

CREST Star Kit Boxes

Inspiring STEM for the youngest learners

Engaging STEM* opportunities for the youngest learners

*STEM stands for science, technology, engineering, and maths

Hands-on STEM learning can boost children's skills, confidence and aspirations. After the development and launch of the hugely popular CREST SuperStar Kit Boxes in 2022-23, it was time to target the youngest learners. Generous funding from The Royal Commission for the Exhibition of 1851 enabled this to happen. In 2024-25, the British Science Association (BSA) rolled out the first CREST Star Kit Boxes aimed at children aged 3-7, and those working at this level, to 20 pilot settings recruited from its Engage Teacher Network.



CREST Star Kit Boxes

CREST kit boxes are designed to enable any educator, including non-STEM experts, to quickly pick up and run fun and educational practical activities linked to the primary curriculum. By reducing the planning time and cost of running high quality, hands-on investigations with whole classes, while building teacher confidence, these common barriers can be overcome.



Key evaluation outcomes

100% of participating teachers reported:

- children's interest and engagement in science improved after taking part in kit box activities
- their own confidence in running STEM activities increased
- future plans to participate in CREST.



Towards the end of term, we asked the children what they'd enjoyed most this year and – no exaggeration – loads of them said 'our science project!' and I genuinely believe that was because of the quality of the resources and the planning in the CREST boxes.

Participating teacher



CREST brings STEM to life for young people aged 3-19

Exciting hands-on projects and challenges for all abilities:

- spark curiosity
- build confidence
- connect students with real-world STEM

Learners achieve a globally renowned CREST Award.

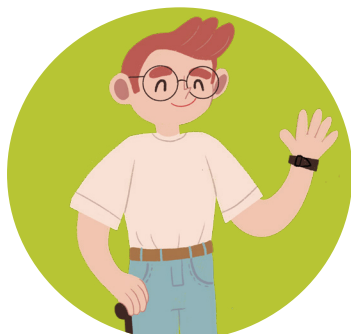


CREST Star provides educators with simple, practical and adaptable activities for pupils aged 3-7 (or those working at this level). The activities align with the early years and primary curricula across the UK.

After completion of at least six CREST Star challenges, children's participation is recognised and celebrated with a CREST Award certificate from the British Science Association.

The kids have all gone home and talked about what a great experience they've had, how much they've enjoyed it. So for the parents to have an opportunity to see them get their certificates but also hear about their work and see it being celebrated – I think that's a start at breaking down barriers.

Participating teacher



The resources were all of a really good quality. They couldn't wait to get their little hands on them!

Participating teacher



Benefits for pupils

The CREST Star Kit Box includes eight activities that:

- cover a range of topics and curriculum areas
- develop key skills including collaboration, communication and creativity
- include relatable characters throughout the resources.

Diverse characters are woven into the materials and supporting classroom slides, providing engaging visual prompts to support understanding.



With the best will in the world you can't take them on that journey [of identifying with science] without the resources to let them get hands on. One of the best things about the kit boxes is how they let kids actually do science, not just see science.

Participating teacher

The children loved collecting the stickers and counting how many they had each week. We gave out the certificates in our celebration assembly where the children spoke about some of the things they had completed and found out.

Participating teacher



Evaluation results show clear benefits for learners:



82%

said kit box activities boosted children's enthusiasm.



73%

said activities boosted communication skills.



50%

reported parent, carer or family engagement with kit box activities, taking enthusiasm for STEM beyond the classroom!

100%

reported children's interest and engagement in science improved after taking part in kit box activities.



82%

said children's collaboration and teamwork skills developed.



Benefits for educators

100% of evaluation participants:

- reported increased confidence in running STEM activities with their class over the course of using the CREST Star Kit Box.
- rated satisfaction with the CREST Star Kit Box as 'good' or 'outstanding'.
- the majority (73%) rated them as 'outstanding'.



It is easy for anybody to pick it up, whatever their experience, and to be able to do a very good quality science lesson.

Participating teacher

For me, when the kit boxes arrived, it was like 'Oh there's so much more I can do now!' It opened up so many more opportunities to actually do hands-on science which just aren't there if you don't have the resources.

Participating teacher

I can just put everything in trays and it's all there for me, I didn't have to run around thinking 'right I need a washing line, I need some socks and pegs!'

Participating teacher

Most evaluation participants **73%** reported that taking part in Star CREST challenges helped overcome barriers pupils face in engaging with STEM activities.

All the resources for the eight Star kit box activities are free to use and download from the CREST Resource Library: crestawards.org/resource-library

To find out more about CREST kit boxes and the **Engage** Teacher Network visit: crestawards.org/engage

To learn more about the impact of CREST and how to support the roll-out of more kit boxes visit: crestawards.org/about-crest/support-crest

