

Making math relevant to the climate strikes

20 September 2019



Credit: Shutterstock

One of the key demands of the UK's school climate-strike movement is that more attention is paid to climate change in the curriculum. To help address this, researchers at Oxford's Environmental Change Institute and Department of Physics have today launched a new website, mathsforplanetearth.org, providing GCSE and A-level maths problems based on topics in climate change and sustainability.

The new questions were created by adapting existing maths GCSE and A-level problems and can be used to supplement or replace traditional practice questions. They pair topical issues like [carbon capture](#), deforestation and [extreme weather](#) with core maths concepts including geometry, algebra and statistics.

Myles Allen, of the University's Environmental Change Institute and Department of Physics, explains the motivation: "When Greta Thunberg raised [climate change](#) in the school curriculum, Michael Gove brushed her off saying it was covered in Geography A-level—which is, of course, hugely relevant, but taken by only around 6% of students. Everyone takes maths to GCSE, and the course is increasingly problem-oriented, but many of the problems seem to be based on money or cars—just the kind of thing that might put off a young [climate](#)-striker. But the same maths that

helps you understand car braking distances also applies to stopping climate change.

We've been working with a group of talented students and 6th-formers to craft useful and interesting maths problems—and we're inviting other climate researchers to contribute to show how maths applies to every aspect of understanding our changing climate and what can be done about it."

Philip Stier, Head of Oxford's sub-Department of Atmospheric, Oceanic and Planetary Physics, adds: "Lots of us work on climate in Oxford Physics, but many school-strikers don't realize that. A big part of this is explaining that solving climate change is as much about maths, [physics](#), chemistry and engineering as it is about biology, geography and the environmental sciences."

The new website is part of an ongoing project led by Dr. Tina Fawcett in partnership with Low Carbon West Oxford that explores how the university's climate-related research can be used beneficially for new audiences in schools.

More information: mathsforplanetearth.org/

Provided by University of Oxford

APA citation: Making math relevant to the climate strikes (2019, September 20) retrieved 13 June 2021 from <https://phys.org/news/2019-09-math-relevant-climate.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.