Sustainability - Science Program

Lesson 2

Three main focal points

- o Impurities in fossil fuels
- o Main energy sources used industrially
- o By-products of energy production.
- Start by reminding pupils of lesson one using PowerPoint clim2.
 Watch the video slide on melting ice caps (fast forward a wee bit as it's 24hrs time lapsed into 10 minutes) (≈10 mins)
- Initiate discussion "What else might be produced when we burn fuels?" leading towards exhaust gases etc.
 Watch Brainpop on "Air Pollution". (≈10 mins)
 www.brainpop.com
- 3. Watch Brainpop on "Fossil Fuels". (≈5 mins)
- Is our rain acidic?
 Using the blotting paper, universal indicator and hair dryers, get the pupils to produce their own A5 sheet of pH paper.
 Using pencil, write their postcodes at the bottom. (≈15 mins)
- Demonstrate "Burning different fuels" experiment.
 Similar to the "testing hydrocarbons" experiment, using an alcohol burner rather than a tea light.
 Lead onto discussion on alternative fuels. (≈10 mins)