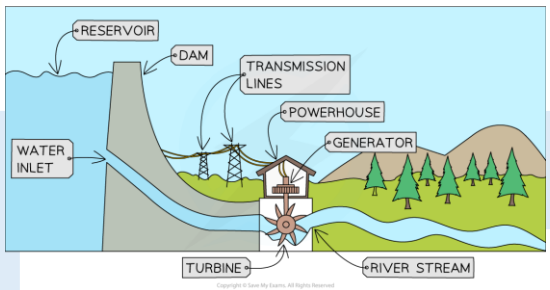
PHYSICS: SP3 Conservation of Energy

CHURCH STRETTON SCHOOL

Assessment = ★



SCAN ME

Final assessment

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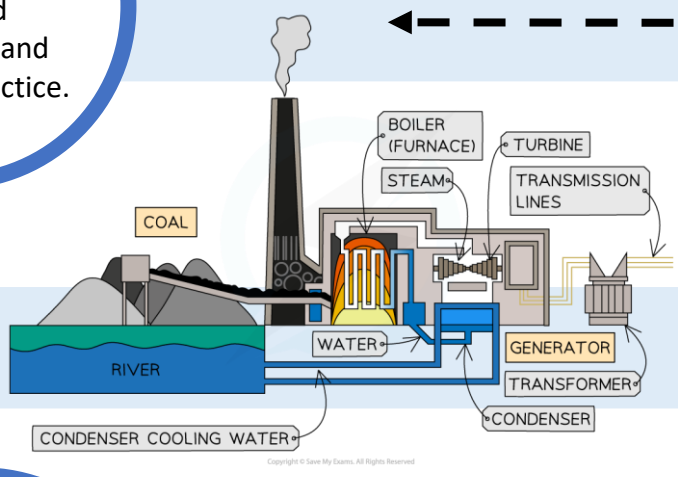
Review of learning

Revision

Retrieval, keyword definitions and equation practice.

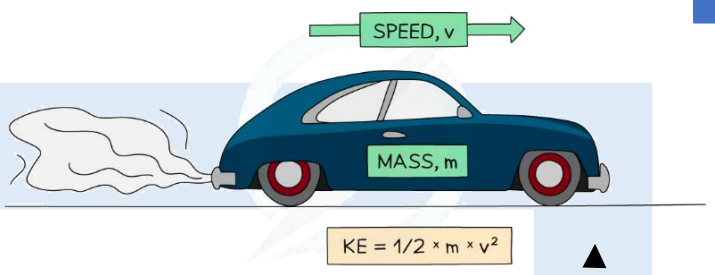


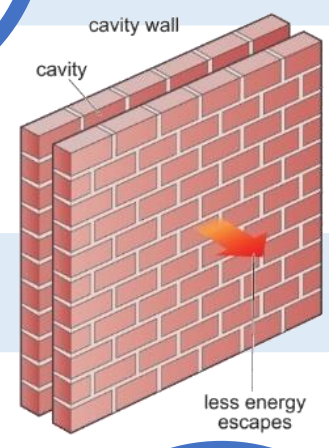
Renewable resources

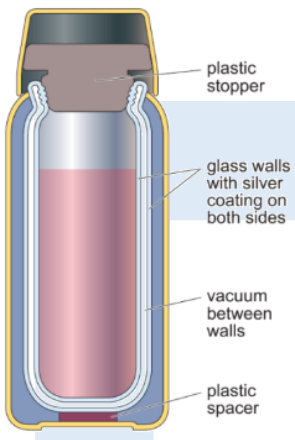
How is the use of renewable energy resources changing?

Non-renewable resources

How are the different non-renewable resources used?

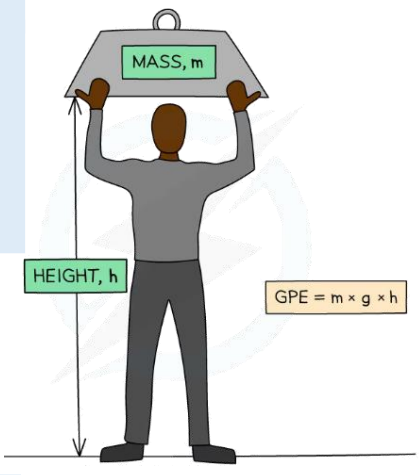






Stored energies

How do you calculate the kinetic energy and gravitational potential energy of an object?



Keeping warm

What affects the rate at which buildings cool?

$$\text{EFFICIENCY} = \frac{\text{USEFUL ENERGY OUTPUT}}{\text{TOTAL ENERGY INPUT}} \times 100\%$$

Energy and efficiency

How do we calculate the efficiency of an energy transfer?

Energy cannot be created or destroyed, just transferred from one form to another

LESSON 1

Energy stores and transfers

How can we represent energy transfers in diagrams?

Apply:
SP4 Waves – transferring energy
SP5 – EM Spectrum
SP8 Energy – forces doing work
SP10 Electrical energy
SP13 Transformers and energy
SP15 SHC / Extension and energy transfers
16+ The capacity for doing work (Energy systems)
Strategies to secure future energy supplies
Energy conservation technologies
Energy and sustainability
Energy levels and excitation

Retrieve:
KS2 Sound and light
P1.2.2 Sound (Sound and energy transfer)
P1.3 Light
P2.1 Electricity
P2.2 Energy
P2.3.3 Pressure in gases
SP1 Braking distance and energy / kinetic energy

Key terms

Make sure you can write definitions for these key terms.

energy, joules, kilojoules, Sankey diagrams, energy transfers, dissipation, efficiency, conduction, convection, radiation, insulation, thermal conductivity, kinetic energy, gravitational potential energy, fossil fuels, non-renewable energy resources, nuclear power