

Webcast for Science week 2010

Primary / Lower version

Suggested age range: 8 - 13 yrs

Structure: live web cast mixed with prerecorded programme about energy, fossil fuels and renewables. Finishing with a hands-on 'Blue Peter' CDT creative activity.

Further detail

Live Welcome from Rob Farr - The Energy MC. followed by

PART 1 - ENERGY

Defining energy, where energy comes from and how we use it for almost everything we do. Rob explains that nearly all energy comes originally from the sun using props and locations including a tennis court, driving in a car and listening to an IPOD

PART 2 - FOSSIL FUELS

Using graphics and film footage from Petroplus Coryton refinery, Rob looks at how crude oil was formed, and how this MIXTURE is seperated using HEAT. The programme cuts to a lab where Rob mixes salt and water together, and uses heat to seperate them again.

The action turns to the lorries that carry fuel and a consideration of the PROPERTIES of LIQUIDS. The programme cuts to Rob being dunked into a bath whilst examining how liquids move around in a container.

PART 3 - RENEWABLE ENERGY

Filmed on location in Yorkshire and Spain, Rob is seen at a Wind farm and investigates solar power and how it is stored. Specially designed graphics detail why solar power is less successful here in the UK compared to Spain.

Live mentions and answering of questions will conclude the webcast before groups are invited to take part in the hands on activity.

HANDS ON ACTIVITY (Optional extra activity)

Build an oil rig / wind turbine / bridge construction using only A4 paper, a wooden dowel (to roll the paper into a tube) and a hole punch. (Details to follow)