

STAFF DEVELOPMENT ACTIVITY

ENERGY IN MY HOME

Learner activity: Collect energy data from your home, four times daily, over a two week period.

Staff Activity: How could this be achieved?

- 1. What would the data be measured in?*
- 2. Could this be converted into the energy unit measured in joule, if so, how?*
- 3. What sort of data could be inferred from this information?*
- 4. What maths opportunities are there here?*
- 5. How could statistics and visual representations be utilised?*
- 6. How could domestic energy be expressed as: per capita per year?*
- 7. How could this be used to give an average power rating for the home over a given period or annually?*
- 8. How would you express this as a mass of carbon output from conventional generation?*
- 9. How could you obtain data from the output of a wind turbine?*
- 10. How would you evaluate the output of a wind turbine from this data?*
- 11. How might home improvements be modelled utilising the previous data?*
- 12. How would you evaluate the performance of a solar water heater or photo-voltaic system from the answers to the above?*