How to complete an Explore: Urban Nature CREST award

This document outlines how your students can complete a bronze CREST Award as part of Explore: Urban Nature – a learning programme led by the Natural History Museum, in partnership with Amgueddfa Cymru.

What is CREST?

CREST is a scheme that inspires young people to think and behave like scientists and engineers. CREST gives young people aged 5–19 the chance to choose their own subject and methodology when completing their hands-on investigation. It is a nationally recognised scheme for student-led project work in the STEM subjects (science, technology, engineering and maths).

Sharing your questions with urban nature scientists

As your students begin to explore project ideas, they will likely come up with lots of scientific questions they are curious about, but they won't be able to investigate them all!

All these research ideas won't go to waste, instead you can submit them to urban nature experts at Amgueddfa Cymru and the Natural History Museum. Our scientists are crowdsourcing ideas for their next big urban nature research project and want to know what urban nature questions young people want answers to. Students across the UK are submitting their questions.

Is your class ready to ***join the challenge*** and be part of the urban nature movement?

How to complete a CREST Bronze project with Explore: Urban Nature

Getting started

Start by checking out the CREST Awards and look at CREST Bronze, which is the level this resource is accredited at. Bronze is suitable for students aged 11+ working individually or in groups, and takes roughly 10 hours of project time to complete. If you'd like to do a different level with your students, then you can adapt the content.

To take part in CREST Bronze you will need the CREST Bronze profile form or workbook. Either can be used – the workbook simply provides some additional scaffolding.

Once you have familiarised yourself with how CREST works you can follow the steps below to gain a CREST Award using the Explore: Urban Nature learning resources.

Research

1. Do as many of the ***Explore*** activities as you'd like – this will make up part of the 'Research' part of your students' CREST Award. You want to give them a solid grounding in what topics they will be looking at. Get them thinking about a topic they would like to investigate in more detail.

Project planning

2. Use the ***Working Scientifically*** resources to get your students to think about what open ended investigation they want to do. These resources can help develop and refine their question for CREST and think about how it could be investigated.
   Scientific question criteria and ***Investigating questions*** will help students develop strong questions.

Sharing questions with Natural History Museum scientists

3. At this point you should consider what questions you would like to submit to the experts at Amgueddfa Cymru and the Natural History Museum who are looking for ideas for their Urban Nature research project. Each student can submit their own question(s) using the student entry form, or you can submit questions on behalf of your class. There is no limit to how many questions you submit!

You can share questions at any stage of your project but here are some suggested approaches:

- **See the big picture then study it up close**
  You can start by developing a whole-class question to be submitted – this should be a broad question about urban nature that is too big to answer alone.
- The ***What's your strongest science question?*** can be used to generate lots of questions as a class and work collaboratively to narrow these down and refine them. Once you know what kind of question you are going to submit your students can consider their own smaller scale, testable questions to use for their CREST Award.

- **Start small then think big**
  Alternatively, you could develop investigations with your students for their CREST project, and then use their findings and any additional questions they have to develop questions to be submitted to the

experts. You can submit questions via the teacher or student entry forms on the Explore: Urban Nature webpage.

Planning your investigation

4. Whichever way round you decide to do it, you can use the ***Tools for outdoor exploration*** to help students to think about the practical details of designing their urban nature investigation such as the outdoor spaces they have access to, and the tools and techniques they can use. This will help to focus their line of enquiry and define the details of their project plan to test their hypotheses. ***Creating a research proposal*** will support students to develop robust project plan.

Next steps for completing CREST

5. Now that students have a question that they would like to investigate, and have a plan for how to do this, they are ready to start on their CREST project. Plan and do any practical work needed to gather further information on their hypotheses using the skills developed through the ***Tools for outdoor exploration*** section.

6. Encourage students to consider what they have learned through this, and any implications this has for the wider world. Ask them to reflect on their work and learning – how might they improve their project if they had to do it again in the future? Have they learned anything new from doing this project?

   How might your students communicate their findings to other people? Are there opportunities to share their project with peers in a school display, scientific poster or an assembly?

What next?

This is just the beginning of an urban nature movement! Keep posted on the Explore: Urban Nature webpage to discover more ways that you can ***join the challenge*** and support urban nature through science.

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