



**Work, Energy and Power**

**Science – Junior Cert**

**Quick Notes**

# Work, Energy and Power

Work is done when a force moves an object. It is calculated by multiplying force by distance moved in the direction of the force. The unit of work is newtons by metres, or Nm also known as the Joule. Power is the amount of work done in a unit of time, it is calculated by dividing work by time. The unit of power is the Watt. Energy is the ability to do work. The unit of energy is the Nm or joule. Energy is neither created nor destroyed but can be converted from one form to another. Some forms of energy are heat, chemical, sound and light energy. Non-renewable sources of energy e.g. oil, coal, gas are limited and are being used up rapidly. Renewable sources, on the other hand, e.g. wind, solar, nuclear are unlimited in supply. Ireland's energy need is large and increasing. Many sources have to be imported at a cost to the economy. We can conserve energy though by insulating buildings, turning off lights and machines that are not needed and by recycling materials.