

Designs for your *future*

Sustainability Challenge 2023

Who is the challenge for?

The challenge is open to students in years 8 and 9.

How many people can take part?

You can work on your own or in groups of up to four. Schools can submit multiple entries.

As a guide, we suggest you spend 8-10 hours in total on the challenge.

What is sustainable design and why is it important?

Sustainable design seeks to provide solutions to problems that are better for people and our planet. Below are some of the principles that should guide your sustainable design:

Design out waste and pollution: no more excess packaging, wasted energy or water in production, or consumption of non-renewable resources

Keep it in the loop: keeping products in use through reusing, redesigning, repurposing or fixing

Supporting biodiversity: using design to eliminate negative environmental impact.

Aiming to build a better future, sustainable design touches every design sphere, from beauty to architecture. It enables the continued survival of our species and our planet as it reduces the amount of resources, pollution, and energy use of our everyday lives.

What is the prize?

The winner(s) will get an all-expenses paid trip to Marwell Zoo, an award-winning adventure attraction committed to sustainability and conservation.

What will I need to complete?

We will send you a challenge journal, which can be completed either individually or as a group. The journal is split into three sections:

1. Introduction

Outline what the real-world problem is that you are solving, why you chose it and identify who will benefit from it and how.

2. Product design

You will need to consider every step of the products lifecycle.

Function: how will it solve your problem

Aesthetics: what will it look like

Construction: how it is made and what from

Economics: how much it costs to make

Disposal: if a product is entirely sustainable, the disposal phase will begin the life of a new product.

You will also need to provide detailed and accurate drawings of your idea, which should be to scale and from different perspectives, including 2D and 3D compositions. You can choose to do this in your journal or using Computer-Aided Design (CAD) software.

3. Reflections

Summarise what you learnt through the process and what you would do differently if you were to do the challenge again.

Closing date

The deadline to submit your challenge journal is **midday**, **Friday 9 June 2023**.

Email us to find out more, or request a challenge journal schoolsliaison@bournemouth.ac.uk