

An Enterprising lesson		
	Subject	Technology and the Environment – S1
	Lesson	Sources of Energy

Brief description

Pupils investigate all energy sources

“Enterprising” it!

1. How we made learning **relevant** by putting into a **real context**

Pupils are given a list of energy sources and then have to investigate ‘how’ it works. Initially this is individual work and the pupils take responsibility for their own research.

The class is then divided into groups. This has a twofold purpose, firstly to ensure efficient and effective use of limited resources. Secondly the group has to produce a presentation as a joint project.

A

Pupils will research and produce a 5 minute presentation on new technologies. Pupils may use any type of presentation including PowerPoint etc. (2 weeks)

B

Pupils will work around 4 workstations – 2 energy transfer kits and 2 wind turbine kits (2 periods).

At the end of this period of time pupils will produce a poster which diagrammatically explains the operation of the energy source they are researching and they also produce the presentation material.

The pupils are expected to take responsibility for research, method of presentation, poster construction and final presentation to staff.

2 How we encouraged pupils to take **responsibility**

Teacher sets the scene with regard to energy sources.

Pupils take responsibility for their own research as well as playing their part within the group project.

Pupils are responsible for group management ensuring that tasks are allocated according to skills and that the task is completed within the time deadlines given.

3 How we involved partners in learning – building **relationships**

External = Business / Community / Parents & Families

Internal = Other adults in school

Pupils in class and other members of staff.

4 How we **reflected** on its success - assessment

The groups perform the presentation in front of a panel of staff and pupils in class.

Both pupils and staff are encouraged to ask questions as the purpose of the project is for pupils to teach the rest of the class about the source of energy they have been researching.

Pupils also receive verbal feedback from both pupils and staff.

Groups are also given the opportunity to discuss their performance with the class teacher.

5 **Review** - further ideas for development

The teacher is examining the possibilities of field trips to wind farms or the hydro electric dam. Also looking at the possibility of outside experts in the field coming in to talk to the pupils.

6. **Links** with ACfE

Successful Learners

Pupils are more motivated and enthusiastic about their learning. They are keen to produce quality presentation as they are aware that there is an audience watching and questioning their information. Pupils learn about technology which is relevant to the production of energy. In addition they also develop their personal skills by having to produce power point presentations.

Effective Contributors

Pupils have to be able to delegate within their groups as well as taking responsibility ensuring that their share of the work has been carried out.

Confident Individuals

Pupils develop a very positive approach to learning in technology as their learning is related to 'real' issues. Pupils also have to accept the possibility of criticism with regard to their public presentation and be able to use this as a positive motivational factor.

Responsible Citizens

Through this study pupils become aware of the 'real' issues with regard to energy. They have to research the issues of sustainability and alternative sources of energy. This project assists them to develop informed views of this complex issue.

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