

Green STEM Project: Hydroponics

Type	A set of science and engineering activities designed to explore appropriate technologies in future food and fuel production.
Purpose	To include an environmental theme into the curriculum to raise the awareness about sustainability, and explore one of the sustainability gateways i.e. that of food production. To raise awareness of the issues of social justice with relation to land use and food production and resource consumption.
Description	<p>An activity over 6 hours via a route decided by the course leader Introducing the notion of sustainability in agriculture and justice in land use and sharing of resources. A number of different activities will be available including</p> <ul style="list-style-type: none">• extended research around the topics of fair trade, organics, food miles, vegetarianism etc with linked web resources.• Scientific investigation into “junk hydroponics” linking to its origins as a project in the shanty towns of Brazil.• Control system design for more complex hydroponics systems. Including data harvesting for monitoring. Links with CORUS on their effluent monitoring systems.
Cross-Curricular links:	<ul style="list-style-type: none">• Literacy – Letter writing’ designing questionnaires.• Numeracy Data handling• ICT• Engineering systems design• Geography / RE
Keystage	AQA science biology KS3 KS4
Links to other materials	Web links

If you would like more information regarding this project, please contact Klaus Selke on 01482 372677 or klaus@heta.co.uk.
