

# Engage Teacher Network

# CREST Star Kit Box Pilot Support session

February 2025

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Mewburn The forward-looking IP firm Ellis





## Housekeeping

- Thank you for your valuable time this online session will last no more than 45 minutes.
- Please switch your cameras on if you're happy and able to.
- There will be a chance to ask questions towards the end of the session, or feel free to leave any comments / queries in the chat.









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

- Timeline
- CREST Star kit box pilot aims
- An introduction to your kit box what are the CREST activities, equipment and printed resources included?
- An introduction to the supporting webpage and online resources available to help you
- Any questions?



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#### **CREST Star Kit Box Pilot – current timeline**

Spring Term 1 2025 – Drop-in support webinar – Thursday 6 February

Spring Term 2 2025 – Drop-in support webinar – Wednesday 26 March

Summer Term 1 2025 – Drop-in support webinar – Tuesday 13 May

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

*Our Star kit box is new and in its pilot year – we'd love to hear your thoughts and feedback, to help us improve it for future children and educators!* 



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#### **CREST Star Kit Box Pilot - 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 certificate
- Use of the supporting resources (webpage, demo videos, PPT slides, drop-in webinar sessions)
- Family involvement
- Evaluation, to capture successes and highlight areas for development
- Resources can be shared with colleagues and re-used beyond this academic year







# **Introducing the CREST Star Kit Box**

#### For early years and primary (ages 3-7, or those working at this level)

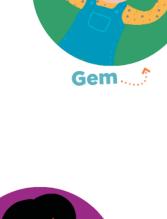


primarylibrary.crestawards.org

#### Meet our **\* \* CREST Star** characters









Tara

Gem, Cosmic, Tara, Zeke, and Seren all go to the same school.



·-- Seren



-

#### CREST STAR

#### Welcome to your CREST Star kit box!

wide this box you'll find the equipment you need to run the British Science Association's GEST Star Award with your children Online CREST Awards resources are completely free, available for all, and designed to be low cost and easy to use. However, we wanted to on a sten further and recover an even Online CREST Awards resources are completely free, available for all, and designed to be low cost and easy to use. However, we wanted to go a step further and provide maximum support for educators to run CREST Awards activities, so it is our pleasure to present you with this fully funded CREST size kit box! This has been made possible by project funding received from the Royal Commission for the evaluation of theil

Designed for children aged 3-7, or those working at this level, Star Awards are a great introduction to problem solving in science, technology, engineering and mattra (STEM), To gain a Star Award, children need to complete at least six one-hour activities. These activities link to multiple areas of the early learning goals and primary curriculum, offering children the opportunity to learn through hands on challenges. By exploring the world around them, children can develop their investigative and teamwork skills.

to be able to pick up and run these activities with as little planning and What is in the boxes?

1	Ne want you t	ne as possible, se	Sneaky St.
	to run:	Animal Adventure Be Seen, Be safe Peggy Problem	Sniffly Sneez Testing Time Useless Umb
		00097	

ces will be used for more than one activity. some of the resources will be used for more than one activity. Wi ided enough sets of equipment for you to run the projects both in a whole class. Two of the eight projects work best with small supplied fearer sets of equipment that you can reuse. You wi sutra materials and resources such as scissors, pencils and p

> hear about any ways you find to involve parents and carer r about any ways you into to involve parana and vara Ould share photos in your newslatter or invite family

# 

**CREST Star Collection for** early years and primary

Suitable for ages 3-7, or children working at this level This collection includes eight practical activities that have This collection includes eight practical activities that have been selected from our CREST Star challenge pack. They have been shores and advected to make them with the been selected from our CHEST Star challenge pack. The have been chosen and adapted to make them suitable constitution or add 2.7. To these strategies at this feature for have been chosen and adapted to make them suitable for children aged 3-7, or those working at this level. Each for children aged 5-7, or those working at this revel, Eddin project is accompanied by a set of PowerPoint slides that can be used to introduce and evolution the activity.

can be used to introduce and explain the activity. These hands on challenges are designed to be interactive and fun for everyor taking part, we recommend reacting both the organiser and activity cards before runnings we activities. Each organiser card area some hand activity and pointers but, set with all practical activities, you array out a full risk assessment beforeheard. As these activities are simed as a ronn of these assessment beforeheard. In our, as with as produced ectivities, you should party out a run rosk itemet beforeband. As these activities are almed at a range of ages and the statement was too one device and software and software too and the software too. nd safet

resources for your children, giving them the opportu-in a way that is accessible and appropriate for them Ve use your proressional judgement and real tree to a ement and feel free to adapt the Run the challenges in this pack

ave carried out at least

#### Each activity takes around 45-60 minutes

Each activity takes around 45-ou nimites and involves hands-on investigation, decision a Involves har has to a minestration to the second When children have carried out at least six activities, they will have earned a CREST Star Award and can receive a u tips and guidance on running ne activity. The accompanying Pc Oiect slides can be used on yr r a laptop to Suppor

activity, they can use a <u>CREST passort</u> to keep track of the challenges they have mpleted. You can use stickers, stamps o their progres

#### What next?

9' not try other CREST Star projects, such as those in the arth and Reyard Pack, with a strusse in the idren. Or you could explore more challenge

Meet our **CREST Star** characters

> Grandmother to Tara and Cosmic's neighour Joyti

int Stella

ara, Zeke, and Serer same schoo

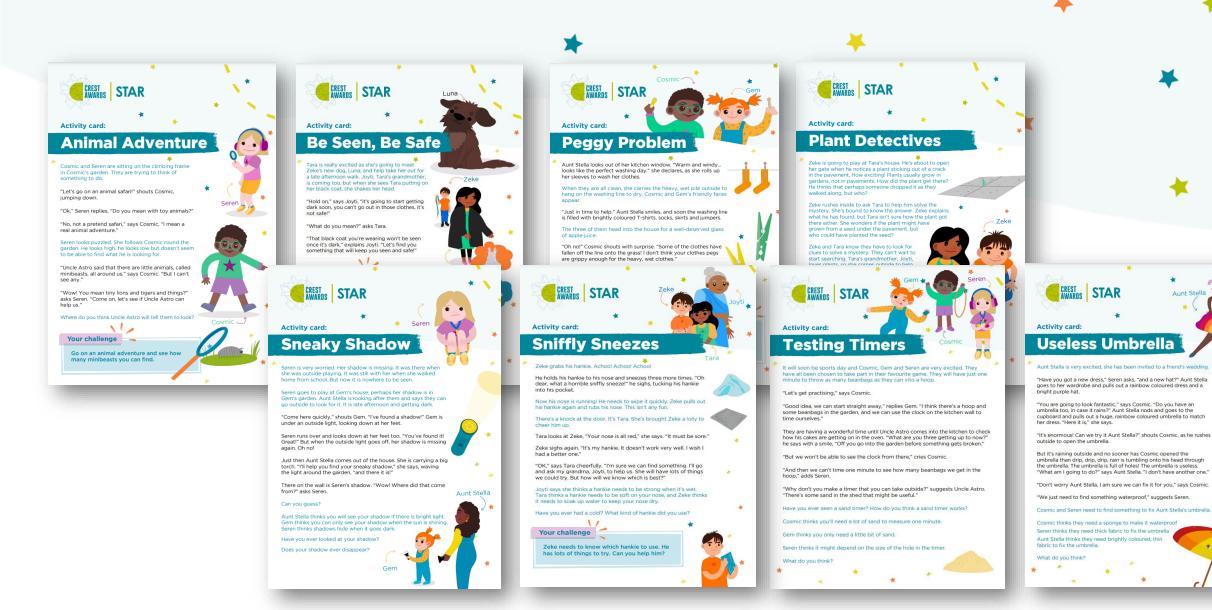
Osmic and Gem

#### Your kit box contains a white box of printed resources:

- a welcome letter
- an intro card
- activity and organiser cards (coated for durability)
- CREST passports
- CREST stickers
- CREST Star certificates and ironon badges

STAR

#### **The 8 CREST activities**



\*

# **Animal Adventure**

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



Get children thinking about minibeasts and habitats. They will explore an outdoor area and go on a minibeast hunt!

- Cloth bag (for children to carry the equipment)
- Magnifying glass
- Collection scissors
- Plastic tub (we recommend not adding holes to the lids of the tubs provided instead avoid keeping minibeasts for an extended time and return them to their habitat)
- Example petri dish as a model to show the children



#### Be Seen, Be Safe

CREST AWARDS STAR CREST AWARDS STAR **Organiser's card:** Activity card Be Seen, Be Safe Be Seen, Be Safe About the activity Fara is really excited as she's going to meet Zeke's new dog, Luna, and help take her out for a late afternoon walk. Joyti, Tara's grandmother, Kit list This activity is designed to get children thinking about reflection and light. The activity works best when run with small groups. is coming too, but when she sees Tara putting or her black coat, she shakes her head. Tara wants to join Zeke and take Luna the dog out for a walk, but it's starting to get dark. The children are asked to help Tar and Zeke decide on the best thing to wear that will help them be seen in the dark. e seen in the dark "Hold on," says Joyti, "it's going to start getting dark soon, you can't go out in those clothes, it's A selection of different materials, e.g. different coloured t-shirts or fabrics not safe!" Through this activity you will support your group to: eflector armbands, mirrore · Test different materials to see how reflective they an "What do you mean?" asks Tara. card, dark/light coloured paper etc. Record and share their results "That black coat you're wearing won't be seen Torches once it's dark," explains Joyti. "Let's find you something that will keep you seen and safe!" A place that can be partially blacked out, e.g. use a dark coloured tablecloth over a table to create a dark den. What to do 110 Introduce the activity using the story on the accompanyin slides or activity card. Ask the children what they think will help them to be seen in the dark. Show the equipment to the children. Your challenge Explain that they will be using the equipment protest the best way to be seen in the dark. Find out if Tara and Zeke can wear ing that will help them to Encourage children to discuss their ideas about how t he better seen in the dark arry out their investigations. Prompt guestions could include Tara thinks they need to wear mething shiny. How will you test to see if the materials are refle Zeke doesn't think what they wear How will you record your results? makes a difference. Support children to conduct their tests and make th own records of their results. They could sort the m or order them from least to most effective reflector Joyti thinks they need to wear something white. Ask the children to share their findings with the rest of the group – they can be as creative in their presentatio as they want. \* What do you think?

Best run in small groups (a pair or group of 3 at a time)

Get children thinking about reflection and light. Test materials to see how reflective they are and how to be seen at night.

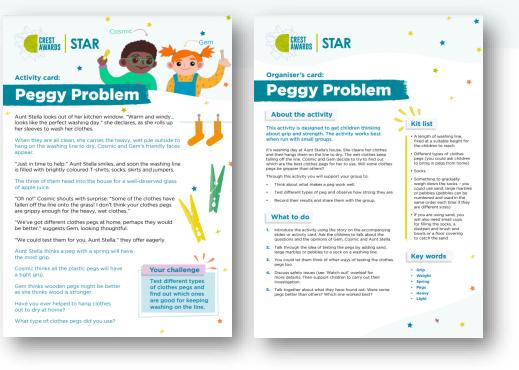
- Large black tablecloth
- Torch
- Materials to test (e.g. black and white t-shirts, coloured paper and foam, mirrored card, high-vis material)





## **Peggy Problem**

Best run in small groups (one or two pairs at a time)



- Washing line
- Coloured socks
- Selection of pegs
- Large pebbles and sticky dots (number the pebbles using the dots and use them in the same order each time!)

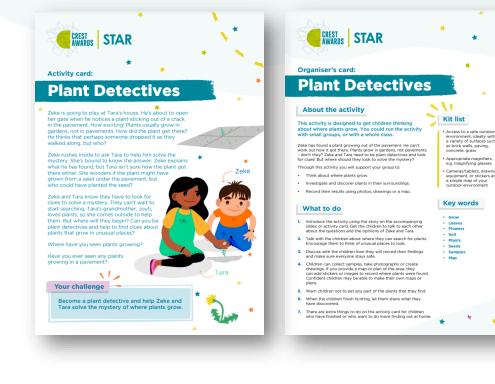
Get children thinking about grip and strength. They will test different types of peg and see how strong they are.





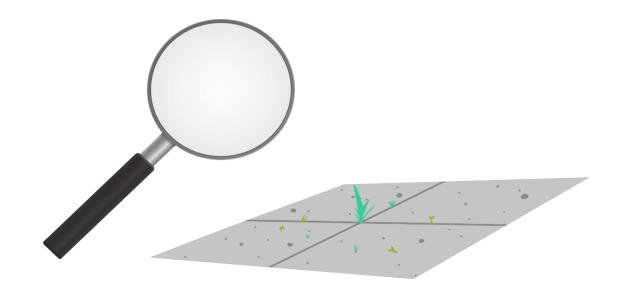
#### **Plant Detectives**

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



- Magnifying glasses (reused from Animal Adventure)
- Sticky dots
   (optional for marking findings on a map)

Get children thinking about where plants grow. They will investigate plants in their outdoor surroundings.



# **Sneaky Shadow**

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



	CREST AWARDS STAR	* *		
	rganiser's card:	*		
5	Sneaky Shadow			
	About the activity	<b>X</b> (		
ab	is activity is designed to get children thinking out shadows. You could run the activity with small pups, or with a whole class.	• Torches or other light sources		
but it. 0	en has lost her shadow. She knows that it was with her all day now it is missing. Gem and Aunt Stella try to help her to find 5em finds it under an outside light and Aunt Stella finds it on wall. Where has the sneaky shadow been hiding?	Card or thick paper     Scissors     Sticks to attach to the		
The	ough this activity you will support your group to:	shadow puppets		
	Experiment with making shadows indoors and outside.	<ul> <li>Sticky tack or sellotape</li> </ul>		
÷.	Create a shadow play to share.	<ul> <li>Coloured transparent material (this can be interesting to experiment with)</li> </ul>		
1. 1.	What to do Introduce the activity using the story on the accompanying sides or activity card. Ask the children to talk about the questions and the opinions of Seren, Gen and Aunt Stella.	<ul> <li>A shadow theatre - this could be a small table-to; theatre, or a large screen made from a sheet. You will need: a light sou</li> </ul>		
2.	If it is sunny, you could go outside first to look at shadows.	(e.g. torch, projector or bright lamp) and a screen		
3.	Children can explore shadows using torches or other light sources.	<ul> <li>(e.g. tracing paper stuck to a cardboard frame, or a white sheet)</li> <li>Musical instruments</li> </ul>		
4.	Set up a shadow theatre for the children to explore.			
5.	Children can cut out a variety of shapes e.g. people, animals or cars. They can then attach their shapes to sticks to make simple puppets and use them to create a shadow play. Some children may need help to think of a story for their play.	(optional)		
6.	They can experiment with coloured transparent material. Is it possible to make a coloured shadow?			
7.	Let them share their plays with each other. They could add sound effects using musical instruments!			
8.	There are extra things to do on the activity card for children who have finished or who want to do more			

Try making a 'V' shape with the notched

Get children thinking about shadows. They will experiment with making shadows, then create their own shadow play!

stand for extra stability!



- Torches (one reused from Be Seen, Be Safe)
- Cardboard frame, tracing paper and notched stand
- Chopsticks, black card and sticky tack (for puppets)
- Translucent coloured paper (to experiment is it possible to make a coloured shadow?)

## **Sniffly Sneezes**

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

**\**\

Kit list

Plastic travs

Beakers Coloured water (dissolve)

any spill

A selection of different materials that could be used as hankies e.g. cotton fabric, newspaper, crepe paper, cotton wool, tissue paper,

drop of food colouring or paint in a beaker of water

Paper towels to clean up

easier for the children to see • Pipettes

this will make the liqui



Organiser's card: Sniffly Sneezes About the activity

CREST AWARDS STAR

This activity is designed to get children thinking about the strength and absorbency of materials. You could run the activity with small groups, or with a whole class.

- Achoo!! Zeke has a cold and his hankie isn't working very w Can you help him find a better one? Through this activity you will support your group to:
- Think about what makes a good hankie
- Test different materials and observe how they behave when used to absorb water
   Record their results and share them with the group

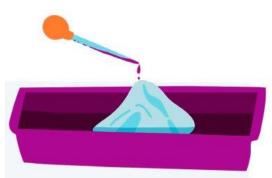
#### What to do

- Introduce the activity using the story on the accompanying slides or activity card. Get the children to talk about the questions and the opinions of Zeke, Tara and Joyti.
- Then give the children a set of materials to test as hankies. Let them talk about which they think might be best and ho they will find out, before they start investigating.
   You could list the different tests they might want to do e.g. absorbency, strength, smoothness. Hake sure that they tes ail the different materials. Encourage them to use their own
- absorbency, strength, smoothness. Make sure that they to all the different materials. Encourage them to use their or ideas too. When they have finished, agree on the winners and talk about why these were the best hankies. You might ask th children to think about why we have disposable tissues.

• Plastic tray

- Beaker
- Green paint (to colour water)
- Pipette
- Materials to test (e.g. paper, cotton wool, tissues, baking parchment)

Get children thinking about strength and absorbency. They will test materials to see which will make a good hankie.





### **Testing Timers**

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

< **\ (** 

Kit list

Dry sand

Real sand timers

Dry paper cups

cup to help)

whiteboard

Sharp pointed pencil to make holes (use some sticky tack or plasticine underneath the

Stopwatch or clock with

use a countdown tim on a tablet or on your

You might like to us

• Water sunar salt et/

trays or a covering on the tables where the children are working

second hand (you could



vill soon be sports day and Cosmic, Gem and Seren are very excited. They have all been chosen to take part in their favourite game. They will have just one minute to throw as many beanbags as they can into a hoop.

"Let's get practising," says Cosmic.

"Good idea, we can start straight away," replies Gem. "I think there's a hoop and some beanbags in the garden, and we can use the clock on the kitchen wall to time ourselves."

They are having a wonderful time until Uncle Astro comes into the kitchen to check how his cakes are getting on in the oven. "What are you three getting up to now?" he says with a smile, "Off you go into the garden before something gets broken."

"But we won't be able to see the clock from there," cries Cosmic.

"And then we can't time one minute to see how many beanbags we get in the hoop," adds Seren

"Why don't you make a timer that you can take outside?" suggests Uncle Astro. "There's some sand in the shed that might be useful."

Have you ever seen a sand timer? How do you think a sand timer works?

What do you think?

Cosmic thinks you'll need a lot of sand to measure one minute Gem thinks you only need a little bit of sand Seren thinks it might depend on the size of the hole in the timer.



CREST AWARDS STAR

Cosmic, Gem and Seren are practising for sports day. They me a timer to work out how many beanbags they can get into the hoop in one minute, but they are not allowed to throw things i the kitchen near the clock. They want to make a timer to take into the garden. Uncle Astro thinks that they can use sand to make a timer.

Through this activity you will support your group to Compare real sand timers and observe which variables affect the time they measure.

- Experiment with different hole size and guantities of sand in their own sand time
- Test their sand timer and reflect on how it could

#### What to do

- Introduce the activity by reading the story on the accompanying slides or activity card together. Get the children to talk about the questions and the opinions of Cosmic, Gem and Seren.
- 2. Discuss how to make sure they carry out the task safely. Let the children look at real sand timers first. Then encoura m to explore different cups and sizes of hole before the
- try to make their one-minute timer Talk together about what they have found out. Can they
  explain why they have different answers to how much sa
  you need? What would they change to improve their their

- Real sand timers to demo
- Paper cups
- Sticky tack (to help make holes in cups safely)
- Coloured sand

Get children thinking about how sand timers work. They will observe real sand timers and then make their own!



### **Useless Umbrella**

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



K Get children thinking about materials and their water resistance. They will test these to find which is best to repair an umbrella.

- Plastic tray and beaker (reused from Sniffly Sneezes)
- Blue paint (to colour water)
- Pipette (reused from Sniffly Sneezes)
- Materials to test (e.g. sponge, wood, foil, cotton)
- Paper towels for testing
- Mini umbrella (with small holes!) to use as a story prop





#### **Supporting resources**

 Dedicated CREST Star kit box webpage with links, ideas and FAQs

#### https://www.crestawards.org/kit-box/star

- Demo videos for each activity showing you how to set up the equipment, run the investigation and capture children's results
- Accompanying PPT slides to use on your whiteboard or a laptop, to introduce the activities and support your children's understanding
- Digital versions of the resources so you can print additional copies



## Supporting webpage

#### https://www.crestawards.org/kit-box/star

CREST	What i	s CREST? Why CREST? Which level? F	Sign in <u>Resource libr</u> rees and funding <u>CREST suppor</u> s	ry Help centre EAQs ers Engage community arch O			*
1000	Your CREST kit box	activities			*	*	
REST Sta	Animal Adventure	Be Seen Be Safe	Peggy Problem	Plant Detectives			
			N. 6		2		*
ort to run CREST Av support page incluc		Digital copi	es of your pr	nted resources			
e on how to run the nank our generous t				u in your CREST kit box. They are also prov	ided here in case you need more copies	s, either to run this year or	
o your setting.	#Outside #Whole class #Small group	when re-using your kit box					
	Get children thinking about minibeasts and habitats. They will explore an outdoor area and go on a	Without to pour CREW Rate Million	CREST				
	minibeast hunt!	CALL Bits Allowed and purposition. Chart of Hanning Allowed and an advantages for a standard first in and Allowed in any standard instances for any advantages of the standard and any advantages of the standard instances for any advantages of the standard and advantages of the standard and advantages of the standard advantages of the standard advantages of the sta	F	AQs			
	Download activity and organisers cards	There are for a fair to que of 3 Y out or (q) is it is use morting a this took. This densities of a CENE's (q) are a bit is A stars, if there are the stars of the area by a stars of the area by a stars, if the area by a s					
_	• Video demo coming soon	empropriet from a months, see the head head head head head head head he		What equipment is included in my kit box for ea	ach activity?		
	Slides for learners coming soon	Instanting pointer and source. The second s	PASSF	How many activities should I do?			
				Is there a deadline for using my kit box?			
		Welcome letter	Star passport pupils' progres	How many children can I use my kit box with?			
				Can I re-use my kit box?			
			~	Should I use my kit box in curriculum time?			

## **Involving parents and carers**

#### Some ideas from educators!



- You could share photos of the children taking part in the activities in your newsletter, or on a photo sharing platform if you use one.
- You might like to invite parents and carers into your setting to support running the activities, or to see the investigations in action.

- Why not send some of the activities or follow-on tasks home, for families to try together.
- You could invite parents and carers to a special celebration assembly to watch the children receive their CREST certificates.



# Ordering additional CREST certificates

Once your children have completed **6** activities, they can receive their CREST Awards certificate!





STAR

- Your kit box contains 32 CREST Star certificates (enough for a class of 30 + 2 spares!) but we know that some settings with larger cohorts may require extra copies.
- These can be ordered from our online platform: <u>https://apply.crestawards.org/</u>







#### What next?

- We will share this presentation, so you have a record of the kit box overview
- We will be in touch with links to the next support webinars, but please feel free to get in touch with any queries in the meantime: <u>crest@britishscienceassociation.org</u>



### Thank you so much for your time!





# Any questions?





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In partnership with:

