

Mathematics of Planet Earth School Competition 2017

REGISTER & GET CREATIVE

Would you like to participate
in the competition for new
exhibits in the Mathematics
of Planet Earth exhibition?



Proudly Organised by:
EPSRC Centre for Doctoral Training (CDT) in the
Mathematics of Planet Earth (MPE)

We are very pleased to announce the launch of the Mathematics of Planet Earth School Competition 2017.

The competition is free to enter and is open to teams of pupils from schools in Greater London. The aim of the competition is for teams to identify how the mathematical sciences can be useful in tackling our world's problems. Through the competition we hope to motivate pupils to engage with science and innovation, to encourage them to work together as part of a team and to engage them in a fun activity that is motivated by their curiosity and drive.

<http://mpecdt.org/mathematics-of-planet-earth-school-competition-2017>

Prizes:

Competition Prize Includes:

The top teams will be invited to present their idea at a showcase event in front of a live audience and a panel of judges. The competition winners will each receive a prize and will have their exhibit displayed for the full duration of the Mathematics of Planet Earth Exhibition.

The competition is open to teams of students from all secondary schools in the Greater London area. There are three age categories for entry: **Years 7-9, Years 10-11 and Years 12-13**. There is a limit of no more than one team per category, per school, with each team comprising of a maximum of four students. Each team must be mentored by Maths or Science teacher from their school.

How to Enter:



1. Register & Get Creative: The Maths or Science teacher mentoring a team must pre-register the team by **Monday, 20th March 2017**, by completing the Team Registration Form which can be found on the competition webpage: <http://mpecdt.org/mathematics-of-planet-earth-school-competition-2017>



2. Exhibits: To enter, teams must create an exhibit in one of the following four forms:

- **Programme.** An interactive software exhibit to be used either on the web or in a museum.
- **Hands-on.** A model explaining how to realize a physical model in a museum.
- **Film.** A short video that can be shown in an exhibition.
- **Image gallery.** A collection of images accompanied by their mathematical description. Some examples of the type of exhibits we are seeking can be found on the MPE exhibition page: <https://imaginary.org/exhibition/mathematics-of-planet-earth>. Additional ideas for new exhibits can be found here: <http://www.imaginary-exhibition.com/osp/mpe2013/data/ideas-for-modules-MPE2013.pdf>.

Teams must briefly outline the idea they have identified and explain the science behind it. To stimulate imagination on how mathematics plays a crucial role in planetary issues, the following (non-exhaustive) themes are proposed:

- A planet to discover: oceans, meteorology and climate, mantle processes, natural resources, celestial mechanics...
- A planet organized by humans: political, economic, social and financial systems, organization of transport and communications networks, management of resources, energy...
- A planet at risk: climate change, sustainable development, epidemics, invasive species, natural disasters, risk analysis...



3. Upload Your Entry: The exhibit must be accompanied by the on-line Submission Form, available on the competition webpage, which includes the information provided as part of the pre-registration process, plus a brief summary of the idea. A completed Submission Form must be submitted by **Friday, 7th April 2017**.

Whatnext..

The best teams in each age category will be selected by a shortlisting panel and the successful entrants will be notified by **Wednesday, 17th May 2017**. Further details of the format of the live final will be provided at this stage. In order to help the teams prepare for the final, members of the shortlisting panel will visit each successful school.

The successful teams will be invited to present their exhibit and pitch their idea at Imperial College London at the final event on **Wednesday, 7th June 2017** in front of a live audience. Our panel of judges will then select the winning team and runners-up. Students from the winning team will receive a trophy and individual prizes and will also be given the opportunity to display their exhibit for the full duration of the Mathematics of Planet Earth Exhibition. All finalists will receive certificates.

Any questions regarding the competition should be directed via email to Dr Anna Radomska a.radomska@imperial.ac.uk