

Energy

2. Energy transfers

CONCEPT 2

TEST YOURSELF

ENERGY DISSIPATION

KNOW

- Q1 What is conservation of energy?
- Q2 When an object receives energy which of its energy stores increases?

APPLY

- Q3 **Dissipated** energy is sometimes called **wasted** energy. Where does wasted energy end up?
- Q4 Draw a simple diagram to show how the energy is transferred by a log fire. Label which energy transfer is useful and which is wasted or dissipated.



EXTEND

- Q5 Look at the Sankey diagram for an *energy saving* light bulb. Use the information in the questions to calculate how efficient it is.
- Q6 On square paper, draw a Sankey diagram for an electric drill that transfers 500 J of energy each second. 300 J of energy is transferred as movement and 200 J are transferred to the environment. You will need to decide which of the outputs are useful and which are wasted.