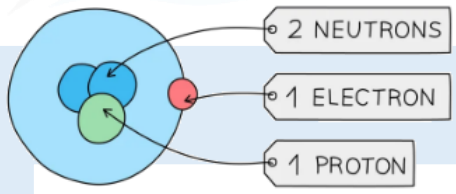
PHYSICS: CP6 Radioactivity

CHURCH STRETTON SCHOOL

Assessment = ★



SCAN ME

Final assessment

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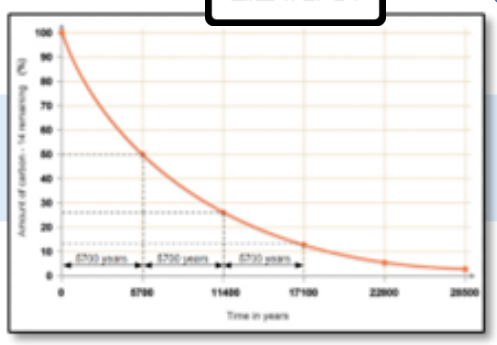
Review of learning

Apply:
SP7 Origin of the universe (CMBR)
SP9 Objects affecting each other
SP11 Static electricity & electric fields
SP14 Particle model
16+ Nuclear energy
Induced fission
Nuclear radius
Nuclear instability
Rutherford scattering

Revision

Retrieval, keyword definitions and equation practice.



Half-life

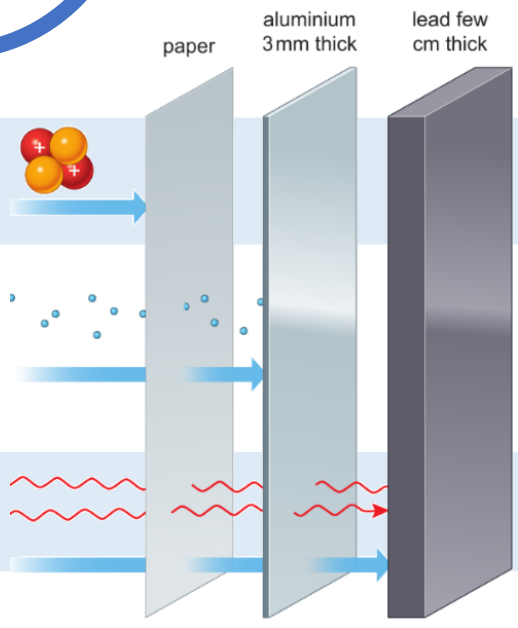
How can half-life be used to work out how much of a substance decay?

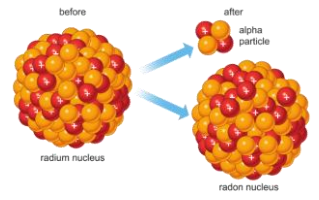
Dangers of radioactivity

What precautions should be taken to protect people using radiation?

Radioactive decay

How can radioactive decays be represented in nuclear equations?



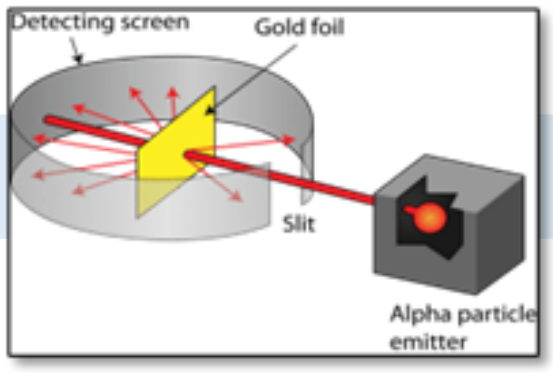


Types of radiation

How do the different kinds of radiation compare in their ability to ionize atoms / penetrate materials?

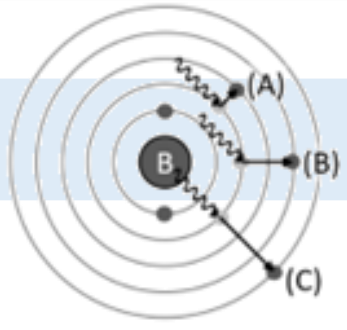
Background radiation

What are the sources of background radiation?



Inside atoms

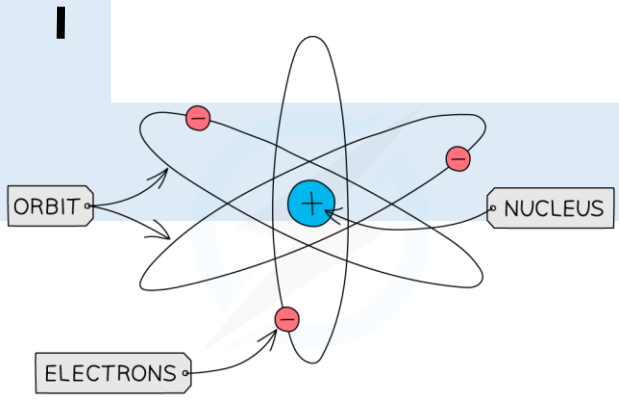
What are the relative masses and charges of the particle that make up atoms?



Electrons and orbits

What happens to atoms when they absorb or emit electromagnetic radiation?

LESSON 1



Atomic models

How has our model of the atom changed over time?

Retrieve:
P1.2.1 sound ad energy transfers
P1.3.3 Density
C1.1.2 States of matter
C1.2. Atoms
P1.4.1 The big bang (CMBR)
P2.1.6 magnetic interaction
P2.2.4 energy transfer: particles
P2.3.4 Pressure
C2.1 The periodic table
SC1 States of matter
SC3 Atomic structure
SC4 The periodic table
SP5 EM Spectrum (gamma radiation)

Key terms

Make sure you can write definitions for these key terms.

atom, John Dalton, JJ Thomson, Rutherford, subatomic particle, proton, neutron, electron, nucleons, atomic mass, atomic number, isotopes, orbits, emission spectrum, ions, background radiation, Geiger Muller (GM) tube, Dosimeter, alpha, beta gamma, decay, half-life