ENERGY CONSERVATION

Energy cannot be created or destroyed we can only move it around. Eventually energy turns into heat which heats up our surroundings.

Here is a picture of a racing car. In the diagram 100 Joules of energy is stored in the fuel. This produces 30 Joules of energy to move the car forward. This means 70 Joules of energy has been wasted as heat. We can represent this in a diagram



100 J 30 Joules movement energy

potential energy

in fuel

 70 Joules heat

Now try these

1. A battery stores 70 Joules of energy. If 10 Joules is given off as light in a bulb complete the diagram below.
2. A burger has 600 KJ of energy stored in it. If 20 KJ are used to make the person run work out how much has been lost and where it could have gone. TRY TO DRAW THE DIAGRAM
3. A battery stores 100J of energy 30 J of which is used to turn a motor. Show the energy transfer diagram.
4. \_\_\_\_\_\_\_\_ is needed to get jobs done, or make things work.
5. \_\_\_\_\_\_can be stored. Stored energy is called \_\_\_\_\_\_\_ \_\_\_\_\_.
For example, \_\_\_\_\_\_\_\_ energy, \_\_\_\_\_\_ energy, and \_\_\_\_\_\_\_\_\_ energy.
6. I need energy for doing things. I get my energy from the \_\_\_\_\_\_ \_\_\_\_\_\_ stored in \_\_\_\_\_\_. I need energy for b\_\_\_\_\_\_\_, keeping me \_\_\_\_\_\_, gr\_\_\_\_\_\_ etc.
7. The unit of energy is the \_\_\_\_\_\_\_\_\_ ( \_\_ )