

# The Charge of the Light Brigade

## Electricity Bills!

The greater the power (wattage) of an appliance, the more electrical energy it uses and the more expensive it is to run.

Most electrical appliances have an information plate that includes the power rating in watts. To find out the energy you use, you must multiply this rating by the time in seconds. As the joule is such a small unit of energy, electricity is supplied in units called kilowatt hours. Each unit costs around 8 new pence (2000).

$$\begin{array}{l} \text{Energy transferred} = \text{power} \quad \times \quad \text{time} \\ \text{(kilowatt hour, kW h)} \quad \quad \quad \text{(kilowatt, kW)} \quad \quad \quad \text{(hour, h)} \end{array}$$

One kilowatt hour is commonly known as a unit.

The total cost of using an appliance can be calculated by :

$$\text{Total cost} = \text{Number of units} \times \text{cost per unit}$$

