

## Eco Day: Sustainable Communities (KS3/4)

**How can we learn from the history of Cromford Mills and apply this to create sustainable communities and energy supplies for the future?**

Led by an expert guide, enjoy a fully resourced, practical, STEM day of learning with links to the National Curriculum for Geography, Science and History. Your pupils will discover the heritage of Cromford Mills and the village of Cromford, how they developed as an exemplar of how a sustainable community might look and how that might inspire us to live more sustainably in the future. The pupils will understand how waterpower was harnessed in the past and undertake a variety of hands-on experiments and activities to learn about climate change and explore how renewable energy can also be part of our future, both here at Cromford Mills and in their own community.

### Pre- and post-visit activities

This programme is designed as a standalone day which pupils can access with no prior knowledge, or as part of their wider learning. It is beneficial, but not essential, if pupils are aware of issues related to sustainability. Equally, they may find it useful to know who Richard Arkwright is and why he is significant in the story of Cromford Mills, but this is covered as part of the day. If you would like additional ideas and resources to support your learning about Cromford Mills, please follow this link: <https://www.cromfordmills.org.uk/secondary-school>

**We are happy to adapt the day and activities to suit the needs of your learners, your priorities for your visit and where the visit sits within your sequence of learning. This is what a typical day with us could look like:**

<b>9.30</b>	<b>Arrival and welcome to Cromford Mills – introduction and safety briefing</b> Your guide will meet you off the coach and take you to the Education Room, your base for the day.
<b>9.45</b>	<b>What would a sustainable community look like? Mapping Challenge</b> An introduction to sustainable communities, after which the pupils will design a truly sustainable community. Pupils will work in pairs to consider themes including energy, work and education, health and well-being, transport, food, housing, and landscape and habitats to design their own ideal sustainable village of the future.
<b>10.30</b>	<b>Understanding the Cromford community of the past - The Arkwright Experience</b> Visiting the video projection in the first mill, pupils will start to understand what happened in Cromford in the past and how this provided a blueprint for a sustainable community.
<b>10.45</b>	<b>Break</b>
<b>11.00</b>	<b>Cromford Mills and village past and present – how was this community sustainable in the past? What is it like now?</b> Using old photographs and maps, we take a tour to explore the mill site and Cromford village. The pupils will explore the sustainable waterpower source for the mills, as well as the features of the village which were established over 200 years ago to help make the community successful and sustainable.
<b>12.30</b>	<b>Lunch</b> – either in the Education Room, or in nice weather classes can picnic in the mill yard or near the canal
<b>1.00</b>	<b>What is climate change?</b> Pupils will take part in a hands-on simulation to understand the science behind climate change, what is causing these changes to our planet and what we need to do to combat this.
<b>1.20</b>	<b>Getting experimental – exploring climate change and renewable energy</b> Pupils will set up a series of experiments to examine climate change in more depth and use hands-on renewable energy kits to explore solar, wind and waterpower. They will make predictions, record their observations, and draw conclusions from their results. They will also find out how waterpower will continue to play a part in the future of Cromford Mills through our plans to introduce hydro-electricity.
<b>2.20</b>	<b>What actions could you take in your community?</b> Taking the learning from the past and present in Cromford, pupils will consider what they could do in their own communities to move to a more sustainable future.
<b>2.30</b>	<b>Depart Cromford Mills</b>

Please contact Lyndsay if you would like more information, or to book a visit and/or pre-visit:  
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