

Efficiency

AQA GCSE Physics · Energy

Efficiency

This is the percentage of the total energy (or power) supplied that is usefully transferred.

Formula in words

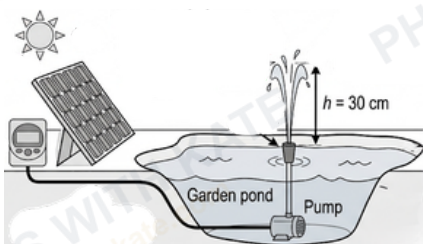
Formula in algebra

Example



Question

A garden fountain pump has an input power of 11.5 W. Each second it lifts 250 g of water to a height of 30 cm above the pond. (gravitational field strength = 9.8 N/kg)
Calculate the efficiency of the pump.



Prose question

Describe the energy transfer in the fountain pump, and say where energy is wasted.

[2 marks]

Calculation question

Calculate the efficiency of the pump.
[4 marks]