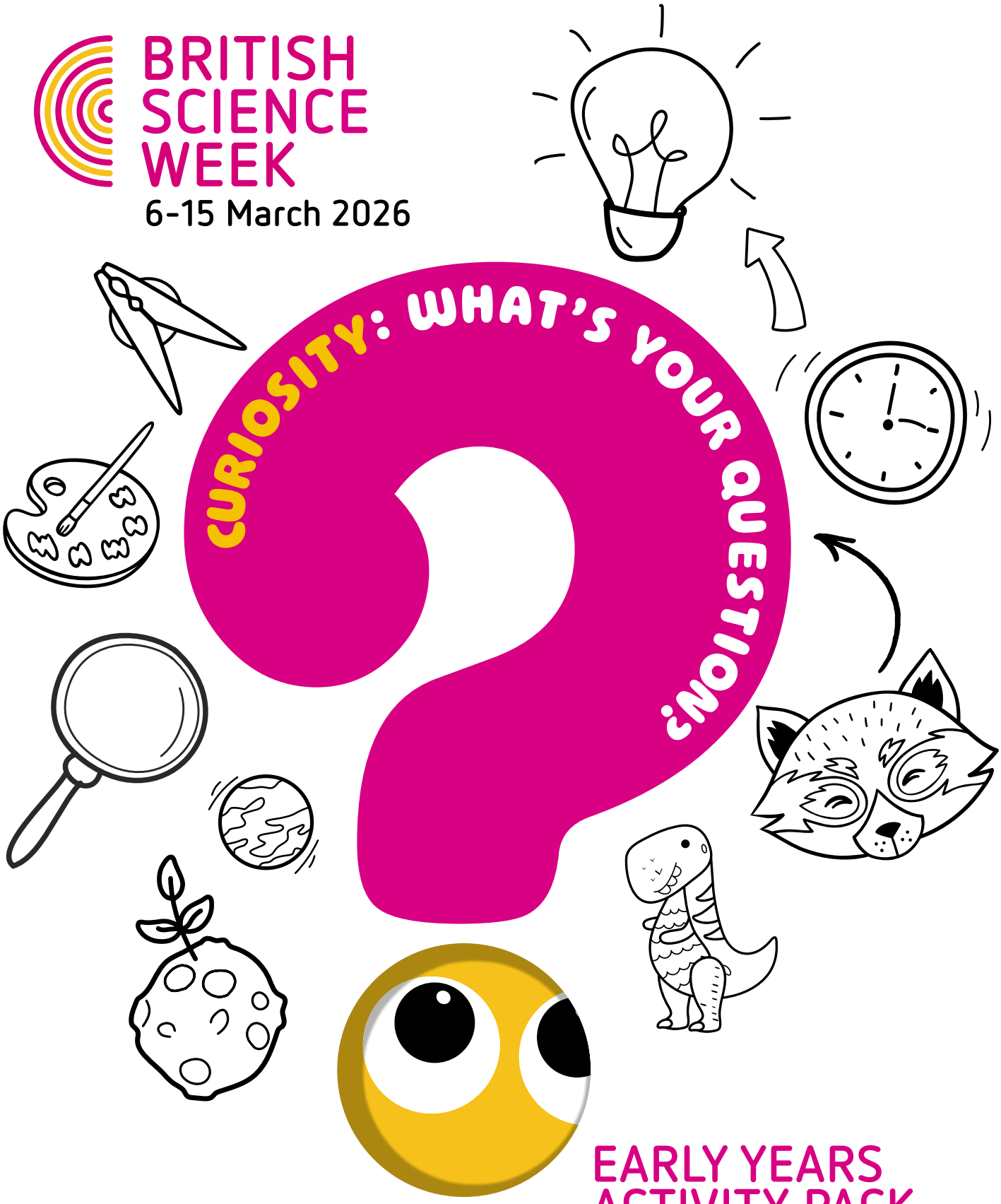
BRITISH SCIENCE WEEK

6-15 March 2026



EARLY YEARS ACTIVITY PACK

A range of activities to be run with children aged 5 and under (approx.)

Delivered by

BRITISH SCIENCE ASSOCIATION

Supported by

UK Research and Innovation

britishscienceweek.org

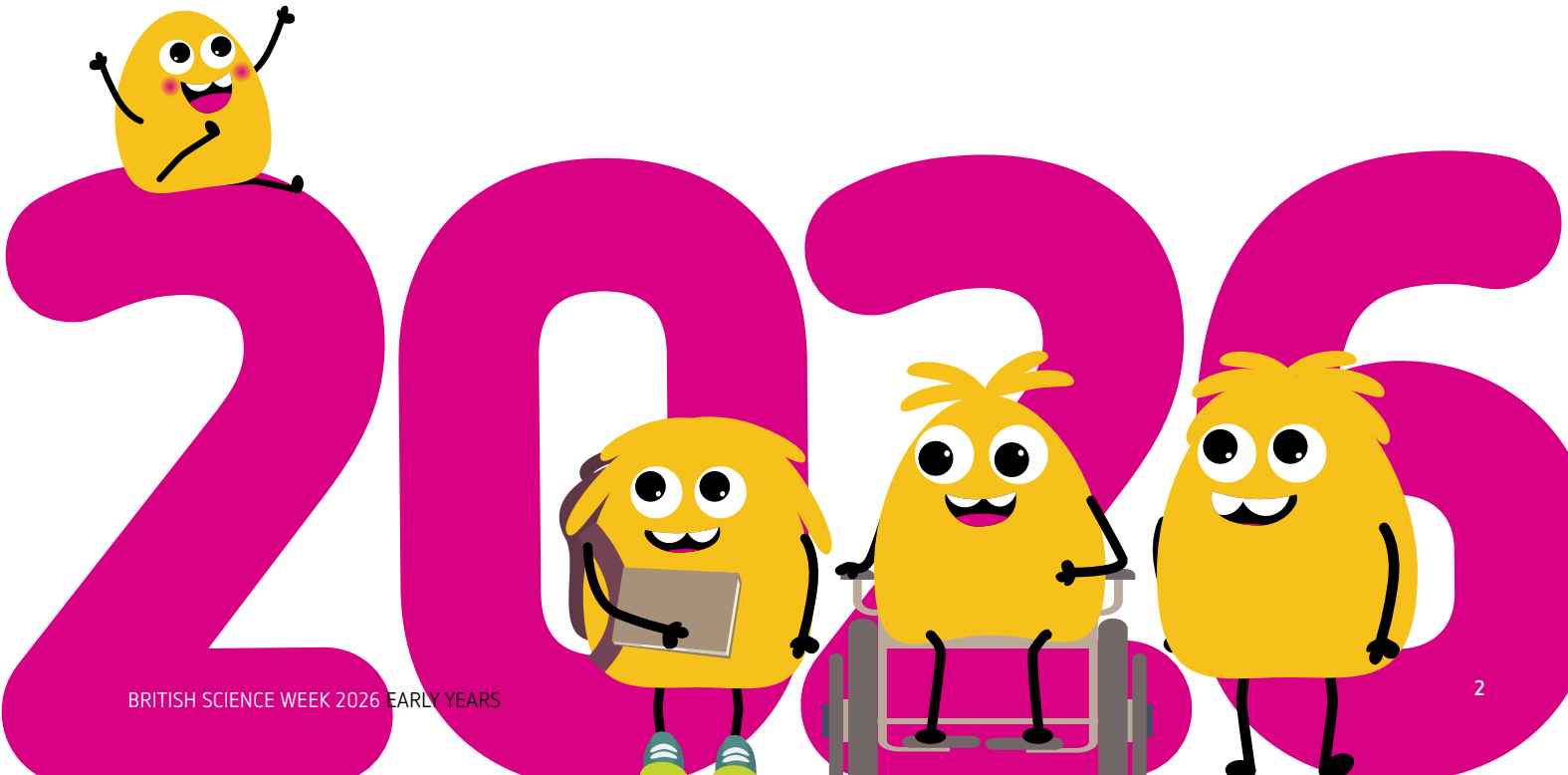
Welcome to the British Science Week 2026 Early Years pack

This activity pack is a **one-stop shop** to support you during British Science Week, and you can use it all year!

When developing this pack, we looked for activities which tap into children's curiosity, promote cross-curricular learning and break down the stereotypes surrounding science, technology, engineering, and maths (STEM). We encourage you to use British Science Week as an opportunity to link STEM to other curriculum subjects, and to your children's own backgrounds, lives, and interests.

We have included activities for children to complete in any setting, whether that is their nursery, school, a club, an organisation, or at home with their families.

You can share your brilliant activities, vlogs, or images on social media. Join the conversation or see what's happening during the Week by tagging British Science Week on **Facebook** and using the hashtag **#BSW26** across all social media platforms.



Contents

This year's theme

Each year there is a new theme for British Science Week and for 2026 it's '**Curiosity: what's your question?**'

This theme is all about putting children and young people in the driver's seat, and encouraging them to find answers to the most pressing questions they have about the world.

Curiosity is at the heart of STEM, driving research and innovation, and anyone can get started this year by simply asking a question. This could relate to a traditional science topic, or it might be about music, sport or architecture – any interest in fact!

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

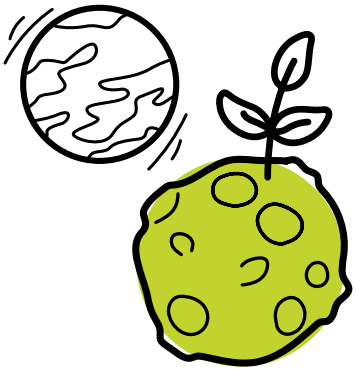
Curious about our poster competition?

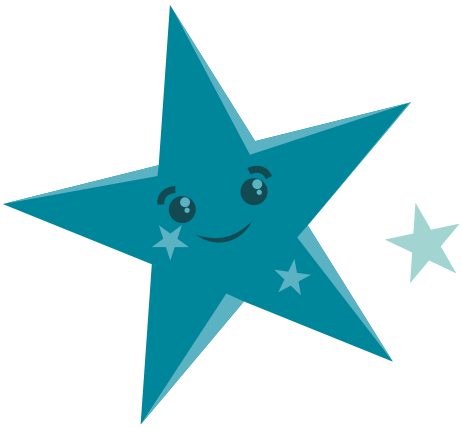
This year's poster competition is a special one!

We're working with a team of scientists and researchers who are curious about what children and young people think makes a 'good' childhood. Find the full competition brief, plus details of how to enter at the back of this activity pack.

- **Talk to children about the types of questions they might want to explore.** Do they have pets at home? Perhaps they're interested in animal behaviour. Or maybe they're curious about the world around them - what questions do they have about their local environment? Or would they like to know something about their favourite toy or snack?

- **If you work in a school or in a nursery setting**, invite a special guest to share their own experience of how curiosity has shaped their life. Are there any STEM professionals local to you, or museums to visit? Maybe someone working in healthcare could talk about how curiosity helps them provide the best care.





CREST Awards

Did you know your children can turn curiosity into achievement and be recognised through certificates from the British Science Association?

CREST brings STEM to life for children and young people of all abilities through hands-on activities and exciting projects. CREST sparks curiosity, builds confidence, and connects children with real-world STEM!

At early years and primary level, CREST challenges typically take between 45 minutes and one hour to run. Children who complete six CREST challenges can earn a Star Award, recognised with a certificate. CREST Passports are also available to download from our online Resource Library allowing you and your children to track their progress as they complete the projects. The Award is given for participation and engagement with the challenges and all children are encouraged to take part. **Why not run them during British Science Week?**

All the CREST activities in this pack can be put towards a Star CREST Award. You may like to adapt or scaffold the challenges, depending on the needs of your children. You can find more CREST Star challenges in our online Resource Library: crestawards.org/resource-library/primary/star.

You'll also find accompanying classroom slides and demo videos, to support you with running the activities. Find out more about how to run CREST Star Awards here: crestawards.org/primary-early-years.

Beyond the Week

Keep the curiosity going beyond British Science Week.

CREST challenges can be perfect activities to run as part of your celebrations for British Science Week, but don't feel that this engagement needs to be limited to the Week; you can turn curiosity into achievement throughout the year with CREST!

Try the Earth and beyond pack, developed in partnership with The Ogden Trust, which is full of fun, colourful characters and space-themed activities to start the smallest scientists off on their STEM journeys. We have also adapted many of our Star challenges, usually suitable for ages five to seven, to also be accessible for children aged three plus. Find them here: crestawards.org/resources/crest-star-collection-for-early-years-and-primary.

The CREST Resource Library is packed with free challenge ideas to inspire children, and you can also choose your own activities and submit them for CREST Awards. As long as the activities meet the CREST criteria at the relevant Award level, their achievements can still be recognised with a certificate to celebrate their hard work.

Find out more: crestawards.org/about-crest.

nustem

Northumbria University NEWCASTLE

Unlocking skills

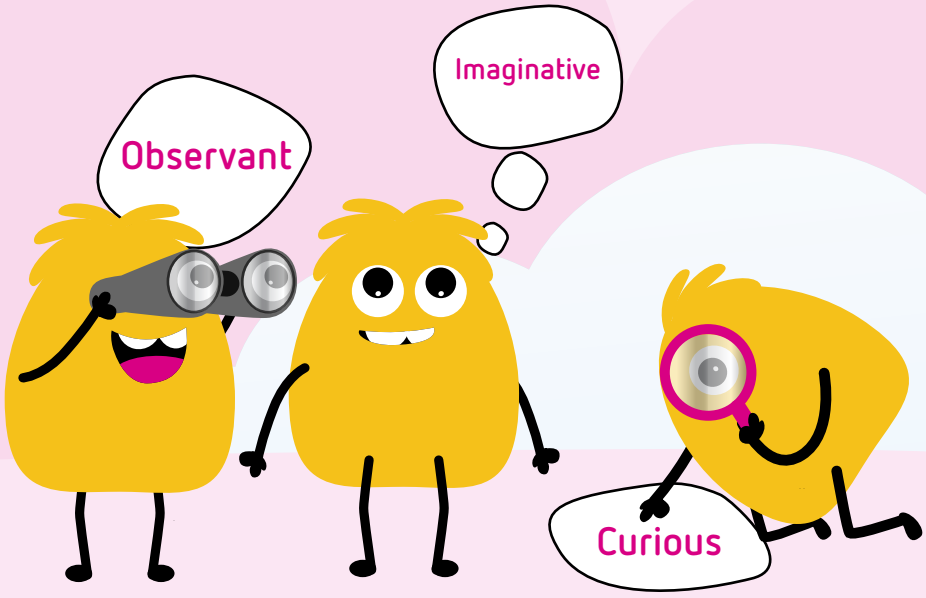
A fantastic way to encourage children to take an interest in STEM is to introduce transferable skills used by those working in STEM-related jobs.

These skills will strengthen positive attitudes and reduce stereotypes of those working in the field.

You could use some of the activities from the 'Play, Be, C' units, developed by NUSTEM at Northumbria University: nustem.uk/eyfs These units aim to promote STEM careers and STEM skills in early years foundational stage (EYFS). In early years, STEM skills might include being collaborative, creative, observant, resilient, or of course, curious!

Look out for the skills unlocked tags for each activity in this pack.

The table opposite has a complete list of skills developed by NUSTEM to use as a talking point or to share with other teachers. As a little bit of motivation, why not award children with a certificate for each STEM skill they demonstrate well during the Week? You can download and print the certificates from britishscienceweek.org/plan-your-activities/marketing-materials.



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

BRITISH SCIENCE WEEK

Primary Science Teaching Trust

HOW ARE ANIMALS SIMILAR AND DIFFERENT?

In this activity, children will develop their observational skills and knowledge of the names and features of living things typically found in parks, gardens, fields, and hedgerows in the UK. Not only will children connect wildlife images, but they will also be making connections between different types of animals, noticing similarities and differences.

20 minutes

Kit list

Scissors

Images of animal faces cut in half along their line of symmetry. You could use your own photos or images freely available from PSTT's EYFS resources: Download here

Instructions

1 Prepare the Wildlife Faces cards in advance:

- Print about 12 large images of animal faces.
- Cut the large images in half (along the line of symmetry). You might want to write the names of the animals on the back of the images.

2 Mix the cards and show them to the children.

3 Ask children to match the halves of the faces and to identify the animals.

4 Encourage children to look closely at the features of the animals, e.g. the shape of the head, the colour of the eyes, feathers and fur.

What questions do they have now? What are the animals' body parts called? How are the animals similar and different to each other?

Next steps

More Early Years wildlife resources can be freely downloaded from the PSTT's Play, Observe & Ask webpage: pstt.org.uk/resources/curriculum-materials/eyfs-science.

If you're interested in live Early Years and Primary investigations during British Science Week, join a PSTT Online Science Day: pstt.org.uk/events/online-science-days-2026/.

At home

Children could make pictures of animals using natural materials found outside (e.g. sticks or leaves) and describe their features to friends or family members.

Career options

- Zoologist - someone who studies animals and their environments.
- Wildlife biologist - someone who focuses on animal behaviors and interactions in the wild.

Skills unlocked

Observant, curious

BRITISH SCIENCE WEEK

WHERE DID DINOSAURS LIVE?

All living things are adapted to their environments - this helps them journey and survive in their natural habitat. In this activity, children will create dinosaurs and decide what environment they would thrive in.

30 minutes

Kit list

Modelling clay

Modelling tools

Materials to make the habitat
e.g. sticks, twigs, leaves, rocks

Pictures of dinosaurs

Instructions

1. Introduce the children to the topic by showing them images of dinosaurs. Consider making some out of clay as examples.
2. Explain different adaptations, such as wings, claws or flippers.
3. Get the children to create their own dinosaurs using the modelling clay.
4. Get the children to draw an image of their dinosaur journeying through the environment they think it would live in. Can they make a model of the habitat using different natural materials? What questions do they have now? How could dinosaurs camouflage themselves? How would the adaptations help them? What did dinosaurs eat?

Watch out

- Make sure to supervise the children when using modelling tools.
- Make sure to use child-friendly modelling clay.

Next steps

Look at new findings about dinosaurs and maybe add feathers or texture to your creations. There are more playful activities to inspire children to become creative scientists at okido.com/free-resources-new.

At home

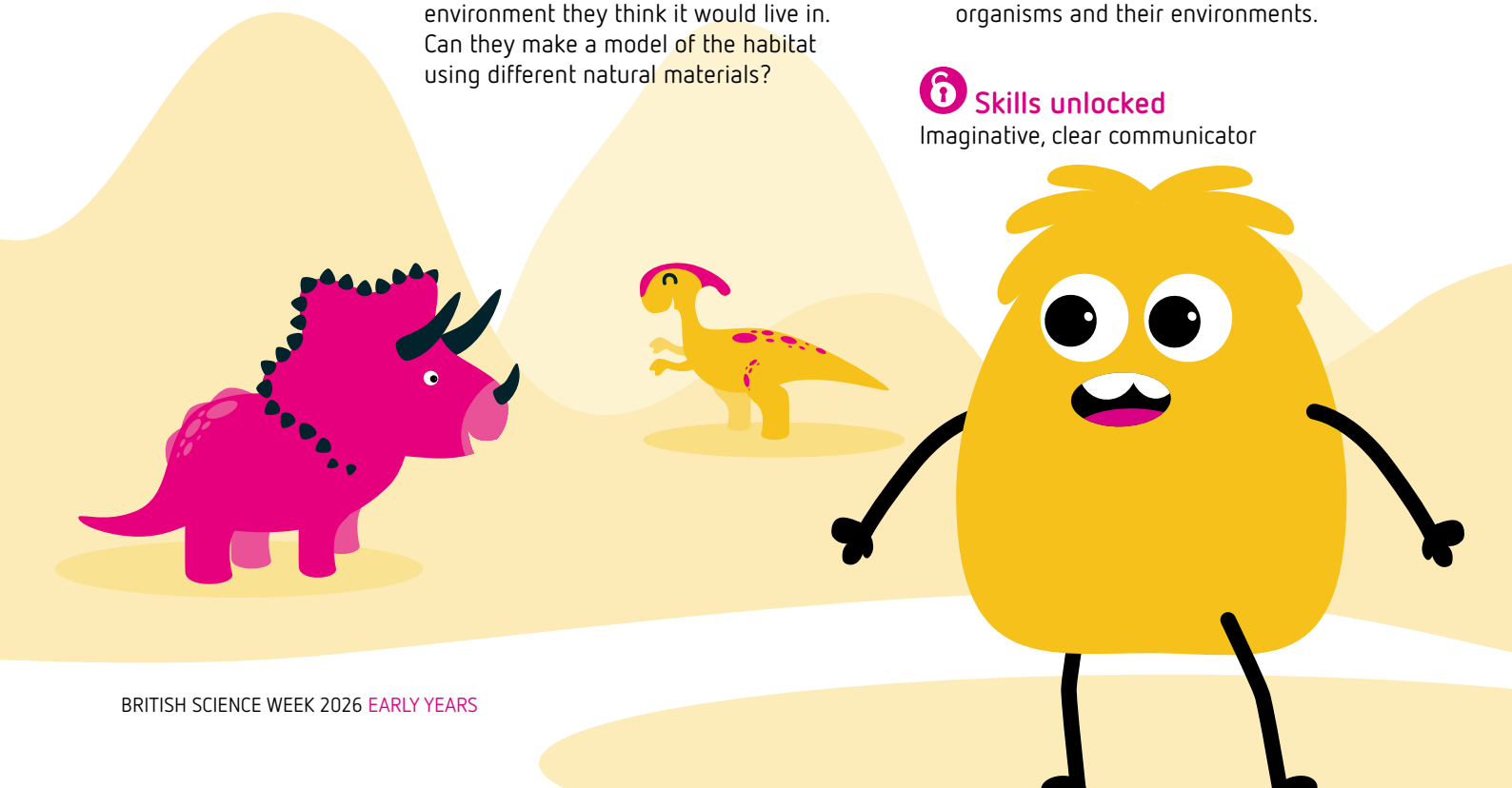
Read some story books about dinosaurs together. Look at the pictures and encourage children to describe what they can see. Are the dinosaurs suited to where they live?

Career options

- Palaeontologist - someone who studies dinosaurs.
- Biologist - someone who studies living organisms and their environments.

Skills unlocked

Imaginative, clear communicator



BRITISH SCIENCE WEEK

COULD WE GROW FOOD ON THE MOON?

This activity is designed to get children thinking about the conditions plants need to grow, and whether or not those conditions exist in outer space. They'll compare cress seed growth on Earth and a Moon-like environment.

45 mins plus a week to let the seeds grow

Kit list

- Bowls of warm water and iced water
- Tubs for planting
- Soil
- Cress seeds
- Pipettes, squeezy bottles or another small watering device
- Access to a freezer

VIDEO AVAILABLE

Instructions

1. Ask the children to consider how the conditions on the Moon are different to the conditions on Earth. Use iced water and warm water to help the children 'feel' what differences in temperature are. Explain that the temperature on the Moon gets much hotter and much colder than it does on Earth. Do they think plants could grow there?
2. Ask each child to fill a pot almost to the top with soil. They will scatter a few seeds on top, and cover them with a light layer of soil. The children will then water the tubs.
3. Half of the pots should be stored in the freezer and the other half on a windowsill where the children can see them. Remember to water your seeds every few days.
4. Do the children think the seeds will grow? What will they look like? Record their answers and revisit them when the seeds have developed into seedlings.

What questions do they have now? What do plants need to grow? Do all plants like to grow in the same sort of places? What do astronauts eat in space?

Watch out

- Make sure children wash their hands after touching soil.
- Ensure the children don't put seeds or soil in their mouths.
- Beware of any vegetable allergies.

Next steps

This activity is taken from Earth and beyond, a pack of CREST Star early years challenges.

Try some of the other activities with your children! You can find out more about CREST Star and download the resources you need at: crestawards.org/resource-library/primary/star/?Ages=3&pageIndex=1.

Have your children complete six activities to get an Award. If you want to run CREST Awards, visit the website for advice on how to get started: crestawards.org/about-crest/how-to-run.

At home

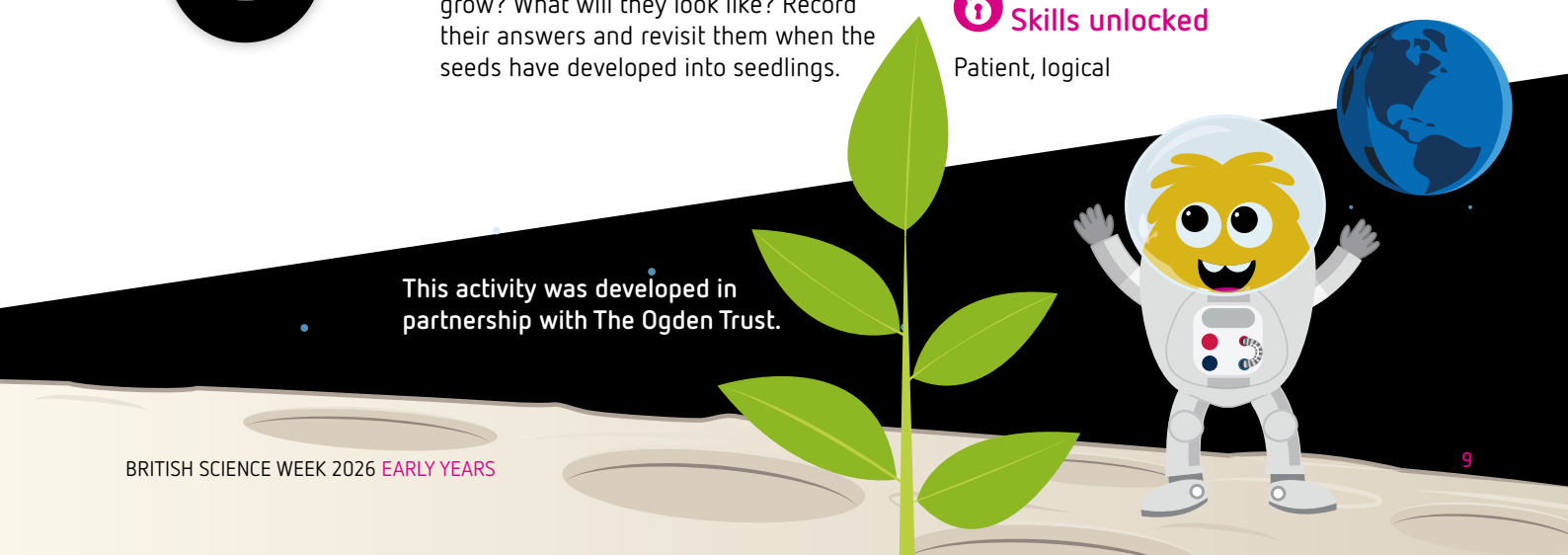
Children could experiment more with growing seeds to find the ideal conditions. How much do they need to be watered?

Career options

Vegetable farmer - someone who grows plants and crops for people and animals to eat.

Skills unlocked

Patient, logical



This activity was developed in partnership with The Ogden Trust.

BRITISH SCIENCE WEEK

nsead

WHAT HAPPENS WHEN CRAYONS GET WARM?

In this activity, children will explore how a solid changes state when it gets warm. They will see the different marks and textures they can make when the wax is a solid stick, and when it gets softer and more paint-like.

30 minutes

Kit list

- Wax crayons in different colours
- Plastic food bags and a rolling pin or pestle
- Heavy paper – sugar or cartridge paper
- Greaseproof paper
- Hairdryer
- Glue sticks and paint brushes

Instructions

Children can work individually or in groups or pairs to make wavy wax pictures, using gentle heat to make the wax behave like paint.

1. Make a collection of broken wax crayons. Ask the children to separate them into colours.
2. Using the wax crayon pieces, ask the children to draw shapes on a sheet of A3 paper – sugar paper or cartridge paper is best. Use a different colour for each shape.
3. Crush the wax crayon pieces – put each colour into a separate plastic bag and bash with a rolling pin or a pestle until you have a bag of coloured wax 'crumbs' (this is a job best done by the adult). Empty the wax crumbs into bowls.
4. The children should then sprinkle the crumbs on their drawings, filling in the shapes with the right colour.
5. Melt the wax. Either leave the drawings in a warm, sunny spot or on a warm radiator and wait for the wax to melt and soften, or place a piece of greaseproof paper over each drawing, and gently heat the drawings with a hairdryer until the wax melts. (Adults will need to do this.)
6. When the wax melts slightly, the children can use glue spreaders and brushes to make marks in the wax. As the wax starts to solidify they can warm their paper again and watch what happens.

What questions do they have now? Where could we leave the pictures to melt the wax? How does the wax change when it gets warm? What does it do on the paper?

Watch out

- Inspect and test the hairdryer beforehand to check if it is safe to use.
- An adult should use the hairdryer. Take care that the wax 'crumbs' don't fly away – use direct heat from above.
- If the wax gets very warm, take care that little fingers don't get coated in runny wax.

Next steps

You can find more activities and inspiration for exploring materials on the NSEAD website.

At home

Can children find other things at home that change state when they get warmer? They could draw or paint a picture to show what happens!

Career options

Artist - someone who uses and changes materials like wax to make art.

Skills unlocked

Patient, creative

BRITISH SCIENCE WEEK

CAN WE MAKE DIRTY WATER CLEAN?

This activity will show children how to clean water of impurities. They'll watch a plastic bottle water filter in action and learn about the importance of clean water.

30 minutes

Kit list

- Big plastic bottle- cut in half
- Plastic cups/ containers
- Soil
- Pebbles
- Kitchen roll or cotton wool
- Buttons
- Sand
- Cloth
- Marbles
- Magazines or newspapers
- Pasta shapes

Instructions

1. Discuss with the children how they use clean water in their daily lives.
2. Now make some dirty water. Take two containers and fill both with tap water. Add soil, sand or mud to both containers. Use one container with dirty water to filter and keep the other to compare at the end.
3. Put the top half of the big plastic bottle upside down into the bottom half.
4. Begin by placing a layer in the bottle with cloth, cotton wool or kitchen roll. Then layer with smaller things, like buttons, marbles and pebbles.
5. Pour your dirty water into the bottle.
6. Watch what happens.

What questions do they have now? Does the water that comes out of the filter look cleaner? Where did the dirt go? Does the clean water look the same as water that comes out the tap?

Watch out

- Do not drink water filtered from this activity because the water is not safe to drink.
- Be sure to collect soil that is not contaminated.
- Make sure items like pebbles, buttons and marbles are large enough not to be a choking hazard.

Next steps

There are more playful activities to inspire children to become creative scientists at okido.com/free-resources-new.

At home

Ask children to think about all the places they can find water at home. Which water is clean and safe to use?

Use the filtered water to water plants or wash your hands but don't drink it!

Career options

- Water treatment engineer - someone who designs and maintains systems that purify water.
- Marine biologist - someone who studies the life and ecosystems in the ocean.

Skills unlocked

Patient, observant

BRITISH SCIENCE WEEK

WHICH PEGS ARE THE BEST AT KEEPING WASHING ON THE LINE?

This activity is designed to get children thinking about the grip and strength of pegs made with different materials and using different mechanisms. The activity works best when run with small groups.

45 minutes

Kit list

- A length of washing line
- Different types of clothes pegs
- Socks
- Sand, large marbles or pebbles to weigh socks down
- If using sand, small cups for filling
- Dustpan & brush

VIDEO AVAILABLE

Instructions

1. Talk through the question and the idea of testing the pegs by adding sand, large marbles or pebbles to socks on a washing line.
2. Let the children think of other ways of testing the clothes pegs too.
3. If you're using pebbles of different sizes, number them and use them in the same order each time.
4. Fix the washing line at a height the children can reach. Support them to add sand/marbles/pebbles to socks attached with different types of pegs until they fall, counting how many units of weight each peg can hold.
5. Talk about what they have found out. Which pegs worked best?
6. Children could show their findings by drawing a picture or poster.

What questions do they have now? Perhaps if washing dries faster on a windy day, or if some clothes dry more quickly than others. Talk about how you could find out.

Watch out

- Remind children not to put the sand, marbles or pebbles in their mouths.
- Ensure the marbles and pebbles are large enough not to be choking hazards.
- Tie the line high enough that children can't run into it, but low enough that the socks don't have far to fall.
- Supervise children handling pegs with spring hinges to avoid fingers getting caught.
- Ensure children wash their hands after handling sand.

Next steps

This activity is taken from Peggy Problem, one of the CREST Star for early years and primary challenges.

Try some of the other activities with your children! You can find out more about CREST Star and download the resources you need at: crestawards.org/resource-library/primary/star.

Have your children complete six activities to get an Award! If you want to run CREST Awards visit the website for advice on how to get started: crestawards.org/about-crest/how-to-run.

At home

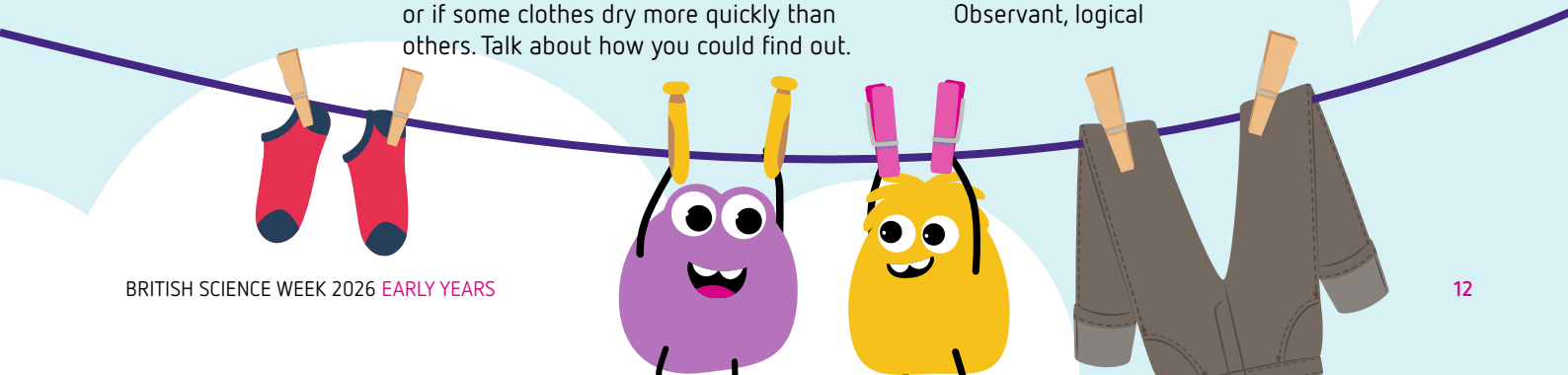
Children can conduct versions of the experiment at home, perhaps outside to see if windy conditions put pegs to the test.

Career options

Product designer - someone who thinks about things that we use and works out how to make them better.

Skills unlocked

Observant, logical



BRITISH SCIENCE WEEK

HOW MUCH WILL I CHANGE IN A YEAR?

A lot can change for children in a year. In this activity, they will make a time capsule to be opened in 12 months' time, to see how different things are compared to today.

45 minutes

Watch out

- Don't leave children unsupervised with scissors or glass jars.

Next steps

There are more playful activities to inspire children to become creative scientists at okido.com/free-resources-new.

Kit list

- **A large jar, or plastic container, per child**
- **Paper**
- **Pens**
- **Colouring pencils or pens**
- **Anything else the children might want to include in the capsule**
  e.g. a newspaper, toys etc

Instructions

1. Get the children to write things about themselves on a piece of paper. Include information such as names, ages, height, hand size, their favourite food, their favourite subject and anything else.
2. Get children to draw a picture of themselves with their family, carers or friends.
3. Children could also draw around their hand on a piece of paper.
4. Fold all the pieces of paper up and put them in the jar.
5. Give the children a piece of string and a small piece of cardboard and get them to write today's date on it.
6. Help the children to attach the string and cardboard to the jar.
7. Find somewhere to keep the jars until next year.

What questions do they have now? How much will they grow in a year? Will their favourite subject and food have changed? What else could they leave in a time capsule if they were leaving it even longer?

At home

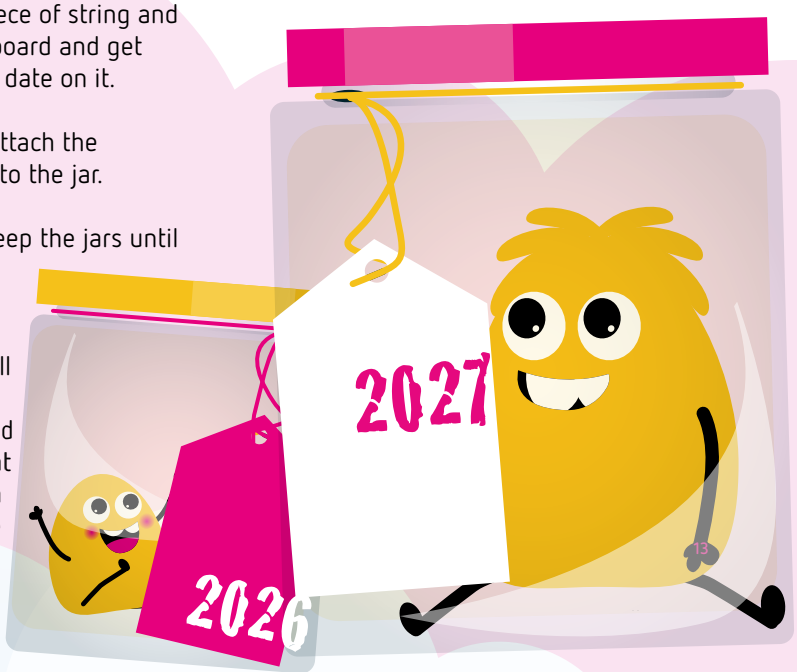
Support children to make a time capsule at home and include information about each member of the family. What might change and what might stay the same over the year ahead?

Career options

Archivist - someone who preserves historical artifacts so we can see how life changes over many years.

Skills unlocked

Patient, self-motivated



BRITISH SCIENCE WEEK POSTER COMPETITION

This year, the British Science Week poster competition is taking curiosity to the next level! We're working with a team of scientists who are curious about what children and young people think makes a 'good' childhood. We will all be thinking together about the same question. You can read more about this research on page 15, but if you're keen to get started here's how your children can enter...

Instructions

Introduce the poster competition theme using the following question:

What makes children's lives good?

To get children thinking about this question, you could talk together using some of these prompts:

- What do you like about being a child?
- Do you have any favourite people, objects or places?
- What do your friends enjoy? Ask children in your class or family.
- You might like to think about people, places, things, occasions, interests, activities.

'Childhood' is a broad phase of life (from 0-18!), so we would encourage you to focus their ideas on children who are the same age as them, although they may also bring in thoughts about friends/siblings, which is fine. There are some additional resources on pages 16-17 that you can use to help children consider some of these prompts.

Make your poster

Once children have had the opportunity to explore the question and collect their thoughts, it's time for them to respond by creating their own poster to present their ideas. Posters must be A4 or A3 in size and you'll need to be able to supply 2D image of them (e.g. photo, jpeg or PDF file) so they can be sent to us online for judging. Children can use materials such as pencils, paints, crayons, collage and pens to create their posters. Digitally created posters are also allowed. Shortlisted posters are often shared publicly, so please don't include any personally identifiable information such as names or photos of real people.

Send us your posters

Once the children's posters are complete, schools should select the best five and submit them for a chance of winning an array of prizes. For more details, along with the full set of poster competition rules and tips, check out our website: **britishscienceweek.org/poster-competition**.

BRITISH SCIENCE WEEK POSTER COMPETITION

What is the research behind this year's poster competition?

This year the British Science Week poster competition is linked to a real scientific research question. The UK government is thinking about how to build a positive future for children. They are keen to understand children and young people's own ideas on this, so they are asking:

What are children and young people's visions for a good/ positive childhood?

The British Science Association and the NUSTEM team at Northumbria University have teamed up with the Government Office for Science to help explore this question.

How will the poster competition entries be used?

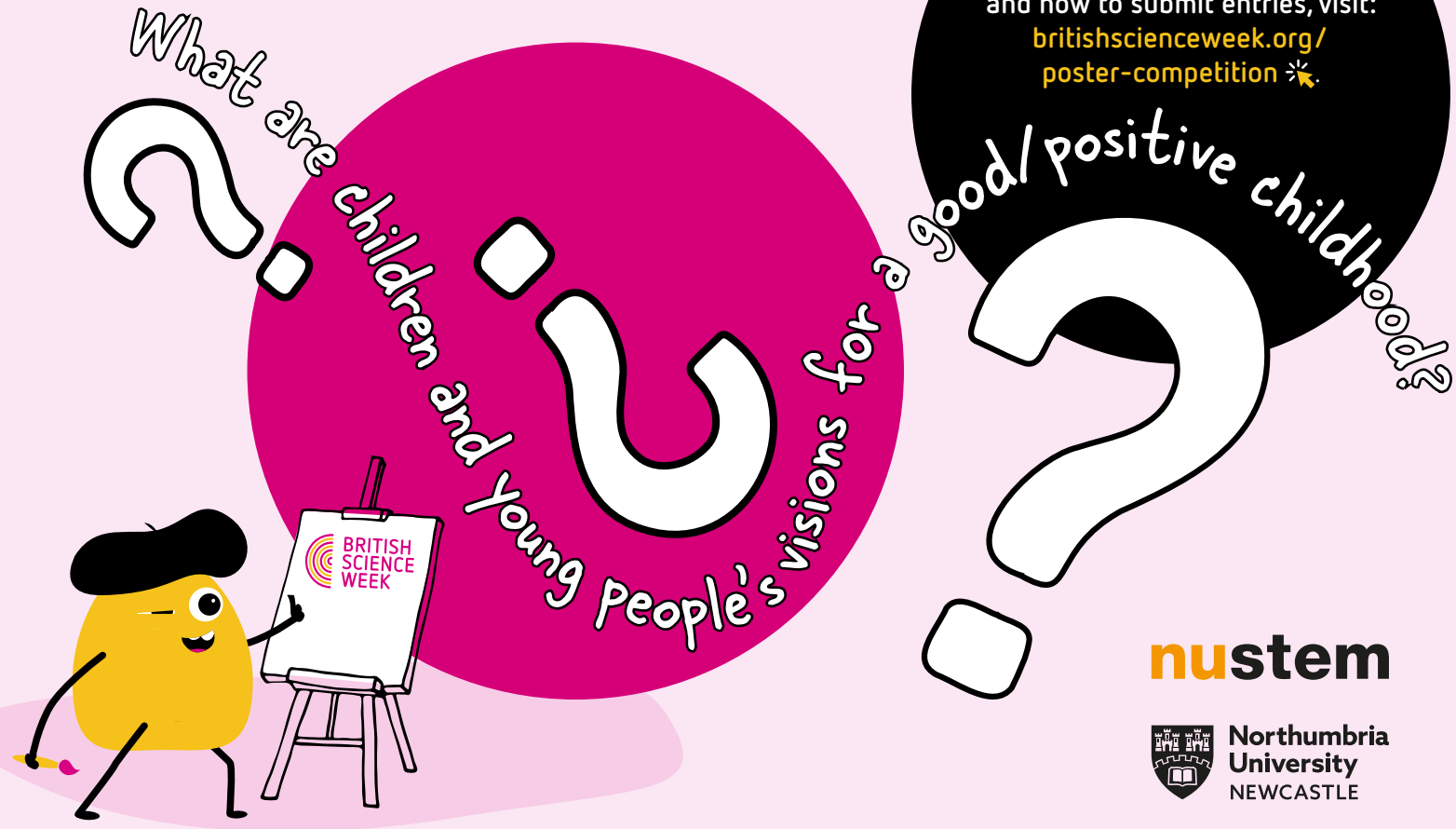
Once the competition is closed for entries, all the submitted posters will be considered by a team of judges. We'll also collect some data, like where in the UK the posters are from, the age of the entrants, and the themes that they reflect. This data will be anonymised before being analysed.

The team at NUSTEM will also look in detail at some of the posters, to gather further ideas and insights based on the children and young people's entries. They will then be able to look for patterns and trends as they analyse the results.

What will happen to the findings of the research?

Once the posters have been analysed, the results will be published in a report. As soon as this is available, we will share the results with everyone who takes part in the competition so you can see the outcomes and insights – it should be a fascinating piece of research!

To find out more about the competition, the full set of rules, and how to submit entries, visit: britishscienceweek.org/poster-competition.



nustem

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POSTER COMPETITION SUPPORTING RESOURCES

What makes children's lives good?

Give your children a chance to think carefully about the main question before they create their posters. We are most interested in their own original ideas, but some initial discussion and thinking could help them to develop their responses. You could use the prompts from the competition brief and share ideas together or give children a chance to speak to each other about the question. Use your discretion when talking about 'good' childhoods, being conscious of any children who may not feel positive about their lives.

Create an image bank to generate thinking and discussion

You could create an image bank to support discussion. Make sure that your collection of images includes a wide variety of pictures for children to consider – you could use online picture banks, accessible symbols, as well as printed images from magazines, leaflets and brochures.

You could group images under the headings below:

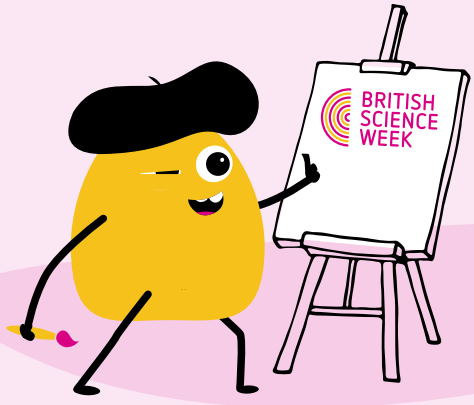
Once children have developed their own ideas, they could use the template on the next page to record their thinking, before they then go on to create their posters.

Early years poster competition resource
To support children with thinking and discussion ahead of creating their entries

POSTER COMPETITION SUPPORTING RESOURCES

What makes children's lives good?

Children can record their ideas on this sheet using simple pictures or words, before going on to create their posters.



Early years poster competition resource
To support children with thinking and discussion ahead of creating their entries

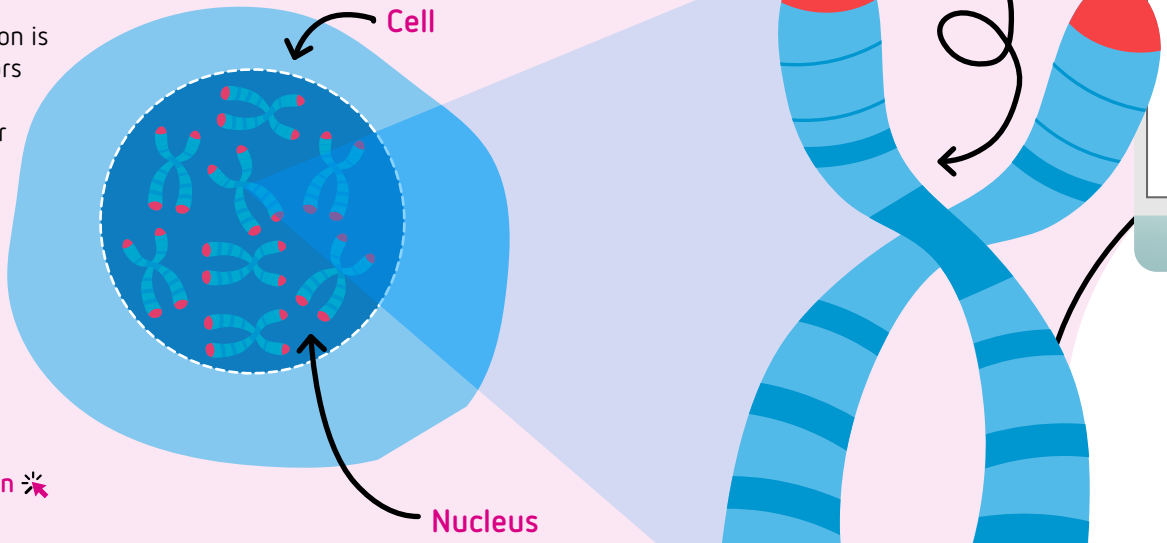
INTEGRATING GENOMICS INTO STUDENT LEARNING

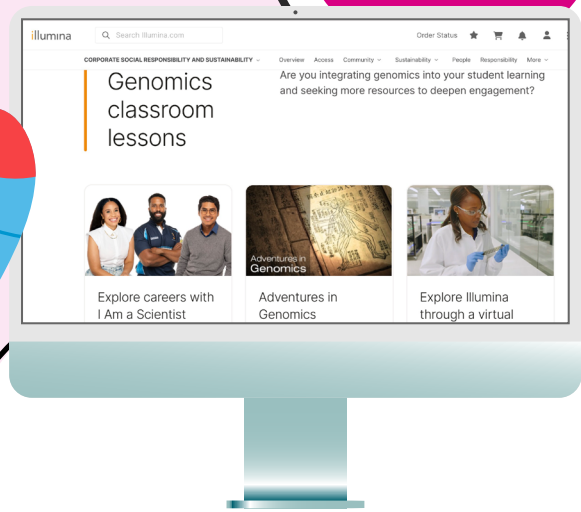
Take pupils on a journey inside the world of the genome – the basis of all life on Earth.

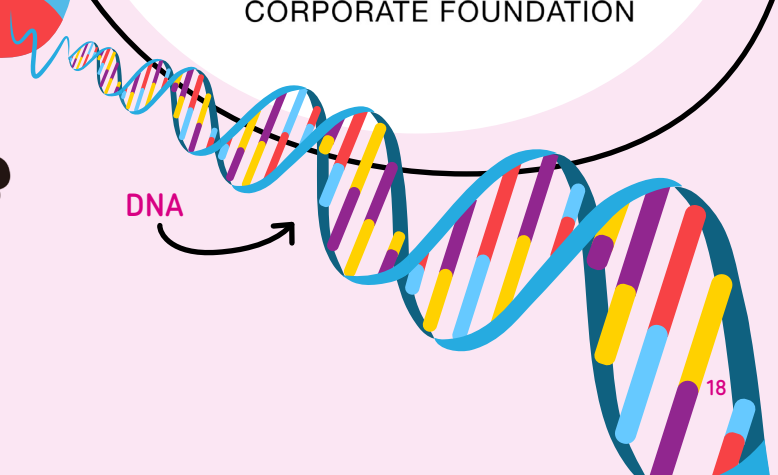
Illumina Corporate Foundation is focused on helping educators bring genomics into classrooms with resources for all ages, as well as helping patients understand the hope genomics represents in rare and undiagnosed genetic diseases and cancer.

Discover the exciting ways that genomics is innovating our world through Illumina's free classroom resources.

Visit Illumina STEM Education to find out more.







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