

Year 8 Smart Build Challenge

Ensuring everyone in the world has access to energy and clean water is a 21st century engineering challenge. On Thursday 29th November Year 8 students took on this challenge to find a solution to the problem.

During the STEM day students worked in small teams of 6 to design and build a system to filter, collect, detect and pump collected rainwater as part of an integrated system on a new smart building.

Students designed and built a watertight, water-collection unit, with a built in filtration system. They also assembled and soldered an electronic water-detector and made a circuit for an electric pump, in order to detect and then pump the water that had been collected. Filtered water could then be used to flush toilets and water plants in the smart building.

Subjects covered include: water conservation, renewable energy, electricity and circuits, structures and forces

