

## Geographers Embark on the Earthship Brighton

Last month, just under 50 year 8 Geography students visited the Earthship at Stanmer Park.

The Earthship Brighton is an off-grid building that heats, cools, powers itself from the sun, harvests its water from the sky and treats its wastewater onsite using plants. Earthship, Brighton was the Low Carbon Trust's first project and was the first Earthship to be built in England. For more information please click the link <http://www.lowcarbon.co.uk/earthship-brighton>

The day started with a walk through the woods, passing a 17th century catchment platform which was built to capture rainwater for Stanmer house. Students were amazed at how people used to get their water!

We then had a tour of the Earthship, learning about the building materials used, why it is so sustainable and how it manages to keep warm all year round despite having no heating. The walls are made from rammed car tyres and earth which act as a storage heater.

The heat from the sun is stored in the thick walls and is slowly released during the night and colder days and seasons. This effect is exactly the same as the heat you can feel emanating from a stone wall in summer after a sunny day.

The angle of the front glass allows for maximum solar gain during the winter months when it is most needed, but reflects it during the summer months when the sun is higher in the sky.

Next students took on a tasting challenge and ate an unusual selection of leaves, herbs and berries. It was lovely to see them trying and enjoying a range of new flavours. Some of the faces being pulled were priceless!

We stopped in the orchard for lunch and enjoyed the warm October sun.

In the afternoon students took part in two workshops; apple pressing and survival fire starting. With a confused expression many declared that the apple juice they made 'actually tasted really nice, nothing like the stuff in the shops!'

Kaylan Nicholson was really impressed by the Earthship, "I was amazed that people can live without a mains water supply and electricity! It was a great day and I loved the apple juice but not the sour leaves!"

It was a thought-provoking trip, helping students to re-evaluate some of the ideas and methods used in the past. Students will be using their new understanding of the Earthship, food sources and sustainability to help them consider the challenges our planet faces and how we can adapt in the future.

