

Power

Edexcel International GCSE Physics · Energy

Power

How do we calculate how much energy is transferred in one second?

Formula in words

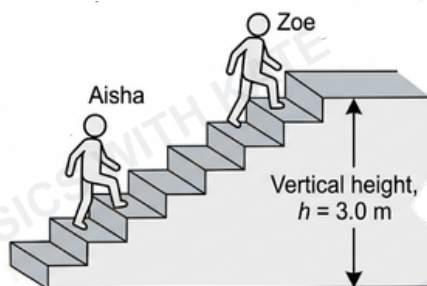
Formula in algebra

Example



Question

Aisha and Zoe each have a mass of 60 kg. They both run up the same flight of stairs, which rises a vertical height of 3.0 m. Aisha reaches the top in 4.0 s. Zoe is twice as quick and takes only 2.0 s. (gravitational field strength = 9.8 N/kg)



Prose question

Describe the energy transfer as a person runs up the stairs.

[2 marks]

Calculation question

Compare the energy transferred and the power of each person's legs.

[4 marks]