



**Engage** Teacher Network

# CREST Star Kit Box Pilot Launch session

November 2024

**Catherine Davies**

Education Resources Manager, British Science Association

In partnership with





# What we'll cover in today's session

- Housekeeping
- Timeline for the academic year
- Recap of the project 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?



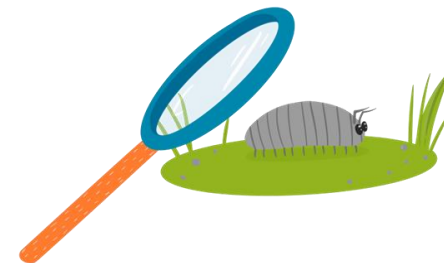


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# Housekeeping

- 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.





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# CREST Star Kit Box Pilot – current timeline

**Autumn Term 1, 2024** – Evaluation activity (thank you for sharing your thoughts!)

**Autumn Term 2, 2024** – Receive your kit box and launch webinar

**Spring Term 1 2025** – Drop-in support webinar

**Spring Term 2 2025** – Drop-in support webinar

**Summer Term 1 2025** – Drop-in support webinar

**Summer Term 2 2025** – Post-activity survey and interview

*You may also be invited to host one of our evaluators in your school during the academic year, so they can see the kit boxes in action!*







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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
- Family involvement
- Use of the supporting resources (webpage, demo videos, PPT slides, drop-in webinar sessions)
- 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)*



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[primarylibrary.crestawards.org](https://primarylibrary.crestawards.org)

# Meet our **CREST Star** characters



**Uncle Astro**  
Uncle to Cosmic and Gem



**Joyti**  
Grandmother to Tara and  
Cosmic's neighbour



**Gem**



**Zeke**



**Seren**



**Aunt Stella**  
Aunt to Cosmic and Gem



**Tara**

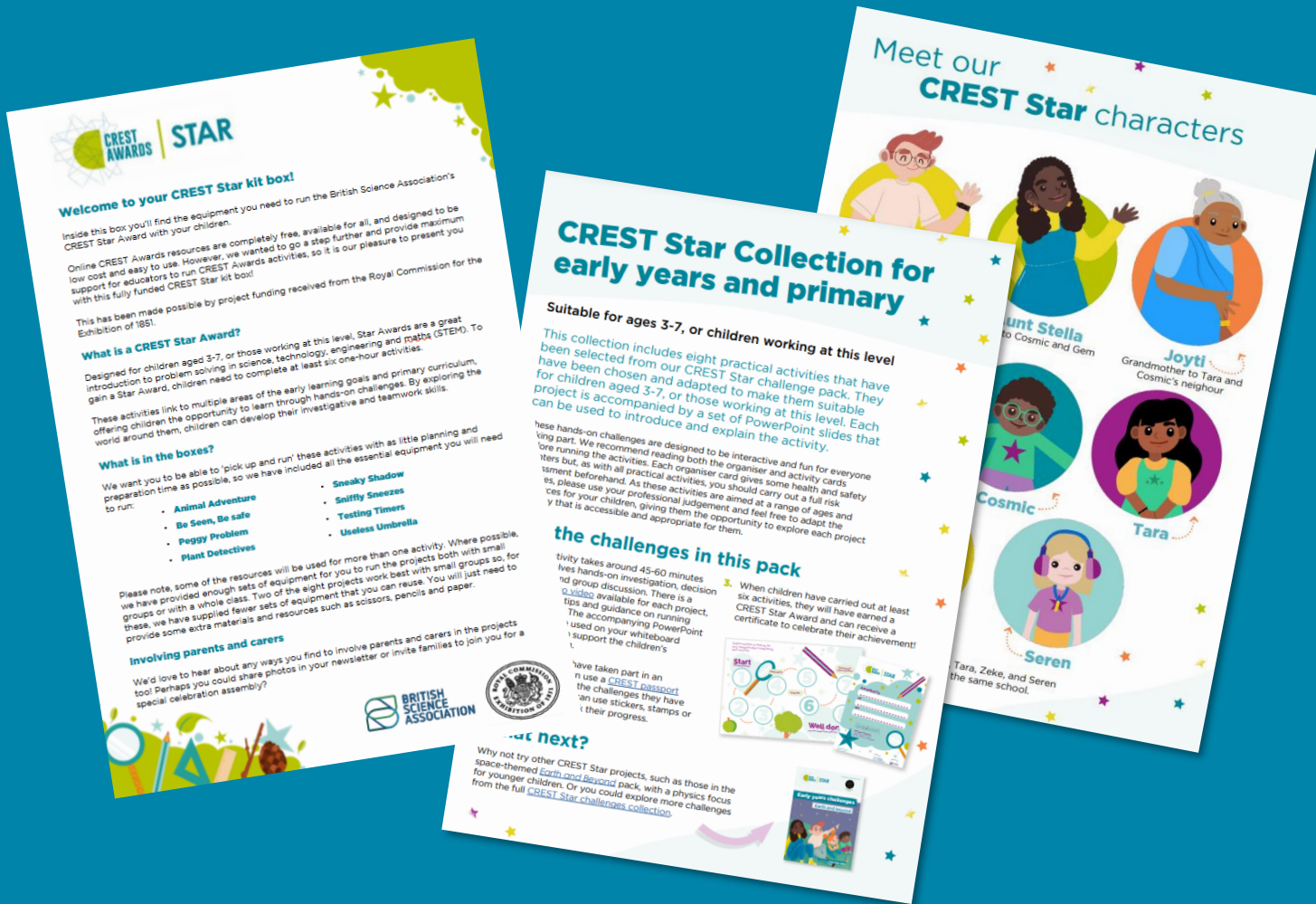


**Cosmic**

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

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 iron-on badges





# The 8 CREST activities

**CREST AWARDS | STAR**

**Activity card:**

## Animal Adventure

Cosmic and Seren are sitting on the climbing frame in Cosmic's garden. They are trying to think of something to do.

"Let's go on an animal safari!" shouts Cosmic, jumping down.

"Ok," Seren replies, "Do you mean with toy animals?"

"No, not a pretend safari," says Cosmic, "I mean a real animal adventure."

Seren looks puzzled. She follows Cosmic round the garden. He looks high, he looks low but doesn't seem to be able to find what he is looking for.

"Uncle Astro said that there are little animals, called minibeasts, all around us," says Cosmic. "But I can't see any."

"Wow! You mean tiny lions and tigers and things?" asks Seren. "Come on, let's see if Uncle Astro can help us."

Where do you think Uncle Astro will tell them to look?

**Your challenge**

Go on an animal adventure and see how many minibeasts you can find.



**CREST AWARDS | STAR**

**Activity card:**


## Be Seen, Be Safe

Tara 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, is coming too, but when she sees Tara putting on her black coat, she shakes her head.

"Hold on," says Joyti, "It's going to start getting dark soon, you can't go out in those clothes, it's not safe!"

"What do you mean?" asks Tara.

"That black coat you're wearing won't be seen once it's dark," explains Joyti. "Let's find you something that will keep you seen and safe!"



**CREST AWARDS | STAR**

**Activity card:**

## Peggy Problem

Aunt Stella looks out of her kitchen window. "Warm and windy... looks like the perfect washing day," she declares, as she rolls up her sleeves to wash her clothes.

When they are all clean, she carries the heavy, wet pile outside to hang on the washing line to dry. Cosmic and Gem's friendly faces appear.

"Just in time to help," Aunt Stella smiles, and soon the washing line is filled with brightly coloured T-shirts, socks, skirts and jumpers.

The three of them head into the house for a well-deserved glass of apple juice.

"Oh no!" Cosmic shouts with surprise. "Some of the clothes have fallen off the line onto the grass! I don't think your clothes pegs are grippy enough for the heavy, wet clothes."



**CREST AWARDS | STAR**

**Activity card:**

## Plant Detectives

Zeke is going to play at Tara's house. He's about to open her gate when he notices a plant sticking out of a crack in the pavement. How exciting! Plants usually grow in gardens, not in pavements. How did the plant get there? He thinks that perhaps someone dropped it as they walked along, but who?

Zeke rushes inside to ask Tara to help him solve the mystery. She's bound to know the answer. Zeke explains what he has found, but Tara isn't sure how the plant got there either. She wonders if the plant might have grown from a seed under the pavement, but who could have planted the seed?

Zeke and Tara know they have to look for clues to solve a mystery. They can't wait to start searching. Tara's grandmother, Joyti, loves plants, so she comes outside to help.



**CREST AWARDS | STAR**

**Activity card:**

## Sneaky Shadow

Seren is very worried. Her shadow is missing. It was there when she was outside playing. It was still with her when she walked home from school. But now it is nowhere to be seen.

Seren goes to play at Gem's house, perhaps her shadow is in Gem's garden. Aunt Stella is looking after them and says they can go outside to look for it. It is late afternoon and getting dark.

"Come here quickly," shouts Gem. "I've found a shadow!" Gem is under an outside light, looking down at her feet.

Seren runs over and looks down at her feet too. "You've found it! Great!" But when the outside light goes off, her shadow is missing again. Oh no!

Just then Aunt Stella comes out of the house. She is carrying a big torch. "I'll help you find your sneaky shadow," she says, waving the light around the garden, "and there it is!"


There on the wall is Seren's shadow. "Wow! Where did that come from?" asks Seren.

Can you guess?

Aunt Stella thinks you will see your shadow if there is bright light. Gem thinks you can only see your shadow when the sun is shining. Seren thinks shadows hide when it goes dark.

Have you ever looked at your shadow?

Does your shadow ever disappear?



**CREST AWARDS | STAR**

**Activity card:**

## Sniffly Sneezes

Zeke grabs his hankie. Achoo! Achoo! Achoo!

He holds his hankie to his nose and sneezes three more times. "Oh dear, what a horrible sniffly sneeze!" he sighs, tucking his hankie into his pocket.

Now his nose is running! He needs to wipe it quickly. Zeke pulls out his hankie again and rubs his nose. This isn't any fun.

There's a knock at the door. It's Tara. She's brought Zeke a lolly to cheer him up.

Tara looks at Zeke, "Your nose is all red," she says. "It must be sore."

Zeke sighs again. "It's my hankie. It doesn't work very well. I wish I had a better one."

"OK," says Tara cheerfully. "I'm sure we can find something. I'll go and ask my grandma, Joyti, to help us. She will have lots of things we could try. But how will we know which is best?"

Joyti says she thinks a hankie needs to be strong when it's wet. Tara thinks a hankie needs to be soft on your nose, and Zeke thinks it needs to soak up water to keep your nose dry.

Have you ever had a cold? What kind of hankie did you use?

**Your challenge**

Zeke needs to know which hankie to use. He has lots of things to try. Can you help him?



**CREST AWARDS | STAR**

**Activity card:**

## Testing Timers

It will 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."

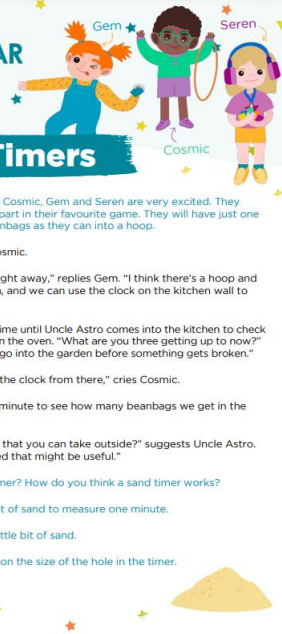
Have you ever seen a sand timer? How do you think a sand timer works?

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.

What do you think?



**CREST AWARDS | STAR**

**Activity card:**

## Useless Umbrella

Aunt Stella is very excited, she has been invited to a friend's wedding.

"Have you got a new dress," Seren asks, "and a new hat?" Aunt Stella goes to her wardrobe and pulls out a rainbow coloured dress and a bright purple hat.

"You are going to look fantastic," says Cosmic. "Do you have an umbrella too, in case it rains?" Aunt Stella nods and goes to the cupboard and pulls out a huge, rainbow coloured umbrella to match her dress. "Here it is," she says.

"It's enormous! Can we try it Aunt Stella?" shouts Cosmic, as he rushes outside to open the umbrella.

But it's raining outside and no sooner has Cosmic opened the umbrella than drip, drip, drip, rain is tumbling onto his head through the umbrella. The umbrella is full of holes! The umbrella is useless.

"What am I going to do?" says Aunt Stella. "I don't have another one."

"Don't worry Aunt Stella, I am sure we can fix it for you," says Cosmic.

"We just need to find something waterproof," suggests Seren.

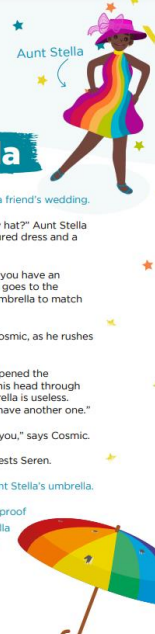
Cosmic and Seren need to find something to fix Aunt Stella's umbrella.

Cosmic thinks they need a sponge to make it waterproof.

Seren thinks they need thick fabric to fix the umbrella.

Aunt Stella thinks they need brightly coloured, thin fabric to fix the umbrella.

What do you think?



# Animal Adventure

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

**CREST AWARDS | STAR**

**Organiser's card:**

## Animal Adventure

**About the activity**

This activity is designed to get children thinking about minibeasts and habitats. You could run the activity with small groups, or with a whole class.

Cosmic and Seren are bored. Cosmic wants to go on an animal adventure. Uncle Astro said that they will find minibeasts if they look carefully. Cosmic looks high and low but he can't find any little animals. Seren thinks that they should ask Uncle Astro for help.

Through this activity you will support children to:

- Go on a minibeast hunt.
- Find out about the minibeasts they see and their habitats.
- Share their findings with the rest of their group.

**Kit list**

- Suitable minibeast collection kit, e.g. pooter, collection jar, collection scissors (special devices for catching minibeasts)
- Appropriate magnifiers, e.g. magnifying glasses
- Collection tub (make some holes in the lid if you want to keep minibeasts in the tub for a short time)
- Identification book or app (optional)
- Outdoor environment, preferably with rocks, logs, large stones, pieces of old carpet (you could place some on the ground a few weeks earlier)

**What to do**

1. Introduce the activity using the story on the accompanying slides or activity card. Ask the children where they think they will find minibeasts.
2. Explain that they will be going on a minibeast hunt.
3. Encourage children to share their ideas about how they will hunt for minibeasts. Prompt questions:
  - Where will we look for minibeasts?
  - Will we collect them?
  - How will we make sure we don't harm them?
4. Give out the equipment to the children.
5. Support children to conduct their investigation and make their own records of their results. They could take photographs or make drawings. Support them to identify what they find - if you have a tablet or mobile phone, you could use Google Lens or a similar app to help with this.

**Key words**

- Habitat
- Damp
- Moist
- Minibeast
- Skeleton
- Invertebrate

**CREST AWARDS | STAR**

**Activity card:**

## Animal Adventure

Cosmic and Seren are sitting on the climbing frame in Cosmic's garden. They are trying to think of something to do.

"Let's go on an animal safari!" shouts Cosmic, jumping down.

"Ok," Seren replies, "Do you mean with toy animals?"

"No, not a pretend safari," says Cosmic, "I mean a real animal adventure."

Seren looks puzzled. She follows Cosmic round the garden. He looks high, he looks low but doesn't seem to be able to find what he is looking for.

"Uncle Astro said that there are little animals, called minibeasts, all around us," says Cosmic. "But I can't see any."

"Wow! You mean tiny lions and tigers and things?" asks Seren. "Come on, let's see if Uncle Astro can help us."

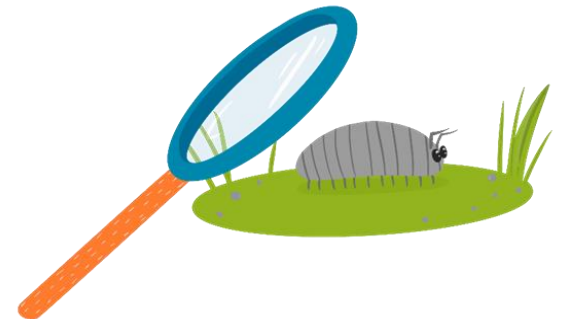
Where do you think Uncle Astro will tell them to look?

**Your challenge**

Go on an animal adventure and see how many minibeasts you can find.

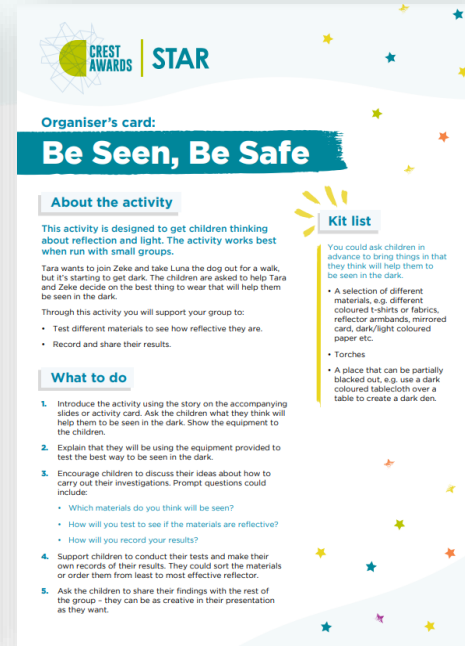
**Get children thinking about minibeasts and habitats. They will explore an outdoor area and go on a minibeast hunt!**

- Cloth bag (for children to carry the equipment)
  - Magnifying glass
  - Collection scissors
  - Plastic tub
- (example petri dish as a model)*



# Be Seen, Be Safe

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 table-cloth
- 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)

**Activity card:**

## Peggy Problem

Aunt Stella looks out of her kitchen window. "Warm and windy... looks like the perfect washing day," she declares, as she rolls up her sleeves to wash her clothes.

When they are all clean, she carries the heavy, wet pile outside to hang on the washing line to dry. Cosmic and Gem's friendly faces appear.

"Just in time to help," Aunt Stella smiles, and soon the washing line is filled with brightly coloured T-shirts, socks, skirts and jumpers.

The three of them head into the house for a well-deserved glass of apple juice.

"Oh no!" Cosmic shouts with surprise. "Some of the clothes have fallen off the line onto the grass! I don't think your clothes pegs are grippy enough for the heavy, wet clothes."

"We've got different clothes pegs at home, perhaps they would be better," suggests Gem, looking thoughtful.

"We could test them for you, Aunt Stella," they offer eagerly.

Aunt Stella thinks a peg with a spring will have the most grip.

Cosmic thinks all the plastic pegs will have a tight grip.

Gem thinks wooden pegs might be better as she thinks wood is stronger.

Have you ever helped to hang clothes out to dry at home?

What type of clothes pegs did you use?

**Your challenge**

Test different types of clothes pegs and find out which ones are good for keeping washing on the line.

**Organiser's card:**

## Peggy Problem

**About the activity**

This activity is designed to get children thinking about grip and strength. The activity works best when run with small groups.

It's washing day at Aunt Stella's house. She cleans her clothes and then hangs them on the line to dry. The wet clothes keep falling off the line. Cosmic and Gem decide to try to find out which are the best clothes pegs for her to use. Will some clothes pegs be grippier than others?

Through this activity you will support your group to:

- Think about what makes a peg work well.
- Test different types of peg and observe how strong they are.
- Record their results and share them with the group.

**What to do**

1. Introduce the activity using the story on the accompanying slides or activity card. Ask the children to talk about the questions and the opinions of Gem, Cosmic and Aunt Stella.
2. Talk through the idea of testing the pegs by adding sand, large marbles or pebbles to a sock on a washing line.
3. You could let them think of other ways of testing the clothes pegs too.
4. Discuss safety issues (see "Watch out" overleaf for more details). Then support children to carry out their investigation.
5. Talk together about what they have found out. Were some pegs better than others? Which one worked best?

**Kit list**

- A length of washing line, fixed at a suitable height for the children to reach.
- Different types of clothes pegs (you could ask children to bring in pegs from home)
- Socks
- Something to gradually weigh down the socks – you could use sand, large marbles or pebbles (pebbles can be numbered and used in the same order each time if they are different sizes)
- If you are using sand, you will also need small cups for filling the socks, a dustpan and brush and bowls or a floor covering to catch the sand

**Key words**

- Grip
- Weight
- Spring
- Pegs
- Heavy
- Light

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

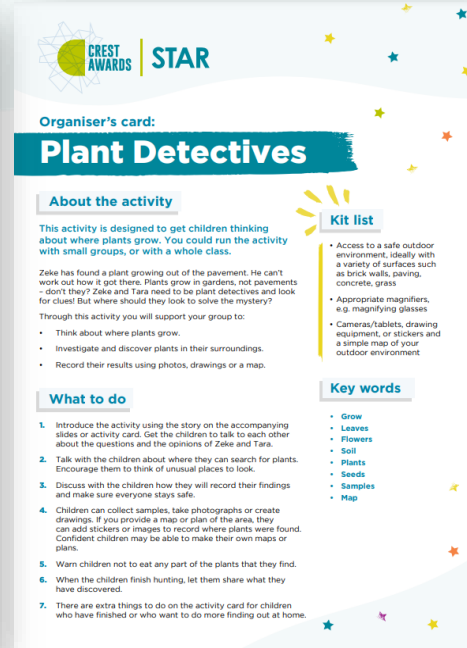


- Washing line
- Coloured socks
- Selection of pegs
- Large pebbles and sticky dots (number the pebbles using the dots and use them in the same order each time!)



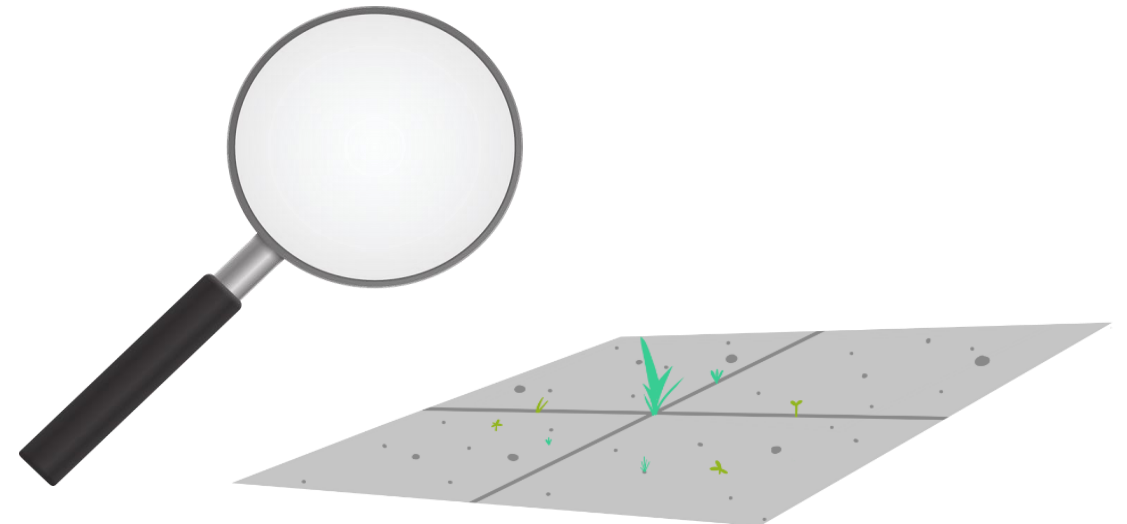
# Plant Detectives

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



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

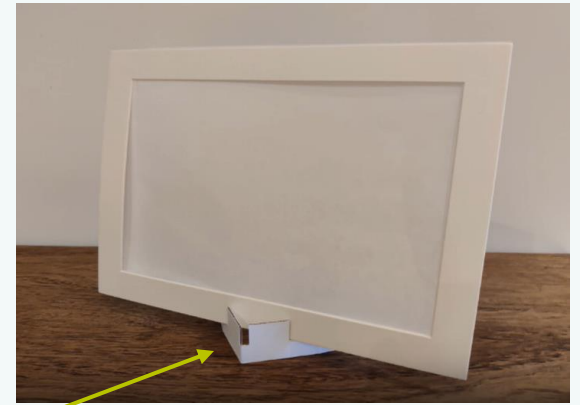
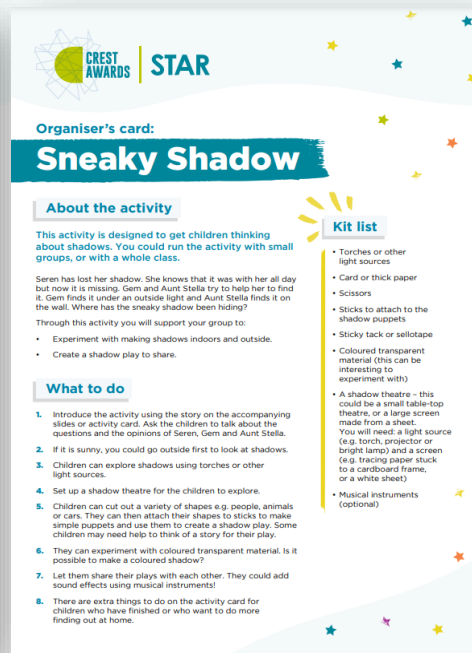
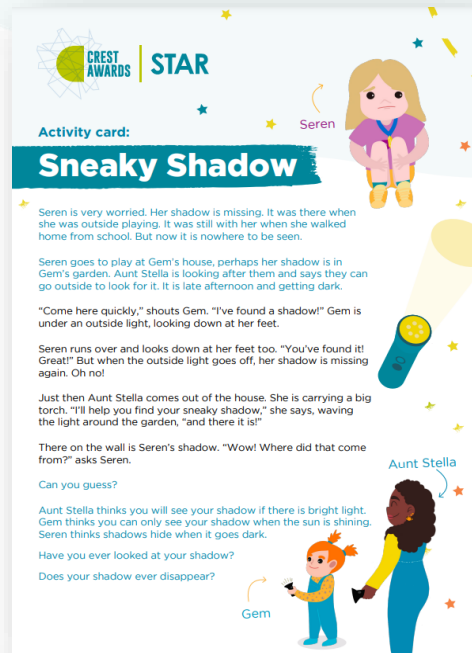
- Magnifying glasses (reused from Animal Adventure)
- Sticky dots (optional - for marking findings on a map)





# Sneaky Shadow

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



*Try making a 'V' shape with the notched stand for extra stability!*

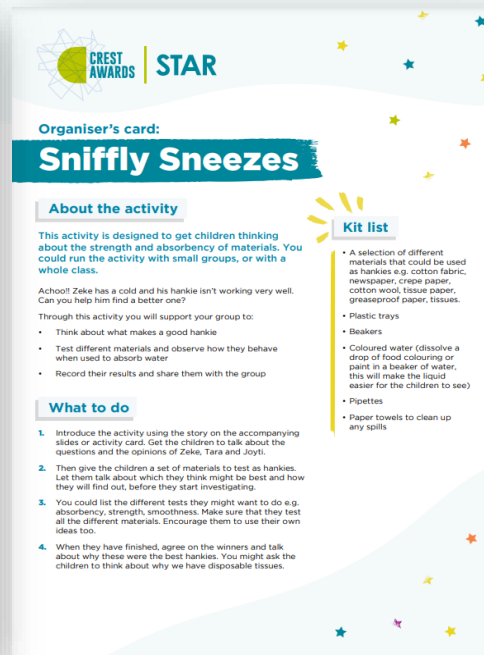
**Get children thinking about shadows. They will experiment with making shadows, then create their own shadow play!**



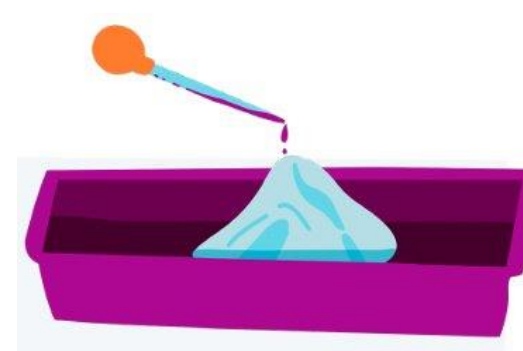
- Torches (one reused from Be Seen, Be Safe)
- Cardboard frame, tracing paper and notched stand
- Chopsticks, black card and sticky tack (for puppets)
- Translucent coloured paper (to experiment - is it possible to make a coloured shadow?)

# Sniffly Sneezes

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



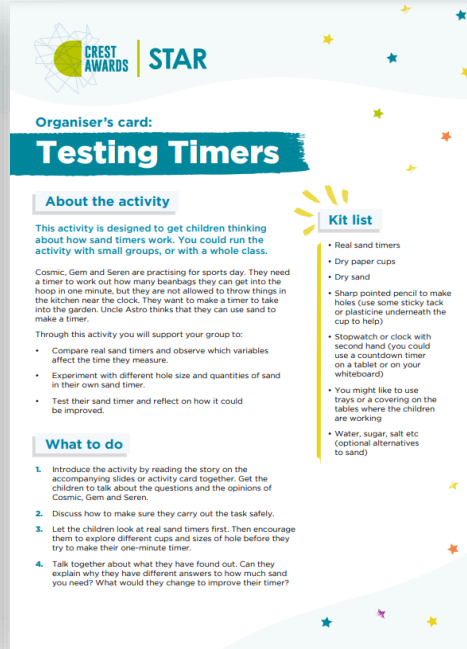
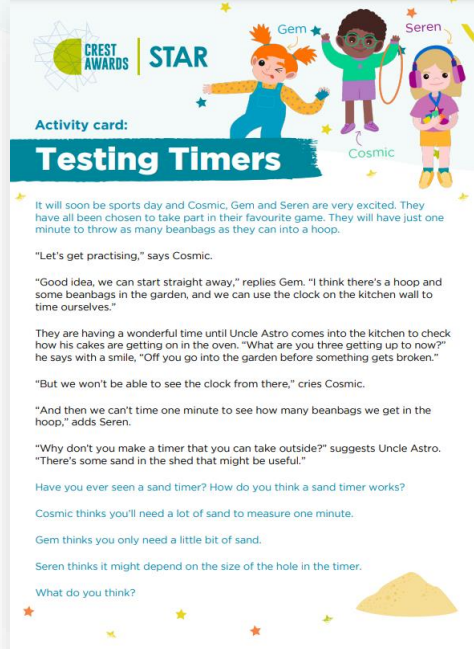
Get children thinking about strength and absorbency. They will test materials to see which will make a good hankie.



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

# Testing Timers

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



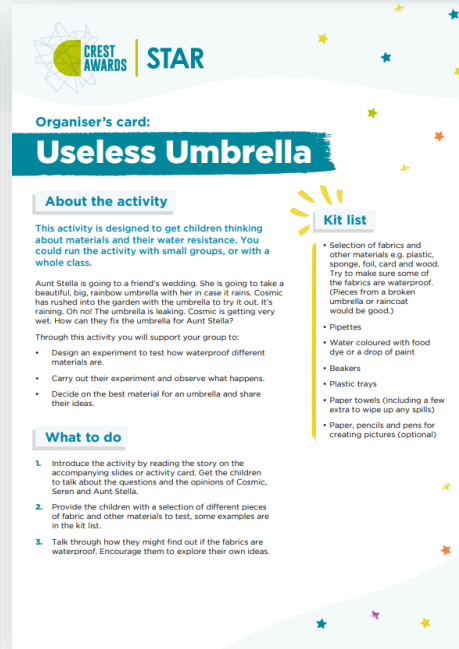
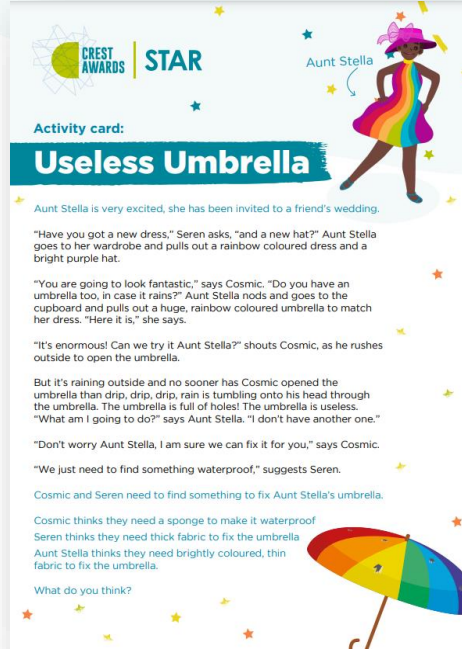
**Get children thinking about how sand timers work. They will observe real sand timers and then make their own!**

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



# Useless Umbrella

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



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)
- Mini umbrella (with small holes!) to use as a story prop
- Materials to test (e.g. sponge, wood, foil, cotton)
- Paper towels for testing







## 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>



[What is CREST?](#) [Why CREST?](#) [Which level?](#) [Fees and funding](#) [CREST supporters](#) [Engage community](#)

[Sign in](#) [Resource library](#) [Help centre](#) [FAQs](#)

Search

## CREST Star kit boxes

You have been directed to this page because you are a recipient of support to run CREST Award activities with your children, by your school or local authority.

This support page includes digital copies of your resources, advice on how to run the activities.

We thank our generous funders The Royal Commission for the Exhibition of 1851 for their support.

## Your CREST kit box activities

### Animal Adventure



#Outside #Whole class #Small group

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

[Download activity and organisers cards](#)

Video demo coming soon

Slides for learners coming soon

### Be Seen Be Safe



#Inside #Small group

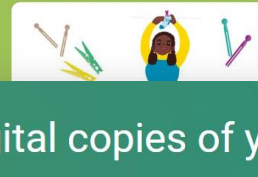
Get children thinking about safety and light. Test materials to see how reflective they are and how they can be seen at night.

[Download activity and organisers cards](#)

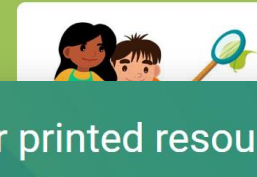
Video demo coming soon

Slides for learners coming soon

### Peggy Problem



### Plant Detectives



## Digital copies of your printed resources

You already have all the resources below printed for you in your CREST kit box. They are also provided here in case you need more copies, either to run this year or when re-using your kit box.



[Welcome letter](#)



[Star passport to track pupils' progress](#)



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



Additional certificates can be ordered from the CREST platform so that you can re-use the kit box.

# Involving parents and carers

Some of the ideas that you shared!



- 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!



- 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 which is linked on the Star kit box webpage.



## What next?

- We will share this presentation, so you have a record of the kit box overview
- We will be in touch with the dates of the Spring and Summer support webinars, but please feel free to get in touch with any queries in the meantime: [crest@britishscienceassociation.org](mailto:crest@britishscienceassociation.org)
- Our evaluators may be in touch to arrange a visit if you have let them know that you would be happy to host them!



**Thank you so much for your time!**





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# Any questions?



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