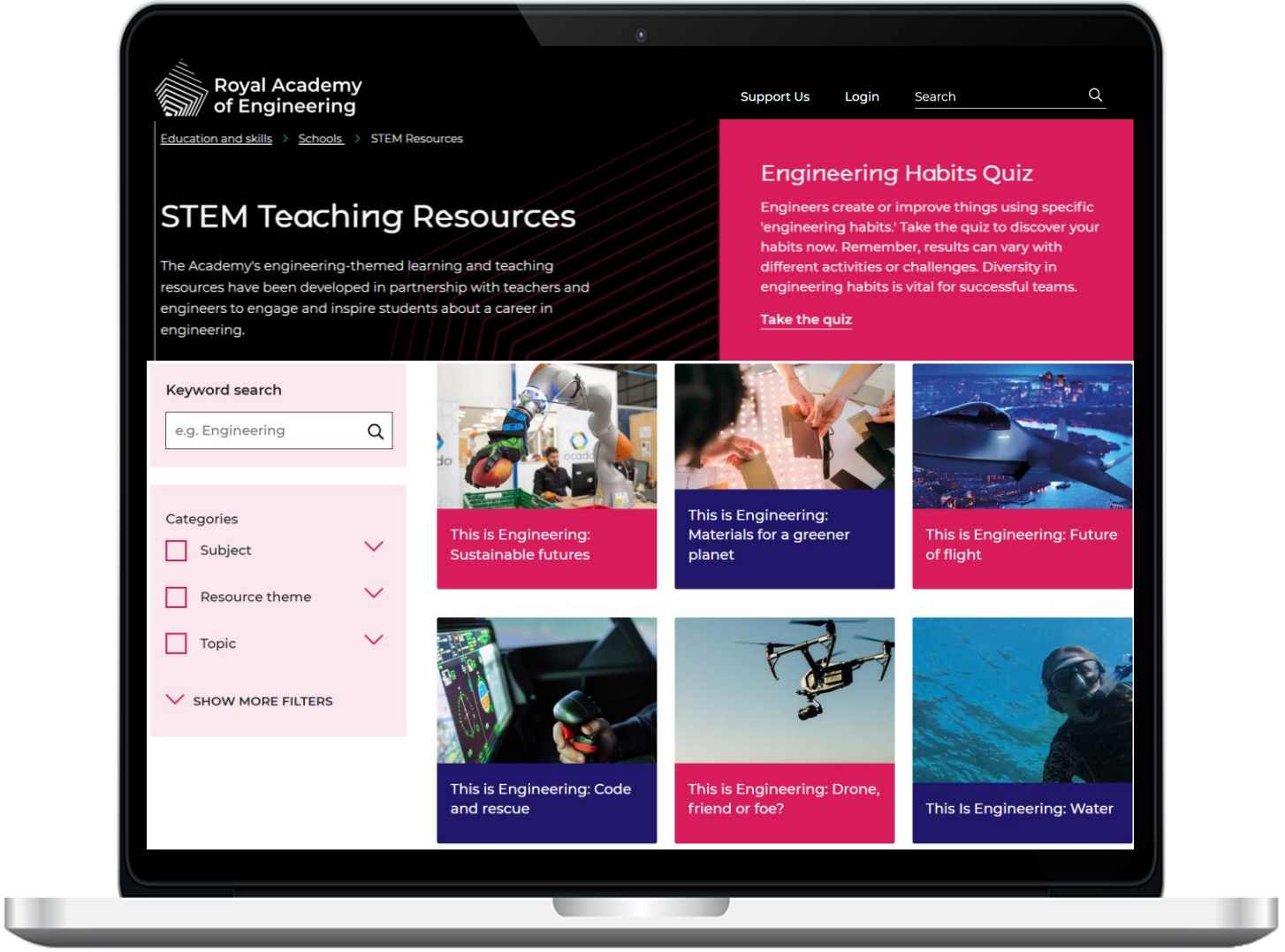
FOR THE WHOLE PROFESSION
BRAND NEUTRAL
OPEN ACCESS.


THIS IS
ENGINEERING
ENENI
ROBOTICS
TRAILBLAZER

NEW WEBSITE

Explore a vast range of engineering careers and find one that could be for you

THIS IS ENGINEERING SCHOOLS – RESOURCES



 Link: raeng.org.uk/education-and-skills/schools/stem-resources

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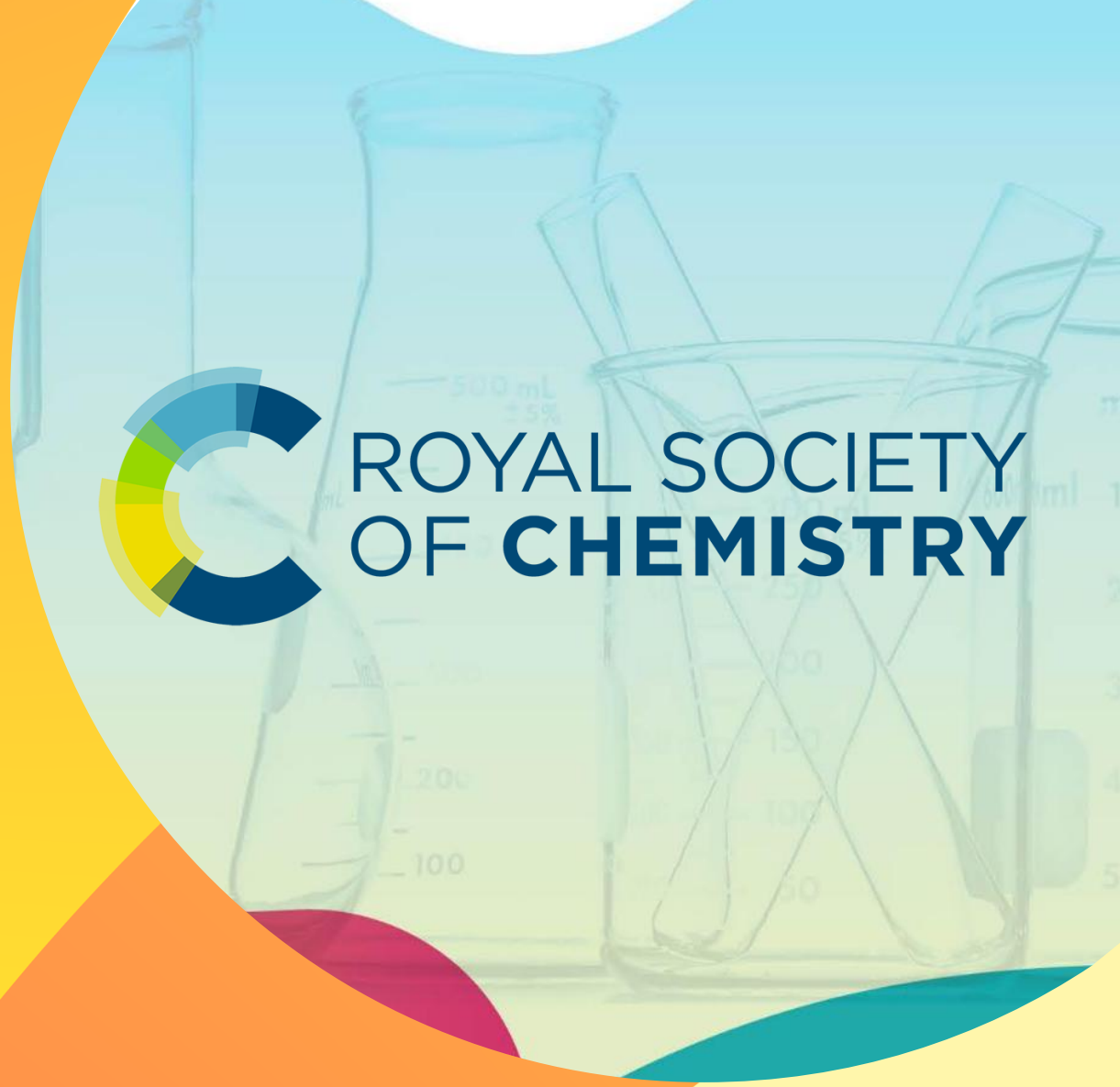
The Royal Society of Chemistry



Katie Haylor
Assistant Editor, Education Resources

www.edu.rsc.org

Education
Inspiring your teaching and learning

ROYAL SOCIETY OF CHEMISTRY

New literacy support

Resources to support:

- vocabulary
- reading
- writing
- speaking and listening

all in a chemistry context.

edu.rsc.org/resources/collections/literacy-in-science-teaching

Concentration

In other words …
how many particles there are in a specific space

Start

The relative atomic mass (A_r) of an element is

Carbon-
standard
relative c
elements

Lir

averag

mass

atom

ROYAL SOCIETY OF CHEMISTRY

ROYAL SOCIETY OF CHEMISTRY

JULIET KENNARD

Education
Inspiring your teaching and learning

All | Search our site

I am a … | Resources | Education in Chemistry | Teach Chemistry | Events | Teacher PD | Enrichment | Our work | Internal

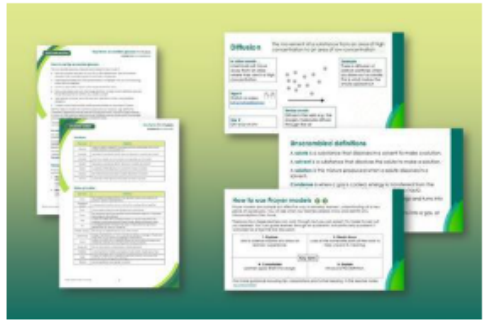
Literacy in science teaching

Resources and ideas to embed literacy into your curriculum and develop learners' skills in reading, writing and talking about science and their understanding of scientific language

Our latest resources by key chemistry topic

Find key terms glossary resources, reading comprehension, structured talk and structure strips for each key topic

Particle model



Particle model | Key terms support | 11–14

Language support pack for structure and bonding, with key terms list, accessible glossary, Frayer models and unscrambling definitions

Particle model | Reading comprehension | 11–14 years

Atomic model

Atomic model | Reading comprehension | 14–16 years

Use this reading comprehension based on a real science research news story to develop literacy skills and confidence

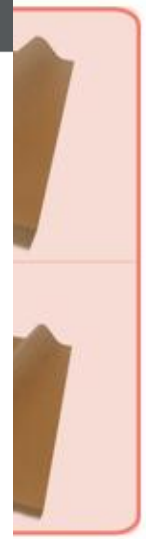
Atomic model | Key terms support | 14–16

Structure and bonding

Structure and bonding | Structured talk | 14–16 years

In this speaking and listening task learners work together to build word bridges by applying, building and sharing understanding of bonding

Structure and bonding | Key terms support | 14–16



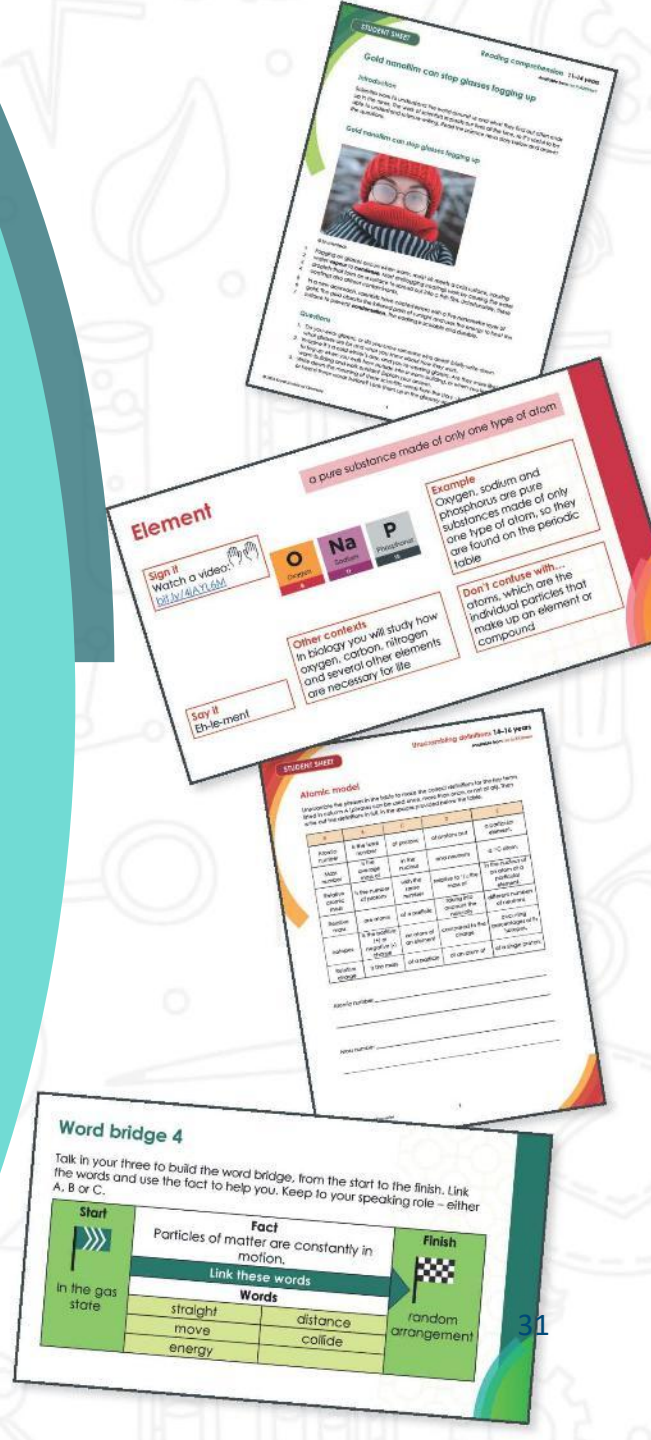
and moving through channels that widen

en observed on crystals. Scientists
the surface of a slowly **subliming**
annels that appear on the surface
e as more of the **solid** sublimes to a
particles along the channels.

carcity in desert areas. A similar
's and animals to trap water.

All resources are…

- written and reviewed **by teachers**
- **ready-to-use** saving on preparation time
- **editable**
- linked with key **curriculum** topics
- designed to promote **metacognition**
- accompanied by teacher **guidance** and answers
- **free** for teachers in UK and ROI



Education
Inspiring your teaching and learning

ROYAL SOCIETY OF CHEMISTRY

Thank you. Any questions?

education@rsc.org

We want feedback! All comments welcome.

Engage

Sutton Trust Online

Caitlin Brown
Digital Programmes and Platform Manager

www.suttontrust.com/our-programmes/sutton-trust-online-sto/

About the Sutton Trust

"They help **open your eyes to all options** that's are out there and help you be **able to achieve them**, it keeps you open minded and stops you feeling overwhelmed with all the choices and things to do."

Our programmes:

Pathways to the Professions

Discover your pathway to a career.

Banking & Finance, Consulting, Engineering, Law, Medicine, Veterinary Medicine

Applications now closed for this year – opening September 2025.

Access Apprenticeships

Learn how to access top apprenticeships.

Law (London), Banking & Finance (London), Engineering (Manchester)

US Programme

Ever considered studying abroad?

Spend a week in the US exploring the American higher education system.

Applications now closed – opening Jan 2026.

Summer Schools

Experience what university life is really like!

Choose from over 40 different subjects at 13 leading UK universities.

Sutton Trust Online

Our 18-month digital programme.

All the information, skill, and advice you need on your journey to university or an apprenticeship.

Applications now open!

Why take part?

Sutton Trust students are

3 times more likely

to receive an offer from a top university

Sutton Trust Online (STO)

This fully digital programme is an added benefit to all of our other programmes, but can also be directly applied to. This one-stop-shop platform provides expert resources and webinars on exploring, applying to, preparing for and succeeding at top universities and apprenticeships.

What's in it for students

- Personal Statement builder tool and mentor
- Q&A with admissions staff and students
- Exclusive webinars on financial aid, interviews, and admissions tests
- Free access to A-level tutoring via Up Learn

Mandatory criteria

Students currently:

- ✓ In Year 12 (England and Wales), Year 13 (Northern Ireland), S5 (Scotland)
- ✓ With excellent academic grades
- ✓ Who attend, and have always attended, a state (non fee-paying) school

Social mobility criteria

We look at other criteria including:

- ✓ Free school meal eligibility
- ✓ First generation to university
- ✓ Your school's context
- ✓ Where students live

Engage

Queen Elizabeth Prize for Engineering Create the Trophy Competition 2026

Dr Sarah Rhodes
Head of Programmes

www.qeprize.org/trophy

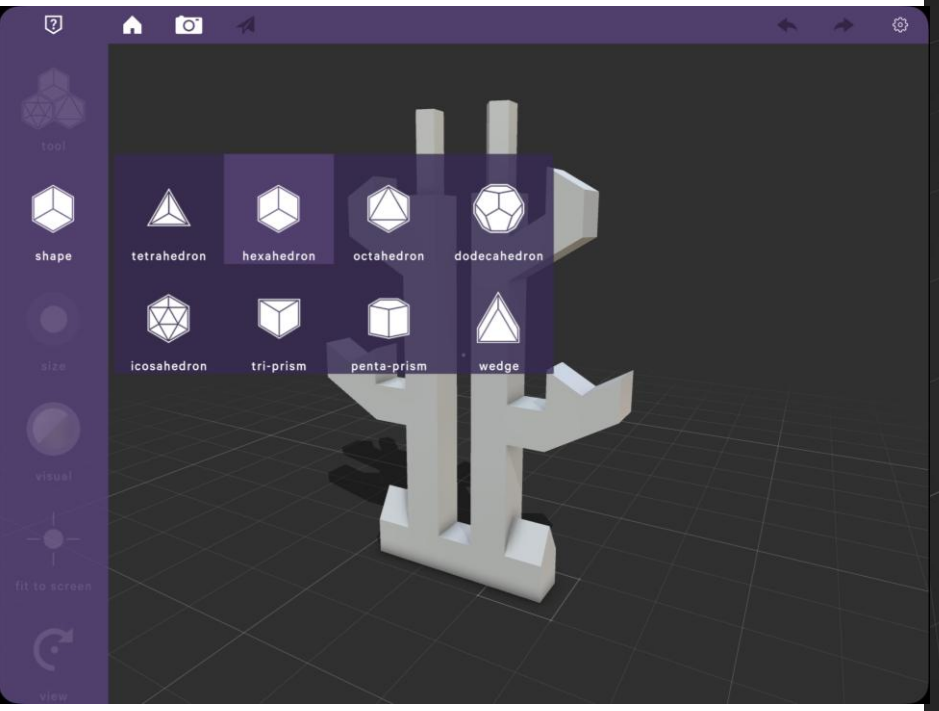
Queen Elizabeth Prize
for Engineering

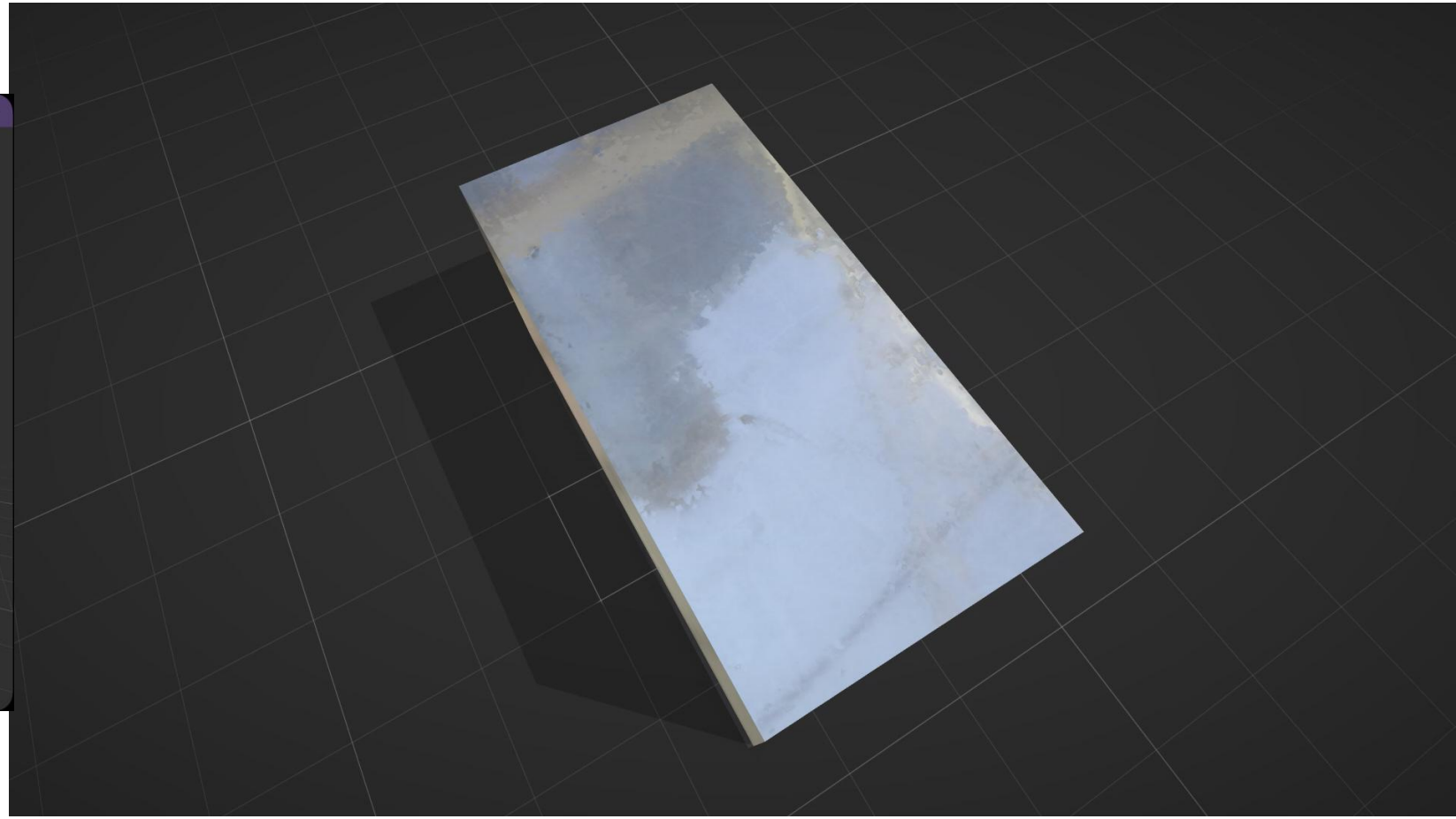
Aims

1. Promote excellence in engineering and celebrate engineering's visionaries

2. Inspire young minds to consider engineering as a career choice

Create the Trophy Competition – 3D Design Studio app





Download on the App Store

GET IT ON Google Play

‘QEPrize 3D Design Studio’

- Free to download – simplified CAD
- User friendly, minimal text to make it globally accessible
- OBJ file design format – opensource design

Outstanding competition prize package

QEPrize

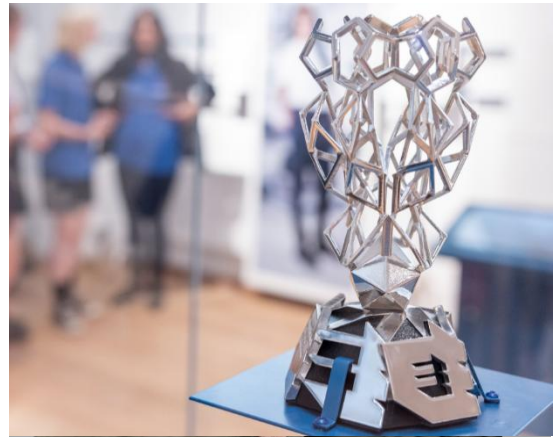
Finalists and their parent/guardian are invited to the winners' announcement.

Laptop

Given a high-end laptop and a 3D printed model of their trophy

Presentation

Winner and their parent/guardian are invited to meet the 2026 QEPrize winners



Science Museum

Their winning trophy is put on permanent display in the Engineers gallery, Science Museum

www.qeprize.org/trophy

Queen Elizabeth Prize
for Engineering

www.qeprize.org

Engage

National Education Nature Park

Victor Heng
Learning Programme Developer

www.educationnaturepark.org.uk

Habitat mapping

Survey | Habitat Change Tool (arcgis.com)

Mapping your site

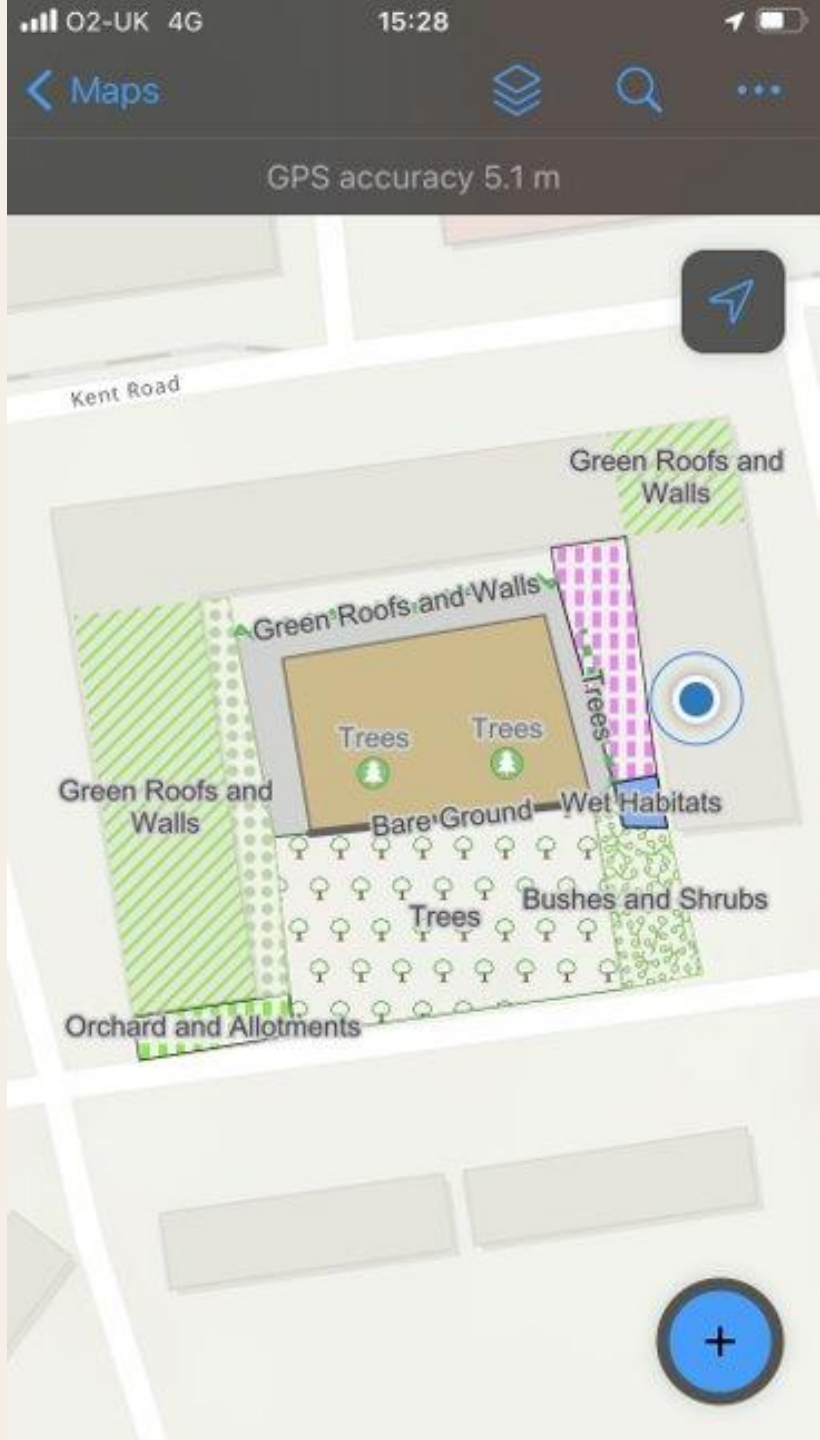
Mapping habitats on your site, both natural and human-made, to understand your starting point

Areas e.g. a patch of grass

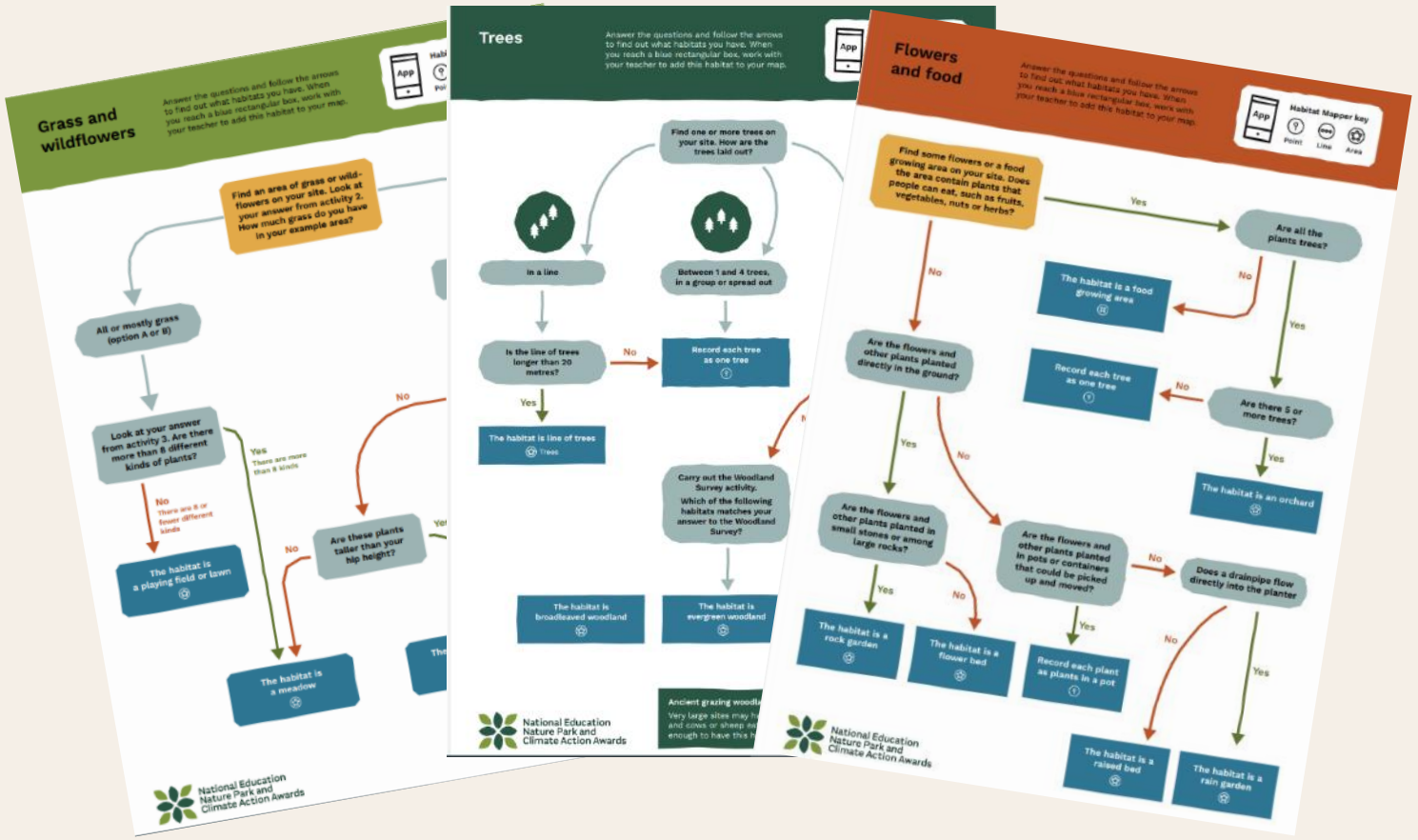
Lines e.g. a hedge or fence

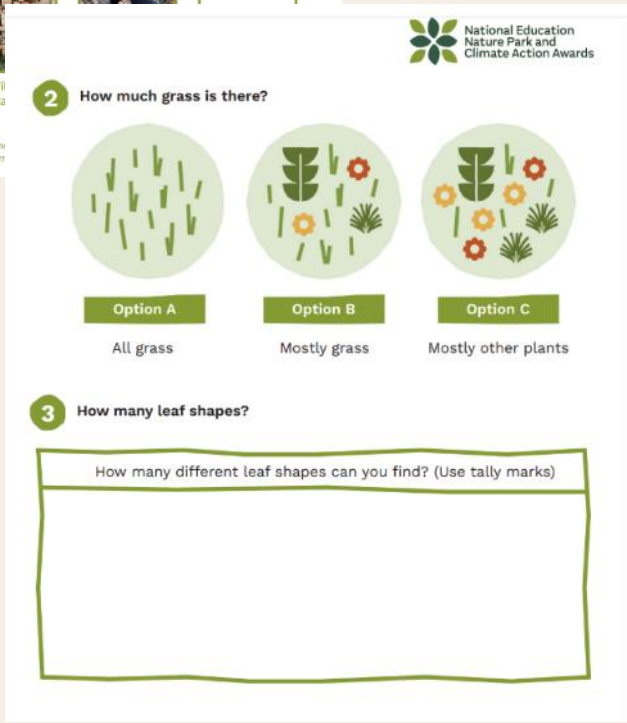
Points e.g. small features like potted plants, a compost bin or a bird feeder

National Education Nature Park



Habitat mapping resources

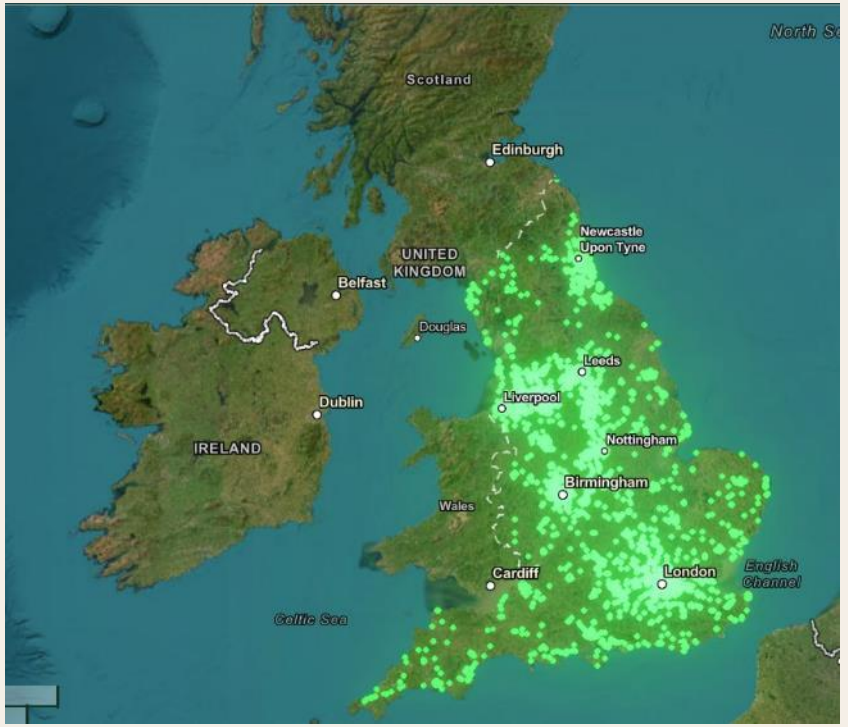




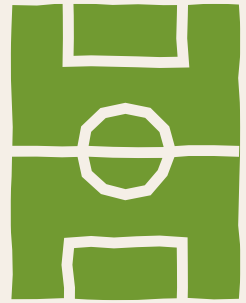
National Education Nature Park

Why use digital mapping tools (GIS)?

- We can understand our starting point and measure **change**
- We understand our setting in its wider **context**
- We make a difference **collectively**
- An opportunity for learners to build key **digital skills**



National Education Nature Park



Any questions?

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Or get in touch with todays speakers:

Apps for Good
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CREST Awards
crest@britishscienceassociation.org

The Royal Society
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IRIS
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contact@thisisengineering.org.uk

Sutton Trust
applications@suttontrust.com

Royal Society of Chemistry
education@rsc.org

Queen Elizabeth Prize for Engineering
sarah.rhodes@qeprize.org

National Education Nature Park
hello@educationnaturepark.org.uk

Engage Teacher Conference

Thank you

Complete the **5-minute feedback form** for the chance to win one of ten **£10 Amazon vouchers**!
www.tfaforms.com/5181926

crestawards.org/engage
crest@britishscienceassociation.org

Run by BRITISH SCIENCE ASSOCIATION

Managed by CREST AWARDS