



A FANTASTIC OPPORTUNITY  
FOR PUPIL-LED DESIGN,  
DISCOVERY AND MAKING

WIN MAKING-THEMED  
PRIZES FOR YOUR  
SCHOOL AND TEAMS

OPEN TO TEAMS  
OF THREE, AGED  
11-14 YEARS

# 2021 MIDLANDS MAKER CHALLENGE

## SCHOOL INFORMATION PACK

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OPEN TO ALL SECONDARY SCHOOLS IN THE MIDLANDS  
Join our making challenge to inspire the makers of the future  
OPEN: 27 APRIL - 8 JUNE 2021



[midlandsmakerchallenge.co.uk](https://midlandsmakerchallenge.co.uk)



# CLIMATE (IN)ACTION

## WHAT IS THE CLIMATE (IN)ACTION CHALLENGE ABOUT?

We are looking for each team to imagine, design and create a solution to the challenge that puts people at its core – key to this is the development of ideas, the creation of a prototype and a presentation detailing the journey undertaken, the solution and who it was designed for.

## THE CHALLENGE THEME

CLIMATE (IN)ACTION is our chosen theme because it is one of the key concerns for young people today and is driven by the idea that local action can have global impact.

The theme has been constructed to offer flexibility for young people to consider positive action but also the impact of inaction when considering issues around the climate crisis. This challenge has the potential to not only support and empower young people but to also create solutions with real life applications.

## THREE QUESTIONS

The challenge will have three questions coming from different perspectives around the subject area including heritage, education and industry. Participants will select a question that inspires and motivates them to create a design solution as well as create a prototype of their idea for the future.

## WHY THE CHALLENGE IS RELEVANT TO TODAY'S YOUNG PEOPLE

**A BBC Newsround survey in March 2020 showed that:**

*“they are worried about the impact that climate change will have on them when they’re older and one in five have even had a bad dream about it.”*

[<https://www.bbc.co.uk/newsround/51451737>]

**The Greta Thunberg Effect and the climate strike movement on 15 March 2019 showed that:**

*“an estimated 1.6 million students from 125 countries walked out of school to demand climate change action.”*

[<https://www.bbc.co.uk/news/world-48114220>]

**The Greta Effect in publishing shows:**

*“a boom in books aimed at empowering young people to save the planet.”*

[<https://www.theguardian.com/environment/2019/aug/11/greta-thunberg-leads-to-boom-in-books-aimed-at-empowering-children-to-save-planet>]

**A YouGov survey suggested that:**

*“Young people rate environmental problems such as the climate crisis and global annihilation of wildlife even higher, placing them second behind Brexit. Almost half of 18- to 24-year-olds chose environmental issues as one of the nation’s three most pressing concerns, compared with 27% of the general population.”*

[<https://www.theguardian.com/environment/2019/jun/05/greta-thunberg-effect-public-concern-over-environment-reaches-record-high>]

## GREAT OPPORTUNITY FOR YOUR PUPILS

### FOCUSSED SUPPORT

Each team will receive focussed support including digital resources, skills coaching sessions, and a physical making kit with materials to help prototype ideas.

### PORTFOLIO

The challenge will support pupils in the creation of a portfolio using their activity alongside Open Badges earned by demonstrating skills.

### WINNING TEAMS

The winning team will win exciting making-themed prizes, the recognition from industry experts and an exclusive invitation to a Maker Celebration event later in the year at the new Museum of Making where their winning prototypes will be displayed with famous inventions from the past.

## WHAT'S IN IT FOR YOUR SCHOOL?

Winning schools will receive exclusive 'Meet the Experts' access to the new Museum of Making for a group of 30 young people as well as a maker kit for their school.

## WHAT'S INVOLVED?

The challenge uses STEAM methodologies and takes place over six weeks. It will introduce Human Centred Design principles to ensure that meaningful solutions are created with people at their core. The prototypes will be judged by a panel of experts from industry, education and heritage, and will provide feedback to all teams.

### HOW IS THE CHALLENGE DELIVERED?

This will be delivered through our online learning platform and includes learning resources and a maker kit to support the development and prototyping of ideas.

The content includes: a challenge briefing, introduction to making, how might we design for people, generating and selecting ideas, introduction to modelling and prototyping and telling your story.

### HOW MUCH TIME IS REQUIRED?

Teams will be expected to access three hours of content and take approximately seven hours to complete their prototype and presentation. The content is designed to be accessed at a time convenient to the team, for example in the timetable or extra-curricular sessions/clubs. There are several contact points including a welcome and presentation session, as well as an optional mid-point review and skills coaching sessions.

### HOW CAN YOU SUPPORT THE TEAM?

The challenge is pupil-led, so as their nominated teacher we suggest that a time and space is made available for them to complete the team elements in school.

### DIGITAL ACCESS

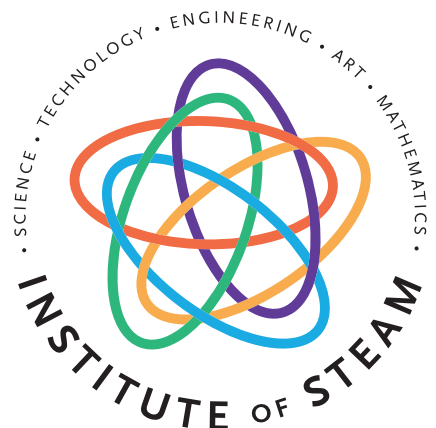
As the content for the challenge will be delivered online, access to the internet and digital technologies (phone, tablet or computer) will be required.

## RECOGNISING ACHIEVEMENT

Participants will earn Open Badges across a range of skills throughout the challenge. The badges will be issued based on the activities undertaken where the participant has demonstrated achievement in specific skill areas.

The badges are issued by the Institute of STEAM, a quality mark used by Derby Museums for all the STEAM powered learning programmes.

The skill areas are: **CREATIVITY**, **CRITICAL THINKING**, **COMMUNICATION**, **COLLABORATION** and **PRACTICAL SKILLS**.





## MORE INFORMATION

Visit [midlandsmakerchallenge.co.uk](https://midlandsmakerchallenge.co.uk) or email [info@midlandsmakerchallenge.co.uk](mailto:info@midlandsmakerchallenge.co.uk) with specific questions.



# ENTER NOW

To enter the challenge your school can nominate teams of three (aged between 11 – 14 within their school bubbles). To submit your team(s) send an email to [info@midlandsmakerchallenge.co.uk](mailto:info@midlandsmakerchallenge.co.uk) with the teams names, year group and nominated teacher.

A maximum of three teams from each school can enter.

Upon receipt of this email we will send documentation to confirm the teams place on the Climate (in)action challenge including: summary of the content, information on team/ individual activity, key contact points and safeguarding information.

## FREQUENTLY ASKED QUESTIONS

### How much input will be required by the school/ nominated teacher?

The challenge has been designed to complement the school curriculum and to be led by the pupils. The activity can be completed in timetabled sessions or in extra-curricular time, e.g. lunch or after school, depending on the institution's provision for social distancing.

### What school resources will be required?

The assumption is that the school will make a space available for the team to complete the practical elements of the challenge. Teams will be provided with a making kit of materials to support the development of their ideas. This will be delivered to the school in advance of the start of the challenge.

### At what points will the team be required to attend cohort events?

The briefing at the start of the challenge and the presentations at the end are the only compulsory sessions. We have also timetabled an optional mid-point review session and several skills coach sessions. These sessions will be recorded so that the team can access when time allows.

### What proportion of the challenge is team based?

The activity provided on our Canvas Learning Management System (three hours) can be accessed individually, but the expectation is that the team will work collaboratively to rationalise the concepts and to make their prototype. A series of short tasks over the six weeks will require the team to feed back individually or as a team through Canvas

### Which school teacher would be the most appropriate to support the team?

The decision of who is best placed to support the team is at the discretion of the school. The challenge uses STEAM principles and encourages a cross-curricular approach.

### How many teams can a school submit?

We have a limited number of places and each school can submit three teams.

### What safeguarding procedures are in place?

All Derby Museums staff and facilitators are DBS checked. Communication between staff and the teams will be limited and will occur through Canvas only. A digital safeguarding policy is available on request.

## TERMS & CONDITIONS

There are a limited number of places on the challenge and teams will be selected in order of submission, so get your enquiry in soon!

Team collaboration must follow Government social distancing guidelines and the school will be responsible for implementing the appropriate Health & Safety policy and risk assessments.

The Maker Celebration event may be postponed/amended dependent on Government guidelines

The Challenge opens on the 27 April 2021 and runs until 8 June 2021.

The Midlands is defined as: Derbyshire, Herefordshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire, Rutland, Shropshire, Staffordshire, Warwickshire, West Midlands, and Worcestershire.