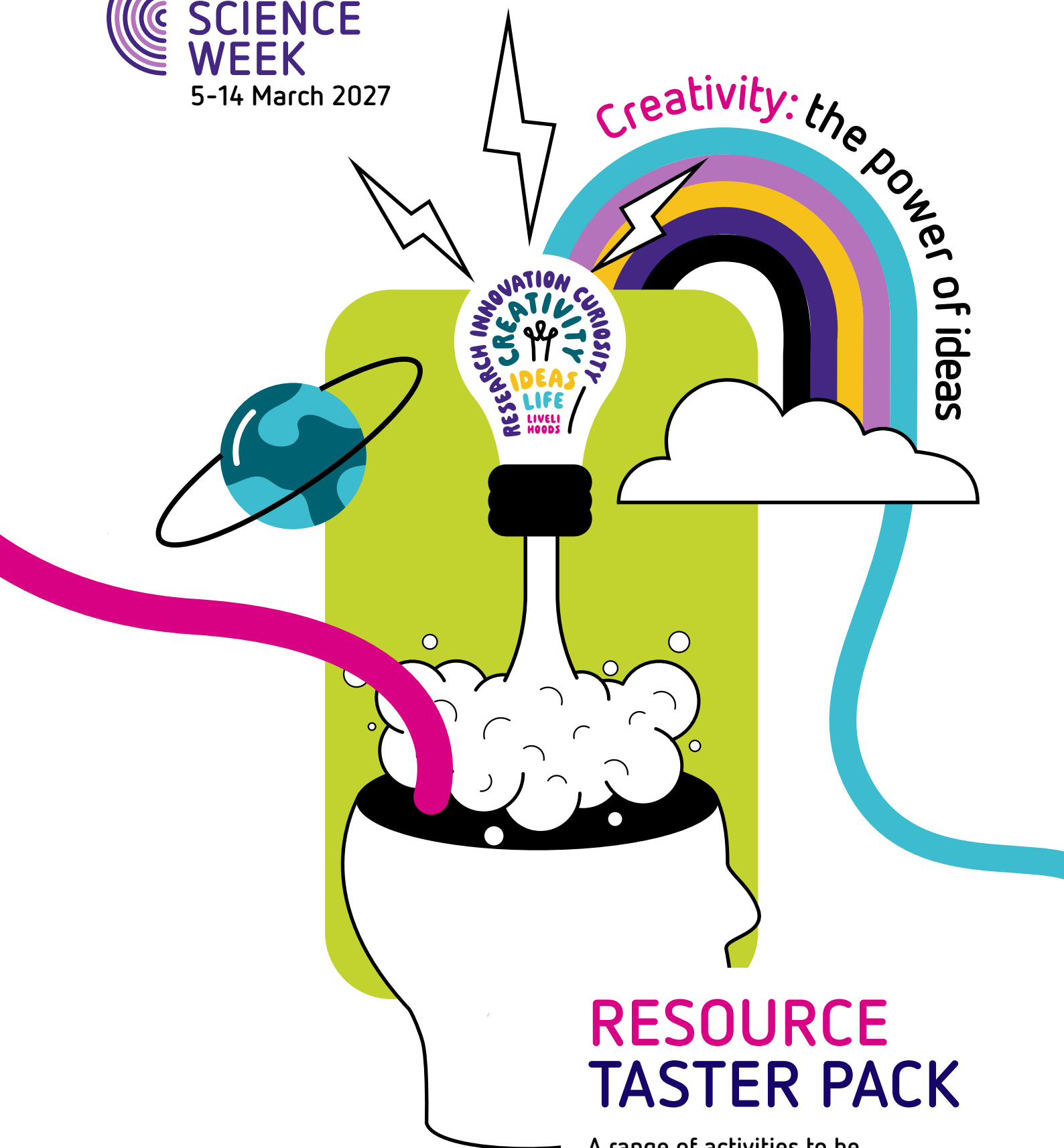




BRITISH
SCIENCE
WEEK

5-14 March 2027



RESOURCE TASTER PACK

A range of activities to be
run with children and young people,
from under 5s to around age 14

britishscienceweek.org

Delivered by



Funded by



UK Research
and Innovation

Welcome to the British Science Week 2027 taster pack! This resource pack has everything you need to start planning for the celebrations taking place from 5 to 14 March 2027.

British Science Week is a ten-day celebration of all things science, technology, engineering and maths (STEM). During British Science Week we encourage everyone to take part in activities, host events and celebrate the science in our everyday lives.

The British Science Week resource packs, funding options and poster competition are part of a wider six-year programme to engage the public with research and innovation across the UK. Funded by UK Research and Innovation (UKRI) and delivered by the British Science Association, this new initiative will celebrate the full breadth of UK research and innovation and the contribution it makes to improving lives and livelihoods.

Who can use this pack?

We hope that you – whether you're a teacher or other member of school staff, a community group leader, a parent/carer, or an event organiser – will find this pack of activities and tips useful.

We've brought together ideas and resources suitable for children under five up to young people aged 14, or those working at this level, into this one, easy-to-use taster pack. Feel free to adapt any and all of the activities for your audience. Full resource packs for early years, primary and secondary aged children and young people will be released in 2027.

2027 5-14 March



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INNOVATION

RESEARCH

CREATIVITY

IDEAS



Creativity: the power of ideas



This year's theme

Each year there is a new theme for British Science Week – and for 2027 it's 'Creativity'! This taster pack explores 'Creativity: the power of ideas' and is all about showing children and young people how creative ideas can spring from curious questions, in ways that can powerfully improve people's lives and the world around us. Almost every interest young people might have could provide inspiration for new ideas. History, sports, animals, gaming, space travel and lots of other topics have STEM behind them, and can be inspiration for creativity.

Here are some ways you can introduce the theme to students in a fun, imaginative way to get them excited about the Week:

Talk to students about their ideas that they might want to explore. Are they passionate about the environment? Perhaps they have creative ideas for how people could reduce their carbon footprint. Making society more

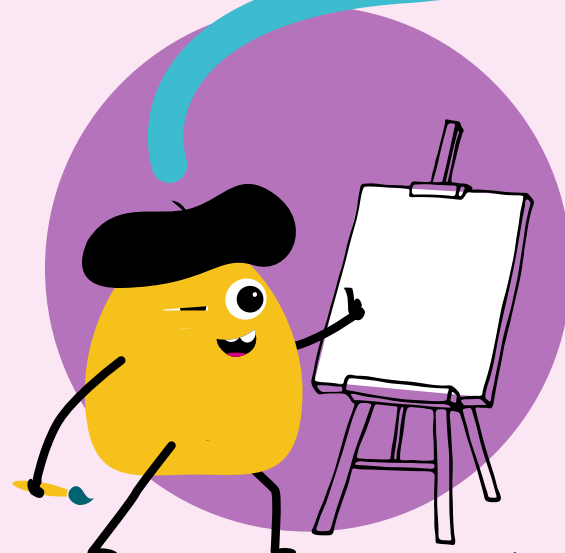
inclusive of disabled people requires a creative mind; students could think about innovations that could boost equity and equality. Food and cooking offer lots of opportunities to try out new ideas – for example, how can we make the most of local produce?

If you work in a school or with a community group, you could invite a special guest to share their own experience of how creativity has shaped their life. Are there any STEM professionals local to you, or museums to visit? Maybe someone working in engineering could talk about how creativity helps them in their designs.

Our Smashing Stereotypes profiles are perfect resources for showcasing creative people working in STEM. We explore the lives and careers of people from across the STEM workforce who challenge long-standing stereotypes about what it means to work in STEM and what a scientist looks like.

Poster competition

In line with the theme, the 2027 poster competition will be all about the power of creativity – we'll be asking children and young people to think about 'ideas that improve lives'. They might come up with their own incredible ideas, or find out more about someone else's innovation, showcasing their research and thinking through their posters. Look out for more details in the full British Science Week resource packs.





CREST activities and projects

All the activities in this resource taster pack are based on CREST resources.



CREST brings STEM to life for young people aged 3-19 of all abilities. Through hands-on activities and exciting projects, CREST sparks curiosity and creativity, builds confidence, and connects students with real-world science, technology, engineering, and maths.

CREST provides teachers and home educators with adaptable challenges and projects for young people that are aligned to the national curriculum, and can be run throughout the year. British Science Week – a time that the whole school is buzzing with STEM excitement – can be a brilliant opportunity to run CREST.

CREST challenges and projects are student-led investigations that allow children and young people to develop STEM skills, communication and teamwork, and discover how STEM is relevant to their lives.

About CREST Awards

Pupils and students can turn their curiosity and creative ideas about the world around them into achievement by earning a CREST Award.

At primary level, pupils who complete six or more activities can earn a Star or SuperStar CREST Award, recognised with a certificate. The Award is given for participation and engagement with the activities and there is no need to submit pupils' work at this level.

Early years children can also take part with specially adapted Star challenges.

Discovery Awards are usually completed by students aged 10-14, meaning they can be run at both primary and secondary level. Students earn a Discovery Award by taking part in a five-hour group project. Discovery projects can be run during one school day, a Discovery Day, but they can also be spread out across a week or term.

At secondary level, teachers or parents / carers can submit young people's project work for a CREST Award. A secondary Award requires between 10 and 70 hours of project work depending on the level. Bronze projects can be teacher-assessed, while Silver and Gold are sent to expert, external assessors. Once work has been evaluated and meets all the criteria, the students receive a Bronze, Silver or Gold Award, recognised with a certificate.

For inspiration on how students can turn curiosity and creativity into achievement, check out some of the case studies:

Tom and his British Sign Language wearable device ✨

Students at Bo'ness Academy bringing photography and chemistry together ✨

Students with SEND doing lab work at Bishop Burton College ✨

A Discovery Day during British Science Week at Moorside High School ✨



Tips for educators

CREST projects are designed to be flexible and inclusive, allowing children and young people to explore relevant, real-life STEM challenges through practical, hands on investigation and discussion at their level. You may like to adapt or scaffold the activities, depending on the needs of your learners, choosing the Award level that best suits them. CREST can be done by anyone!

If you can think of a STEM topic, a CREST project can explore it! Young people can design their own projects or they can choose one of the existing project ideas in the CREST Resource Library, running their own investigations to find the answers. crestawards.org/resource-library

Some more projects that match the British Science Week 2027 theme of 'Creativity' from the CREST Resource Library include:

- 'Yummy yoghurt makers', a **SuperStar** activity that has children get creative with yoghurt flavours to understand reversible and irreversible reactions.

- 'Make your own animation' ✨ a Bronze project that has secondary students building their own kinoscope and creating a short animated film.
- 'Design the ultimate toothbrush' ✨ challenges older students to combine creativity, engineering and health for a Gold Award.

Discovery projects can also be easily incorporated into British Science Week. As group projects that take around five hours, they could be done in one day – a Discovery Day – or run across the Week.

Secondary level projects usually cannot be completed within a week, but part of British Science Week at your school could involve students coming up with ideas for their projects and kicking them off to be worked on across the school year.

Educators working with students with SEND at secondary level may like to try the accessible Bronze Award project, 'Design and make a pizza box' ✨ which can be found in the CREST [Resource Library](#) ✨



Funding for British Science Week 2027 has had a revamp!

We now have two new options of funding schools can apply for to celebrate British Science Week and use throughout the 2026/2027 school year.

The new funding provided by UKRI will support schools to organise activities for young people to engage with science and the concepts, skills and people behind research and innovation.

Explore Kit Boxes

Apply for an activity kit bundle that includes:

- a set of printed materials to help you introduce **research and innovation** to your children
- all the resources and the equipment to run eight enquiry-led skill-building challenges
- CREST Award certificates for 60 students.

This is a perfect option for primary schools as there are two versions of the box available for 5-7 year olds or 7-11 year olds (or those working at those levels).

There is no cash grant given with the Explore Kit Boxes.

Curiosity Grant

This grant is £600. This option is aimed mostly at secondary schools, and can fund a range of approaches and activities linked to **research and innovation**, and not just for British Science Week.

Eligibility

This funding is for schools in challenging circumstances; there are some eligibility criteria schools must meet before applying.

- The school is in England, Scotland, Wales, or Northern Ireland.
- The school is state funded. Registered independent special schools that receive local authority funding for places are also eligible to apply.
- The school is not academically selective.
- The school also meets **at least one** of the following criteria:
 1. a minimum of 30% of students are from ethnic minority backgrounds
 2. a minimum of 30% of students are eligible for free schools meals (FSM) or, in Scotland, living in SIMD quintile 1
 3. the school is located in a designated rural area.

You can find more information on the two types of funding on the **British Science Week funding page** 

Engage

The application window is from 21 September - 4 November 2026.

Find out more about joining **Engage**  - run by the British Science Association, Engage is a community of educators in schools in challenging circumstances who share ideas, access inspiring resources and apply for grants to help bring STEM to life for all young people.

For guidance on introducing research and innovation in the classroom, check out **Getting Started with Research** , a completely free and brand-new scheme of work from The Institute for Research in Schools, designed to help you create a culture of research and innovation, in any classroom in the UK.

 **IRIS**



Creative

nustem



Northumbria
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NEWCASTLE

BRITISH
SCIENCE
WEEK

Collaborative

Unlocking skills

A fantastic way to encourage children and young people to take an interest in STEM is to introduce transferable skills used by those working in STEM-related jobs. These skills will strengthen positive attitudes and reduce stereotypes of those working in the field.

You could, for example, use the [STEM Person of the Week](#) activity from NUSTEM at Northumbria University or introduce a scientist from the [Smashing Stereotypes](#) campaign. Ask children and young people to identify what characteristics people working in STEM need. These might include being observant, creative, patient, good at communication, or curious. Look out for the skills unlocked heading for each activity in this pack.

The table to the right has a complete list of attributes developed by NUSTEM to use as a talking point or to share with other teachers. As a little bit of motivation, why not award students with a sticker or certificate for each STEM characteristic they demonstrate well during the Week?

Observant	Resilient
Open-minded	Clear communicator
Committed	Passionate
Collaborative	Logical
Creative	Curious
Imaginative	Self-motivated
Patient	Hard-working
Organised	

Curious

About this activity:

This activity asks children to come up with ideas for how to design and build a safe landing device in which astronauts can land on the Moon, and use their creativity to turn ideas into reality. They'll reimagine an egg as their passengers, and the holder from an egg box as a landing device.

Instructions

- 1 Ask the children to think about how the surface of the Moon looks different to the surface of Earth, using photos to support the conversation.
- 2 Explain that astronauts in space need to land safely on the Moon, in a special landing device. Introduce the idea of using parachutes to slow the landing device down.
- 3 Give each child an egg holder and have them thread a pipe cleaner through each of the holes and tie a knot to secure the pipe cleaners.
- 4 Provide lots of material options for the canopy of the parachute. Have the children attach their chosen material to the pipe cleaners by wrapping the corner of the material around the top of the pipe cleaner and twisting.
- 5 If possible, create a Moon-like landing spot with soil and pebbles. It's helpful to lay a bin bag below the landing spot for an easy clean-up.
- 6 Have them test their designs with eggs, and challenge them to think about how their landing devices could be improved.

Watch out

- Ensure the eggs and egg boxes are clean.
- If children have egg allergies, a tomato can be substituted.
- Ensure any raw egg is cleaned up.
- Ensure children wash their hands after touching eggs.

Beyond STEM

Children could be inspired to come up with a story about a character landing on the Moon. They could tell their story out loud, act it out with toys or models, or create pictures to show the events. The activity could also prompt finding out more about the history of the first Moon landings.

At home

Children could experiment with different materials and cargos, coming up with creative designs for safe landings.

Career options

Aeronautical engineers focus on the design, construction and science of air and spacecrafts.

Skills unlocked

Observant, logical

Early years

Suitable for children aged 3-5, but also works well for children up to 7 or those working at this level.

Lunar Landers



Time: 45 minutes

Kit list

- Eggs (one per child)
- Egg boxes cut into individual egg holders with a hole punched into each corner
- Hole punch
- Pipe cleaners
- Different materials – paper, plastic bags, fabric
- Pebbles and soil (optional)



This activity is taken from **Earth and beyond**, a collection of CREST Star early years challenges which is free to use and download from the CREST Resource Library.



About this activity

This activity asks children to think about water resistance and which materials would be best for making an umbrella. They'll get creative by putting lots of different materials to the test, and turn their ideas about how to shelter ourselves from the rain into reality.

Instructions

- 1 Ask the children to think about umbrellas, how they work and why we need to shelter when it's rainy outside.
- 2 Provide the children with a selection of different pieces of fabric and other materials to test, some examples are in the kit list.
- 3 Talk through how they might find out if the fabrics are waterproof. Encourage them to explore their own ideas.
- 4 Prepare beakers of coloured water, and plastic trays lined with paper towels.
- 5 Have the children choose one material at a time, and place it on the tray.
- 6 Using the pipettes or teaspoons, they should add one drop of water onto the material, then check to see if the water has come through onto the paper towel.
- 7 Ask the children if they can think of other ways to find out which materials are waterproof.
- 8 The children could draw a design of an umbrella they think would keep them dry.

Watch out

- Mop up spills to avoid a slippery floor.
- Warn children not to squirt coloured water at each other.
- Ensure children do not taste or put the liquid or materials used near their mouths. Food colouring can stain children's fingers.

Beyond STEM

This activity could be the start of a discussion around weather and seasons. Children might like to think about how weather varies in different countries and parts of the world. You could keep a class weather diary and use it as the prompt for a story or piece of art.

At home

Children could think about other everyday objects that need to be waterproof, shower curtains for example, and come up with ideas to test which materials would be most suitable.

Career options

Materials engineers create and test all sort of materials to be most efficient and appropriate for different uses.

Skills unlocked

Organised, curious

Early years

Suitable for children aged 3-5, but also works well for children up to 7 or those working at this level.

Useless Umbrella



Time: 45 minutes

Kit list

- Selection of fabrics and other materials e.g. plastic, sponge, foil, card. Make sure some of the fabrics are waterproof
- Pipettes or teaspoons
- Water coloured with food dye or a drop of paint
- Beakers/cups
- Plastic trays
- Paper towels (including a few extra to wipe up spills)
- Paper, pencils and pens for creating pictures (optional)



This activity is taken from the **Star challenges collection** which is free to use and download from the CREST Resource Library.



Primary

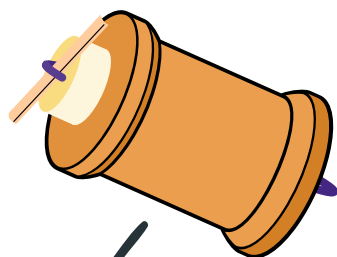
Suitable for children aged 7-11 or those working at this level.

Band Rollers

Time: 45 minutes

Kit list

- Selection of clockwork or wind-up items e.g. clockwork radio, wind-up torch or watch etc.
- Cotton reels
- Candles (cut into 1cm pieces)
- Matchsticks
- Elastic bands of different lengths and thicknesses
- Measuring tapes or sticks
- Timers
- Materials to stick on the roller (optional)



About this activity

In this activity you'll learn about different ways to produce sustainable energy without batteries or fuel, thinking about forces and motion. You'll design and create your own wind-up band roller, test it, then come up with ideas to make it better.

Instructions

- 1 Experiment with some clockwork and wind-up items, do you know how they work? How could clockwork technology help combat climate change?
- 2 Now you'll make your own band roller. Use a piece of candle about 1 cm thick. Remove the wick (string) to leave a hole.
- 3 Push an elastic band through the centre hole of a cotton reel.
- 4 Put half a matchstick through one end of the elastic band loop and tape it to the cotton reel.
- 5 Thread the other end of the elastic band through the hole in the candle.
- 6 Now put a whole matchstick through the elastic band loop by the candle.
- 7 Wind the long matchstick to twist the elastic band. Put the band roller down and see if it moves!
- 8 Race your band roller against others in your group and compare how well they work. What creative ideas do you have to make it better?

Watch out !

- Take care when winding up the elastic bands to not over-tighten them so that they snap.

Beyond STEM

You could use this activity as a prompt to learn more about the history of clockwork technology and timekeeping.

At home

Children could think about the different types of energy used at home, and think about creative solutions to produce greener energy.

Career options

Climate scientists study Earth's atmosphere, oceans and land to understand historic climate patterns, and make predictions for the future.

Skills unlocked

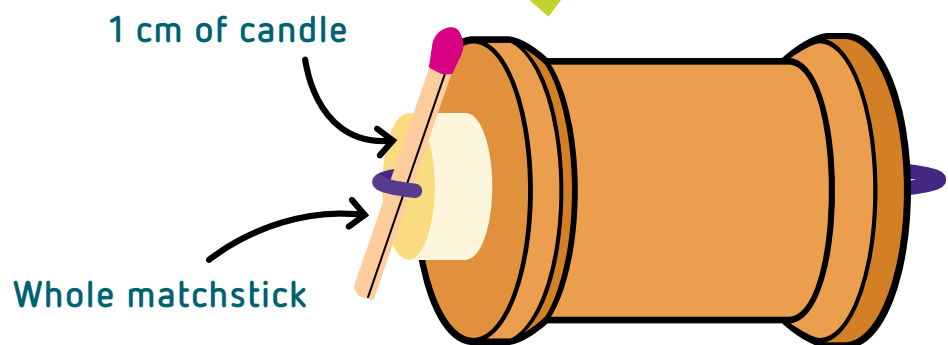
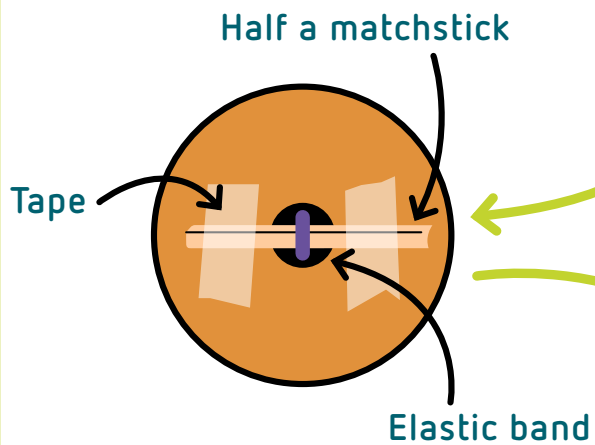
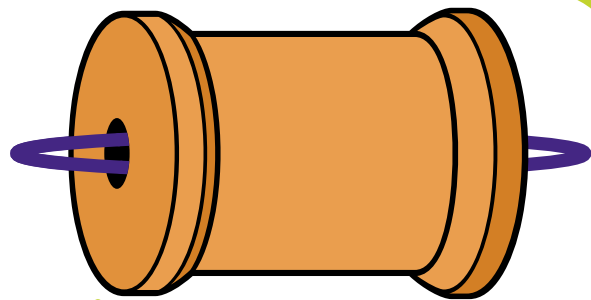
Patient, hard working



This activity is taken from the **SuperStar challenges collection** which is free to use and download from the CREST Resource Library.

Activity sheet

Band Rollers



Primary

Suitable for children aged 7-11 but could also work well with younger learners.

Under Your Feet



Time: 45 minutes

Kit list

- Cut out 'foot' to record your results on
- Cut out 'holes' to place on the ground and look through (find the template for the foot and hole on the following page, or make your own)
- Hand-held magnifiers
- Identification charts or books
- Drawing materials, pencils etc
- Digital camera (optional)



About this activity

In this activity you'll see nature in a creative new way, by looking at what's under our feet and imagining how you would experience the ground if you were the size of an ant. You'll explore a patch of the outdoors, then write an imaginative story about your ant-sized adventures.

Instructions

- 1 Your teacher will help you to cut a foot shape out of a piece of card, leaving you with a foot to draw your findings on, and a piece of card with a foot-shaped hole.
- 2 You'll go out into the school grounds and find an area of nature. Place your foot-shaped hole on the ground and, using a magnifying glass and identification book, look closely at what you can see and draw it onto your foot shape. Include everything you see, including pebbles, twigs and spiders' webs.
- 3 Once you're back in the classroom, compare your foot shapes with the group and look at what others saw.
- 4 Next, imagine you are the size of an ant and write a creative story about the adventures you would have on the patch of nature you drew on your card. Include lots of details of the animals and plants.

Watch out

- Followed your organisation's safety code for working outdoors. Check the area first to look for dangerous plants or other items such as broken glass, sharp stones, etc. Avoid areas regularly used by dogs.
- Ensure the animals are treated with care.
- Wash hands carefully after the activity outside.

Beyond STEM

Why not use your piece of writing as inspiration for further creativity? Look again at what you have written: could it become a short drama piece, artwork or even inspire a piece of music?

At home

Have a look at nature near your home and imagine how different animals experience it. Is there anything we can do to make parks and gardens more welcoming?

Career options

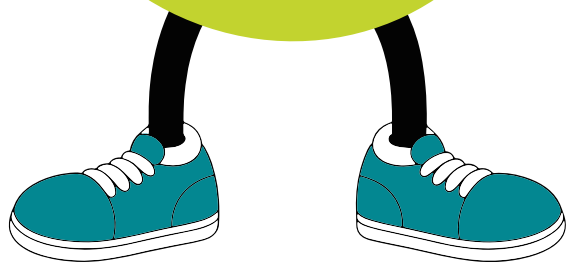
Horticulturists study plants and the science of how they grow, using their understanding to look after gardens, parks and green spaces.

Skills unlocked

Imaginative, creative

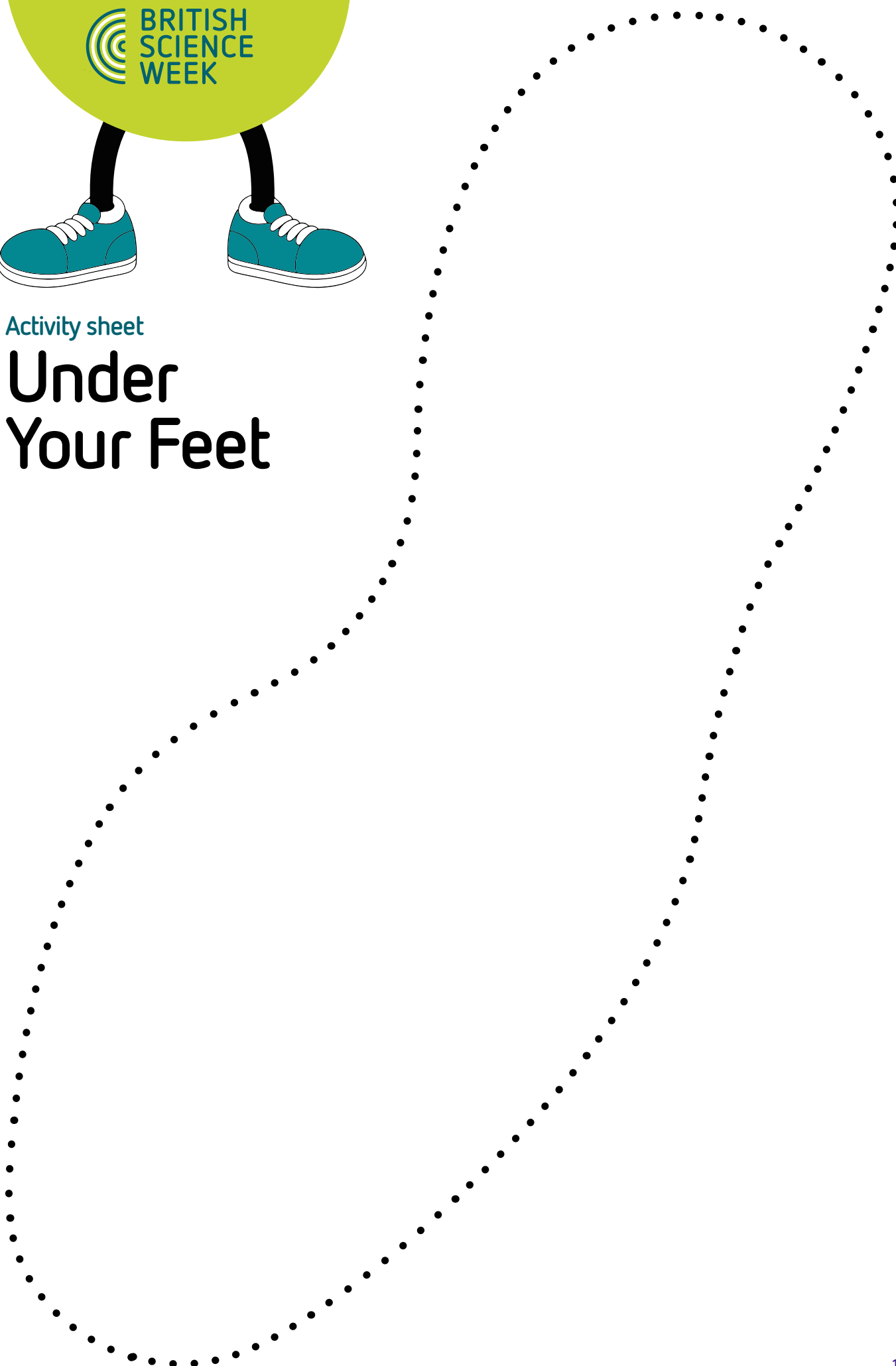


This activity is taken from the **SuperStar challenges collection** which is free to use and download from the CREST Resource Library.



Activity sheet

Under Your Feet



Secondary

Suitable for young people aged 11-14
(or those working at this level)

HPV and Cervical Cancer

Time: 1 hour

Kit list

- An internet-enabled device for research
- Other research resources, books, medical pamphlets etc
- Pens and paper/a device

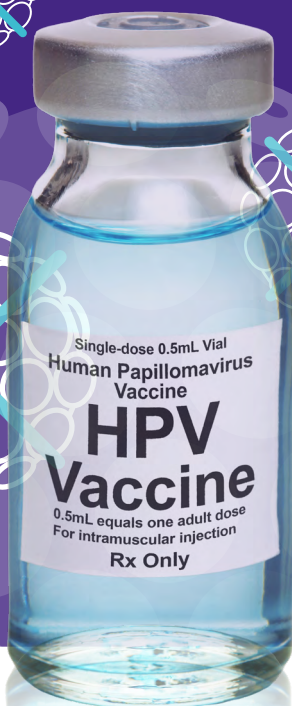
Useful websites:

Cervical cancer

HPV research

Accessible screening

HPV vaccine



About this activity

In this activity you'll research the human papillomavirus (HPV) vaccine, cervical screenings and the role they play in reducing rates of cervical cancer. You'll imagine you work for the NHS, and use your creative skills to design a public health campaign that encourages people to get vaccinated and attend screenings.

Instructions

- 1 Using the internet, books, pamphlets and other resources, carry out some research into HPV and its link to cervical cancer.
- 2 Find out about the HPV vaccine and cervical screenings, and how they can help people to avoid developing cervical cancer.
- 3 Decide if you want to create a public health campaign which encourages young people aged 12-25 to accept the HPV vaccine, or which encourages people with cervixes to attend cervical screening tests.
- 4 Come up with some ideas about how best to get your important message across. What is the best type of media to reach your target age group? Where can you find reliable sources of information? How can you best use your creative skills to make a difference?
- 5 Use either pens and paper or a device (computer/laptop/tablet) to design your campaign, and explain it to the rest of the group.

Watch out

- Ensure students only have access to appropriate websites.

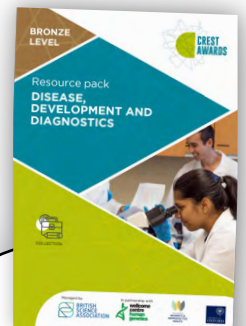
Beyond STEM

You could use this activity as a prompt to find out more about the history of vaccines and immunisation. You could create a timeline showing key dates, events and individuals.

Career options

There are lots of different jobs in public health, which is all about preventing disease, extending life spans and promoting better health practices among the general public.

- Public health doctors focus on health issues among populations rather than individuals.
- Public health campaigners identify health needs in communities, and create plans and methods to improve health outcomes on issues such as smoking or mental health.



This activity is taken from a CREST Bronze resource pack, **Disease, development and diagnostics**  which is free to use and download from the CREST Resource Library.

Skills unlocked

Passionate, clear communicator

Secondary

Suitable for young people aged 11-14
(or those working at this level)

Sustainable Solutions

Time: 2+ hours

Kit list

- Access to computers for internet research
Ensure students only have access to appropriate websites.
- Writing/drawing materials



About this activity

In this activity you'll come up with an idea for a sustainable start-up business that could help people in your local community. You can be super creative with your approach; there are all sorts of business and product ideas that could improve lives!

Instructions

- 1 Research the impacts of climate change and how they could affect your community. What ideas do you have about how to make the local area more sustainable?
- 2 Your start-up business must be either a **PRODUCT** or a **SERVICE**.
 - **Design a product:** Think about products that you use regularly. Are they environmentally friendly? Do they have a lot of packaging? Are they disposable? Can you think of ideas for an alternative? Will your product be made using sustainable materials? You could research how to use local, recycled or upcycled materials.
 - **Design a service:** Think about services you use on a regular basis. Could you reimagine transport to make it more environmentally friendly? Or a sustainable cafe that doesn't produce waste? Perhaps you can think of creative ways for people to share or pass on clothes or other items they no longer need, to avoid throwing them away.
- 3 Create a poster or slides showcasing your start-up business.

Beyond STEM

You could take your creativity further by devising an advertising campaign for your new product or service. Think about the language you use to describe your sustainable solution – how will you persuade people to consider buying or using it?

At home

Present your start-up business to friends/family. Do they have any ideas to help improve your product/service?

Career options

If you enjoyed developing your sustainable start-up business idea, then you may be interested in a career in engineering. Engineering jobs cover a wide range of topics from renewable 'green' energy to providing clean drinking water. Engineers need to be creative, good at problem-solving and data research.

Skills unlocked

Organised, collaborative



This activity is taken from a CREST Discovery resource pack, **Sustainable Solutions** which is free to use and download from the CREST Resource Library.



Smashing Stereotypes

These pages could inspire secondary students

Smashing Stereotypes is a campaign run by the British Science Association which aims to dispel stereotypes of who scientists are and what they look like, and about the jobs people associate with science.

We have a collection of around 60 stories from individuals and teams from a variety of different backgrounds that challenge these long-standing stereotypes, encouraging more young people, from all backgrounds, to see themselves as scientists.

With profiles of chefs, product designers, and fitness professionals, Smashing Stereotypes proves that science is for everyone, whatever your interests, background, or career path.

Smashing Stereotypes showcases the variety of careers on offer and highlights careers that you may not initially associate with STEM. The campaign also reinforces that there's no 'typical' route into a science role.





Smashing Stereotypes

Dedun Oyenuga

As a child, Dedun's parents instilled in her the importance of education; weekends were regularly spent in libraries and bookshops, and that's where her love of learning began.

At school she found that she wasn't only drawn to STEM subjects, she loved humanities and arts too. Her final A Level subjects were maths, physics and art.

At university she studied Design Engineering, which taught her how to blend technical skills like coding and robotics with the creativity of design research.

After a stint working in cybersecurity, Dedun found a role that allowed her to best utilise her diverse skill set: a user experience consultant at Microsoft.

Dedun works with technical teams who are building custom products like mobile and web apps, to design them to be easy and enjoyable to use. She puts people at the heart of technology.

Dedun hopes that, as students are choosing the subjects to study, which could shape their careers, they will know that hybrid paths exist – creativity and STEM are a perfect pairing.

Check out Dedun's full profile 

Skills you could learn from Dedun:

Open-minded, collaborative, self-motivated





Smashing Stereotypes

Ayesha Mustafa

Though she started her career working in marketing in the soft drink industry, Ayesha had always had an interest in sustainable fashion. As a child, her grandmother would repurpose old saris to design dresses for her.

Seeing women in Bangladesh working in the handloom industry – using their skills, creativity and business acumen to build sustainable livelihoods – inspired Ayesha.

She launched her fashion brand Everyday Phenomenal using local factories and ethical, environmentally friendly practices.

Innovation is central to her work, although it's something she feels isn't always associated with a creative field like fashion.

She explores new materials such as bamboo and lab-grown materials that use fewer chemicals and less water, among other creative methods for making fashion greener.

[Check out Ayesha's full profile](#) 

Skills you could learn from Ayesha:

Passionate, hard-working, observant





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