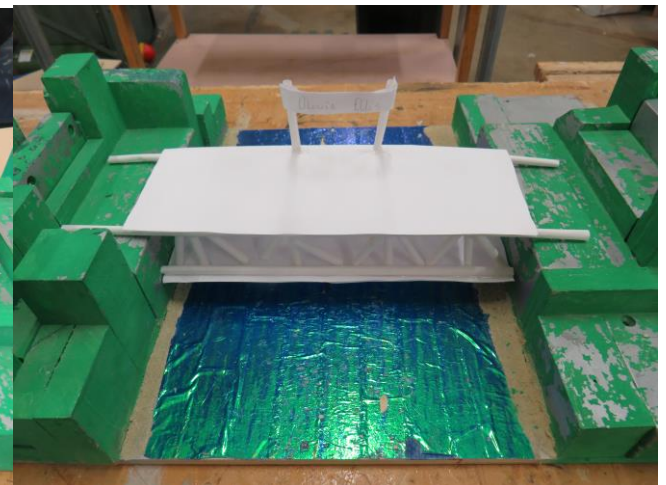
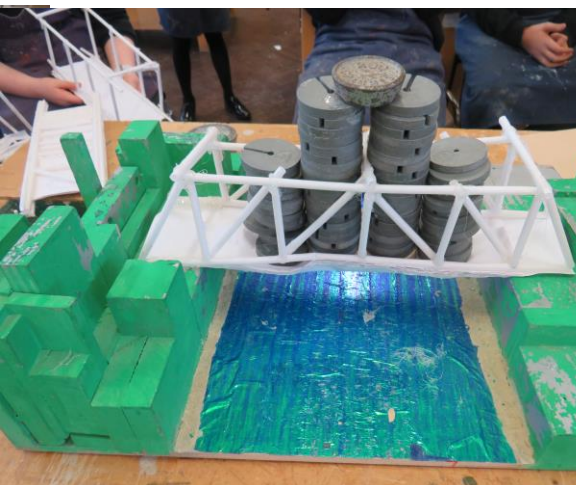
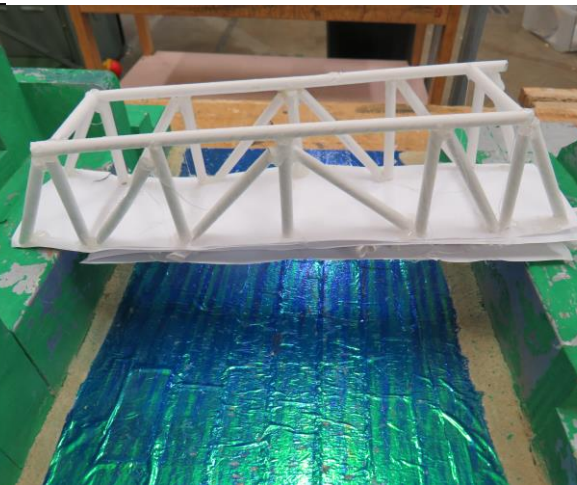
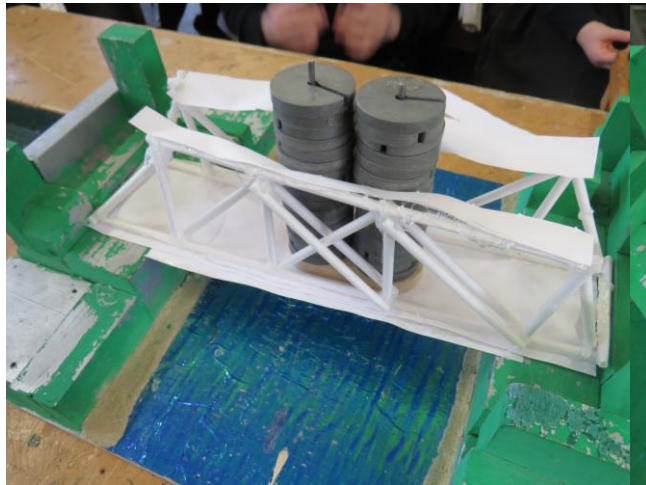


# Year 7 projects

## 20<sup>th</sup> Century clocks



## Bridge engineering





# Year 8 projects

## Balance Toy



## Night light





# Year 9

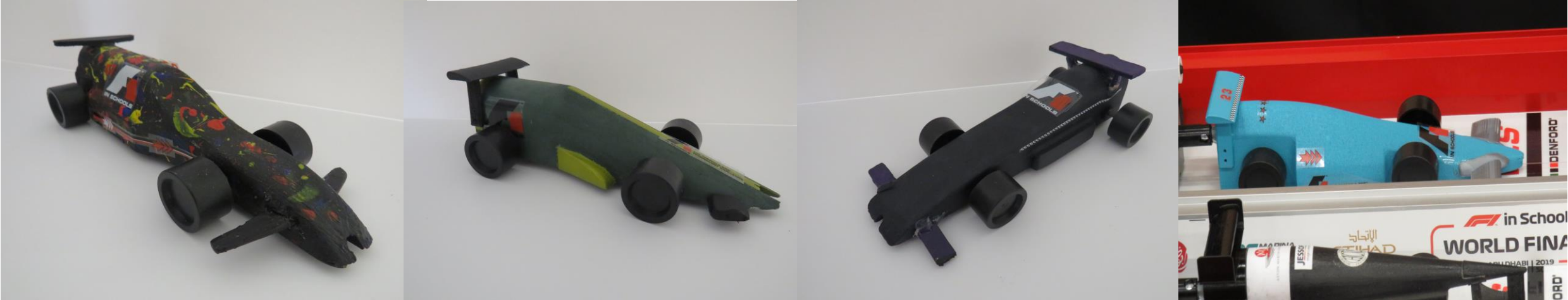
## Metal Creatures





# Enrichment

## F1 in schools



## Eco House competition



**The Treehouse**  
**By The Eco Females**  
Names: Beth Michael, Ellie Payne, Victoria Balint, Charlotte Ledain.

As you can see, we have made a treehouse. We decided to make this as it means that we do not need to clear any forests or wood to create a living space. To make this treehouse we have used old pieces of wood, scrap plastic, cardboard and tin cans.

We researched sustainable energy options, and decided to pick a water wheel because it has very little environmental impact and we can use water from the river to water the crops. We also chose a wind turbine because solar panels have monocrystalline solar cells which produce a lot of silicon waste and use additional energy and thin film solar cells contain toxic materials that can cause environmental harm unlike the wind turbines. The turbines create electricity that we can use for lights, making food and much more.

The treehouse is completely self sufficient, it grows its own food. Likewise the toilet helps fertilise the field and its crops. The compost bin also plays a part in this. There are two places to grow food, the field and the greenhouse. The greenhouse is for more tropical foods or food that need more heat such as tomatoes, grapes and strawberries. The field is for foods we need in more quantity (staple foods) such as potatoes, carrots, wheat and corn. The chickens are also a source of food as they produce eggs and the excrement can be used to fertilise the fields. The side plants such as the flowers and trees help offset any carbon footprint created in the building and upkeep of the house. We also have insulation in the roof to keep the heat in.

