Revision Guidance Year 10 (10X1 and 10X2)

Physics AQA May/June Assessment 2024

* Understand the National Grid is a system of cables and transformers linking power stations to consumers.
* Students should be able to explain why the use of step-up transformers and step-down transformers on the National Grid system makes it an efficient way to transfer energy.
* Be able to use the equation:-

energy transferred = charge flow × potential difference (E = Q V)

* Be able to use the particle model to explain how increasing the temperature, at constant volume, can lead to an increase in gas pressure.
* For a fixed mass of gas held at a constant temperature - Be able to use the equation:-pressure × volume = constant (p V  =  constant)
* Be able to explain what is meant by the half-life of a radioactive sample and be able to calculate it from a decay curve.
* Know the properties of alpha, beta and gamma radiation and describe their uses and evaluate the best sources of radiation to use in a given situation.
* Describe in detail how to determine the densities of regular and irregular solid objects.