



Dear Parents and Students

The Foundation Award

Upper School: KS4 and KS5

The Gordon Foundation would like to offer entry to the following competition for students in the Upper School:

How can we re-forest a desert?

Environmental issues have been of great concern for some time now. With the changing global climate and a need to consider our future impact on the planet, an ability to offer innovative and far reaching solutions is more important than ever.

Many of the most significant problems can, at least in part, be remedied through re-forestation. Effective replenishment or replacement of global forests could have a positive impact on numerous areas such as the atmosphere; the availability of raw materials; soil erosion and habitat regeneration for wildlife and, if done to a large enough scale, could even impact global weather patterns to increase rainfall and eventually become self-sustaining!

For inspiration, you may wish to look at these short clips:

- <https://www.youtube.com/watch?v=06S3tQ6n4OM>
- <https://www.youtube.com/watch?v=UhljWOuQA-o&t=36s>

Therefore, this competition is asking you to present an original idea on how to re-forest a desert.

In tackling such a project you could consider, amongst other things, some or all of the following:

- The alternative energy sector
- The potential difficulties of engineering a project of this nature within an inhospitable environment.
- Geographical location of existing deserts (and/or where they might be in the near future).
- Potential impact on, and/or creation of, eco-systems.
- What trees can grow when watered by salt water (or how to desalinate sufficient quantities of water)?
- How much water would you need? (How many trees will you plant? How many trees could you plant in a specific area? How much space does each tree need? etc.)
- What could be used as a fertiliser to help the trees grow (without damaging a fledgling ecosystem)?
- What use, if any, might be made of such re-forested areas and what potential is there for sustainable commerce? Would this be ethical under the circumstances?
- How might such projects impact on local and global economies?

- Timescale – how long do you want to wait for your forest? Do some trees grow faster than others?
- Are some trees better than others for the environment? What is your priority – Oxygen production, carbon sequestration, soil/coastal erosion, desert encroachment, habitat regeneration etc?

As you can see, this competition could benefit from knowledge of, or interest in, numerous different subject areas from Engineering, Maths and Science (Physics, Chemistry and Biology!), to Geography, Economics and even Ethics!

The Gordon Foundation is happy to receive **group or individual** submissions. Entries can be presented in any format but must be based on an **original idea** and be sufficiently rigorous and substantial as befits the prestige of this award.

The winning entry will receive an award towards the cost of a 'Study Abroad' programme which the School hopes will run in the Summer of 2021. An official presentation will also take place at Annual Parade, 2021.

Please email entries to: **Competitions@gordons.school**
Closing Date: September 7th 2020

'The most prestigious environmental prize in history!'

Suitable entries will also be submitted to *The Earthshot Prize*, launched by Prince William as an ambitious set of challenges to inspire a decade of action to repair the planet.

Click here for more details: <https://royalfoundation.com/programme/the-earthshot-prize/>

Kind regards.

Gordon's School