



**Engage**

Teacher Network

# CREST SuperStar Kit Box Drop-in support session

March 2025

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In partnership with





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# Housekeeping

- Thank you for joining us!
- Please switch your cameras on if you're happy and able to.
- Feel free to join in with any thoughts and questions, or you can leave comments and queries in the chat.





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## What we'll cover in today's session

- Timeline and CREST kit box aims
- A guide to the supporting resources
- A look at some SuperStar projects in more detail
- Share your experience so far / Q & A





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## Timeline for this academic year

**Spring Term 2 2025** – Drop-in support webinar – Tuesday 25 March

**Summer Term 1 2025** – Drop-in support webinar – Thursday 15 May

**Summer Term 2 2025** – Post-activity evaluation





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## CREST SuperStar kit boxes - aims

- Participation and inclusion for all children (not just an enrichment activity!)
- Children given the opportunity to complete **at least 6 projects**, allowing them to gain their CREST Award and certificate
- Family involvement (e.g. newsletter, parent volunteers, celebration assembly)
- Use of the supporting resources (webpage, demo videos, drop-in webinar sessions)
- Evaluation, to capture successes and highlight areas for development
- Resources can be shared with colleagues and re-used next year!





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# CREST SuperStar kit box

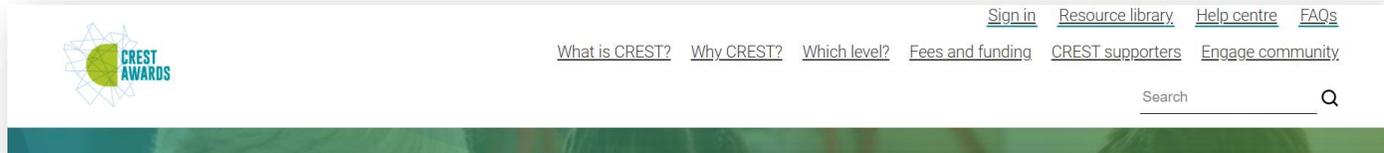
*Supporting resources*





# Supporting webpage

<https://www.crestawards.org/kit-box/superstar>



## CREST SuperStar kit boxes

You have been directed to this page because you are a recipient of a support to teachers to run CREST Award activities by including all the...  
This support page includes digital copies of your resources, additional...  
We thank our generous funders The Horners' Education Charity and... a free CREST kit box to your school.

## Digital copies of the printed resources in your kit box

For displaying on your screen or for printing additional copies:

[Welcome letter](#)

[SuperStar passport](#)

[Activity cards and organiser's cards](#) for all the...

Additional certificates can be ordered on the CREST... kit box.

✓ Your kit box activities:



## CREST Activity video demonstrations



Crafty rafts



Playground games



Fantastic fingerprints



Investigating ink



Super spinners



Under your feet



Warm or cold



Windy ways



# Ordering additional CREST certificates

Once your pupils have completed **at least 6 of the activities**, they can receive their CREST Award certificate!



- Your kit box contains enough CREST SuperStar certificates for a class of 30 but we know that some settings with larger cohorts may require extra copies.
- These can be ordered from our online platform which is linked below and on the SuperStar kit box webpage.



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# CREST SuperStar projects

*A closer look*

# The 8 CREST activities in your kit box:

**CREST AWARDS | SUPERSTAR**

## Crafty Rafts

Organiser's Card

**About the activity**

This activity is designed to get children designing and making a raft that floats. The children have been asked to design a raft. The Cub Scouts and Brownies of Startown are having a problem making a raft that floats.

Through this activity you will support your group to:

- Design and make a model raft using just a piece of paper
- Conduct a fair test to see which raft design can hold the most weight
- Record and present their results.

**Kit list**

- Plastic tanks or bottles of water - 1 per group
- A square sheet of paper (20 cm x 20 cm) or A4 - 6 per group plus spare sheets
- Foil (optional as an alternative to paper)
- A set of marbles all the same size - 30 per group plus lots of spares
- Sellotape, masking tape, staples, or other fasteners - provide the same for each group
- Waterproof coverings if you are working on wooden desks

**CREST AWARDS | SUPERSTAR**

## Fantastic Fingerprints

Organiser's Card

**About the activity**

This activity is designed to get children thinking about fingerprints. The investigators have been given a news article about fingerprints. Teachers at Startown Primary School are wondering if they can use fingerprints to identify the students. Are the students' fingerprints that different?

Through this activity you will support your group to:

- Collect their fingerprints
- Compare different fingerprints and identify patterns
- Record and present their results

**Kit list**

- Dust (flour, chalk, talc, cocoa powder)
- Soft pencils
- Blank paper (white paper for pencil and cocoa prints; black paper for white powder prints)
- Other things to investigate e.g. oil or cream (leave a print on DFT film or plastic, not permanent markers etc.)
- Sellotape
- Scissors
- Hand lenses or magnifying glasses

**What to do**

1. Introduce the activity using the news article. Ask them if they have taken a fingerprint before.
2. Draw children's attention to the different patterns found in fingerprints (loops, arches and whorls).

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## Investigating Ink

Organiser's Card

**About the activity**

This activity is designed to get children thinking about how to identify different inks using chromatography.

Lady Felicity Falmer's prize winning Cocker Spaniel has been dog napped and a note has been sent asking for a ransom. Can the investigators work out which one of the four suspects wrote the note based on the type of ink used?

Through this activity you will support your group to:

- Equipment with different ink pens using chromatography
- Design an experiment to help them identify the pen used to write a note
- Share their conclusion and present evidence to support it.

**Kit list**

- Absorbent paper e.g. blotting paper, white filter paper, white coffee filters
- Four pens (not pens) with black water-soluble ink inside, labelled with the suspects' names (it's better to have a set per group)
- Additional pen or black ink for the initial exploration - you must check that the colour separates
- Random note (written using one of the pens prior to the activity). Don't worry if it spreads a bit.
- Scissors or cuts
- Scissors
- Extra non-permanent marker pens in various colours
- Thin paper for wanted posters

**CREST AWARDS | SUPERSTAR**

## Playground Games

Organiser's Card

**About the activity**

This activity is designed to get children thinking about disabilities and creating games that are accessible and inclusive. Comic and Gem's friend Iyla has limited vision, but would like to join in on their games. Can the investigators find some accessible games?

Through this activity you will support your group to:

- Learn about the effects of limited vision.
- Design games taking into account the needs of different players.
- Evaluate their games.

**Kit list**

- Games equipment such as bean bags, balls, cones, poles etc.
- Balls and other noise makers
- Torches and other lights
- Ear plugs
- Low vision simulators (there is a template you can use following the Activity Card)

**What to do**

1. Read the ACTIVITY CARD to familiarise yourself.
2. Help children to collect resources.

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## Super Spinners

Organiser's Card

**About the activity**

This activity is designed to get the children thinking about helicopter blades, and how different blade sizes change the way a paper spinner falls.

Mr Spurgeon arrived for work in a helicopter, attaching the students. He's testing which helicopter is best. Can the students help to find out if a longer blade design will make a difference?

Through this activity you will support your group to:

- Think about what makes paper fall in different ways
- Test whether a paper spinner falls in different ways with different blade sizes
- Share their ideas with the group

**Kit list**

To make the spinners they will need:

- A4 Paper
- 30 cm ruler
- Metre ruler
- Paperclips or Blu-Tack
- Scissors
- 1 ready-made spinner to show the children how they work
- Large and small templates for spinners (if you think children will need them) - see following page
- Staple/watches
- Other types of paper and card

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## Under Your Feet

Organiser's Card

**About the activity**

This activity is designed to get children thinking creatively about nature. Stella Storyteller is struggling for inspiration for her latest storybook. It's the story of two special children who wake up one morning and find themselves the size of ants. Can the children help to find a challenge for the trapped duo?

Through this activity you will support your group to:

- Think about the world around them from a different perspective
- Investigate and explore what living things they can find outdoors
- Record their thoughts and ideas and present them to share with the group

**Kit list**

To test temperature change of water in different sized bottles they will need:

- Cut out 'feet' for children to record their results on - you might want to provide a template as children's feet are usually too small
- Cut out 'holes' for children to place on the ground and look through
- Hand held magnifiers
- Identification charts or books
- Drawing materials - thin coloured markers or pencils etc.
- Digital camera (optional)

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## Warm or Cold

Organiser's Card

**About the activity**

This activity is designed to get children thinking about warm and cold-blooded creatures. Dina Diggs needs some help working out whether dinosaurs were cold-blooded or not. Can the children work it out by doing some tests?

Through this activity you will support your group to:

- Explore whether dinosaurs were warm or cold-blooded
- Investigate the difference size makes to how quickly things cool down
- Complete a grid to compare warm and cold-blooded theories.
- Design a dinosaur fact sheet.

**Kit list**

To test temperature change of water in different sized bottles they will need:

- Different sized plastic bottles with lids
- Measuring jugs
- Warm water
- Thermometer and stop watch or data logger

**What to do**

1. Read the ACTIVITY CARD to familiarise yourself with the activity.
2. Check the kit list and ensure you have the correct resources.
3. Set the scene by discussing the story with the children.
4. Help children gather the resources.
5. Encourage children to talk together about their ideas and carry out their own investigations.
6. Discuss the differences between warm-blooded and cold-blooded animals.
7. Encourage children to read 'scientist' arguments for and against dinosaurs being cold-blooded.
8. Help children to recognise that more tests may be needed to reach a firm conclusion.

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## Windy Ways

Organiser's Card

**About the activity**

This activity is designed to get children thinking about wind patterns and directions. Bubbles provide an interesting and engaging way for children to investigate wind speed and direction. They can make simple measurements of the time it takes for bubbles to travel a set distance to get wind speed, and can plot the movement of bubbles to get the wind direction.

The children are asked to read a new article: Startown Primary School has been invited by an organisation called OPAL to take part in an exciting new weather survey. It has asked the school to use if they can find out about the wind using bubbles! Can they help?

Through this activity you will support your group to:

- Think about how the wind behaves
- Investigate wind speed and direction using bubbles
- Record and present their results to the group

**Kit list**

- Bubble blowers and solution
- Pops or pencils
- Paper
- Compasses
- Timers
- Measuring tapes or sticks

**What to do**

1. Introduce the activity using the story. Set the scene by discussing the weather and how it is measured and get the children to think about their own experiences of things blowing in the wind (balloons, garden hoses etc.)
2. Give out activity cards and equipment to the children. Let them practice blowing bubbles.
3. Explain that they will be trying to measure wind direction and the speed that the bubbles travel.
4. Encourage children to discuss their ideas and how they will use the resources to carry out their investigations.
5. Support children to conduct their investigation and make their own records of their results. Go outside to carry out the investigation. Make sure groups are not too close together.
6. Ask the children to present their findings to the rest of the group. They can be as creative in their presentation as they want. They could record their findings by making a chart or presentation.



Watch the demo video here:  
[www.crestawards.org/kit-box/superstar](http://www.crestawards.org/kit-box/superstar)

# Crafty Rafts

Can be run in small groups or with a whole class (groups of 3)

This activity is designed to get children designing and making a raft that floats!

- Small inflatable pool
- Foil
- Marbles





Watch the demo video here:  
[www.crestawards.org/kit-box/superstar](http://www.crestawards.org/kit-box/superstar)

# Fantastic Fingerprints

Can be run in small groups or with a whole class (groups of 3)

This activity is designed to get children thinking about fingerprints.

- Cocoa powder
- Soft pencils
- Magnifiers





Watch the demo video here:  
[www.crestawards.org/kit-box/superstar](http://www.crestawards.org/kit-box/superstar)

# Investigating Ink

Can be run in small groups or with a whole class (groups of 3)

This activity is designed to get children thinking about how to identify different inks using chromatography.



- Water-soluble black ink pens
- Filter paper
- Measuring beakers





Watch the demo video here:  
[www.crestawards.org/kit-box/superstar](http://www.crestawards.org/kit-box/superstar)

# Playground Games

Can be run in groups or with a whole class (groups of 10)



This activity is designed to get children thinking about disabilities and creating games that are accessible and inclusive.

- Torches
- Ear plugs
- Bells
- Horns
- Blindfolds
- Glasses template





Watch the demo video here:  
[www.crestawards.org/kit-box/superstar](http://www.crestawards.org/kit-box/superstar)

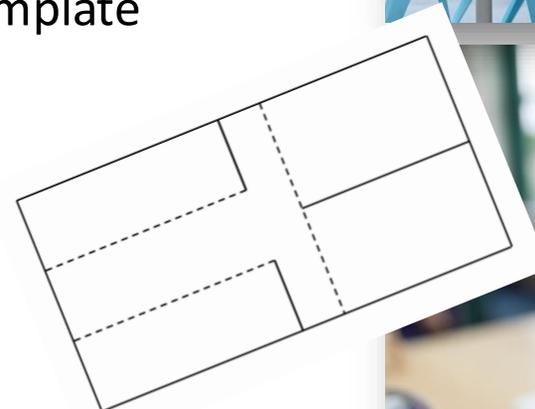
# Super Spinners

Can be run in small groups or with a whole class (groups of 3)



This activity is designed to get the children thinking about helicopter blades, and how different blade sizes change the way a paper spinner falls.

- Super Spinners template
- Timers





Watch the demo video here:  
[www.crestawards.org/kit-box/superstar](http://www.crestawards.org/kit-box/superstar)

# Under Your Feet

Can be run in small groups or with a whole class (groups of 3)



This activity is designed to get the children thinking creatively about nature.

- Magnifiers (from Fantastic Fingerprints)





Watch the demo video here:  
[www.crestawards.org/kit-box/superstar](http://www.crestawards.org/kit-box/superstar)

# Warm or Cold

Can be run in small groups or with a whole class (groups of 2 or 3)

This activity is designed to get children thinking about warm and cold-blooded creatures.

- Different sized plastic bottles with lids
- Measuring beakers (from Investigating Ink)
- Thermometer
- Timers (from Super Spinners)



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## Warm or Cold

Organiser's Card

**About the activity**

This activity is designed to get children thinking about warm and cold-blooded creatures. Dina Digg needs some help working out whether dinosaurs were cold-blooded or not. Can the children work it out by doing some tests?

Through this activity you will support your group to:

- Explore whether dinosaurs were warm or cold-blooded.
- Investigate the difference size makes to how quickly things cool down.
- Complete a grid to compare warm and cold-blooded theories.
- Design a dinosaur fact sheet.

**Kit list**

To test temperature change of water in different sized bottles they will need:

- Different sized plastic bottles with lids
- Measuring jugs
- Warm water
- Thermometer and stop watch or data logger

**What to do**

1. Read the ACTIVITY CARD to familiarise yourself with the activity.
2. Check the Kit list and ensure you have the correct resources.
3. Set the scene by discussing the story with the children.
4. Help children gather the resources.
5. Encourage children to talk together about their ideas and carry out their own investigations.
6. Discuss the differences between warm-blooded and cold-blooded animals.
7. Encourage children to read scientists' arguments for and against dinosaurs being cold-blooded.
8. Help children to recognise that more tests may be needed to reach a firm conclusion.



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## Warm or Cold

Activity Card

**No one has ever seen a live dinosaur but scientists know a lot about them.**

Some ate meat, some only plants. They laid eggs. Dinosaurs lived between 230 and 65 million years ago. They lived on dry land.

Scientists have worked out all these dinosaur facts from looking at fossils.

**But one dinosaur fact is still puzzling Dina Digg.** For many years scientists believed dinosaurs were cold-blooded animals, like modern reptiles, rather than warm-blooded like birds and mammals.

**Now they are not so sure.**

Cold-blooded reptiles like crocodiles and lizards need to lie in the sun to warm up. Warm-blooded animals do not have to do this.

Time to become a dino detective ...

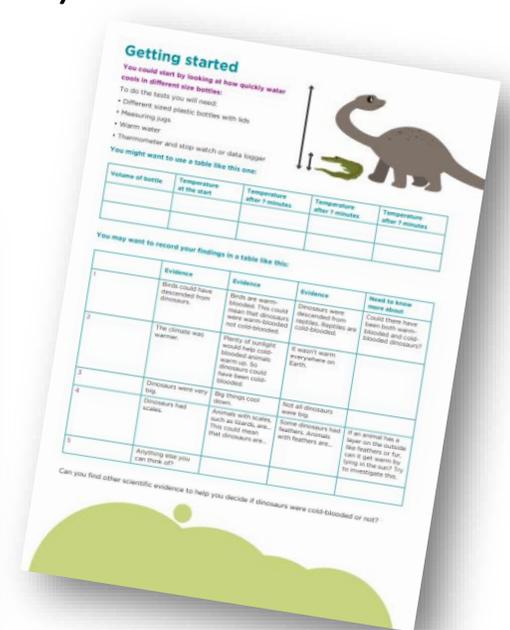
Cold-blooded animals get warm by lying in the sun. The size of an animal's body makes a difference to how quickly it cools down again. Many dinosaurs were very big. If dinosaurs were cold-blooded, would being big be a problem? Or would being big be helpful? Do big things cool down faster or slower than smaller ones?

**Your challenge**

Help Dina Digg to explore if size matters.

**Discuss**

You can't get a real dinosaur but you can use large and small plastic bottles to make model dinosaurs. If you fill the bottles with warm water you can see how long they take to cool down. What will you measure in your test? How will you record your results?

**Getting started**

You could start by looking at how quickly water cools in different size bottles.

To do the tests you will need:

- Different sized plastic bottles with lids
- Measuring jugs
- Warm water
- Thermometer and stop watch or data logger

You might want to use a table like this one:

Volume of bottle	Temperature at the start	Temperature after 1 minutes	Temperature after 2 minutes	Temperature after 3 minutes

You may want to record your findings in a table like this:

	Evidence	Evidence	Evidence	Need to know more about
1	Birds could have descended from dinosaurs.	Birds are warm-blooded. This could mean that dinosaurs were warm-blooded not cold-blooded.	Dinosaurs were descended from reptiles. Reptiles are cold-blooded.	Could there have been both warm-blooded and cold-blooded dinosaurs?
2	The climate was warmer.	Energy of sunlight would keep cold-blooded animals warm. So they could have been able to live in the sun.	It won't warm everywhere on Earth.	
3	Dinosaurs were very big.	Big things cool down.	Not all dinosaurs were big.	
4	Dinosaurs had coats.	Animals with coats, such as horses, are warm-blooded. They could have had dinosaurs are.	Some dinosaurs had feathers or fur.	If an animal has a surface on the outside can it get warm by lying in the sun? Try to investigate this.
5	Anything else you can think of!			

Can you find other scientific evidence to help you decide if dinosaurs were cold-blooded or not?



Watch the demo video here:  
[www.crestawards.org/kit-box/superstar](http://www.crestawards.org/kit-box/superstar)

# Windy Ways

Can be run in small groups or with a whole class (groups of 3)



This activity is designed to get children thinking about wind patterns and directions. Bubbles provide an interesting and engaging way for children to investigate wind speed and direction.

- Timers (from Super Spinners)
- Bubble wands
- Bubble solution
- Compasses





## Q & A / feedback

*Is there anything you need support with?*

### Playground Games

- Stop watch
- Cones
- Air pump
- Balls
- Hoops

### Super Spinners

- Paper
- Scissors
- Markers
- Paper clips
- Glue stick



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## What next?

- We will share this presentation, so you have a record of the session
- We will be in touch with a link to our next support webinar, but please feel free to get in touch with any queries in the meantime:

[crest@britishscienceassociation.org](mailto:crest@britishscienceassociation.org)





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# Thank you for joining us!



 [crestawards.org](http://crestawards.org)

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