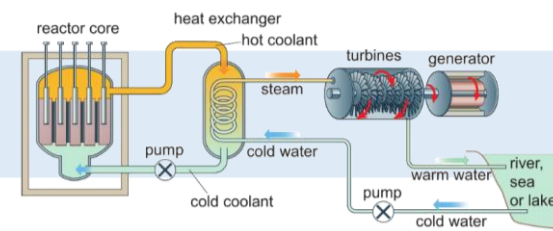


Revision
Retrieval, keyword definitions and equation practice.

Final assessment
★
Review of learning

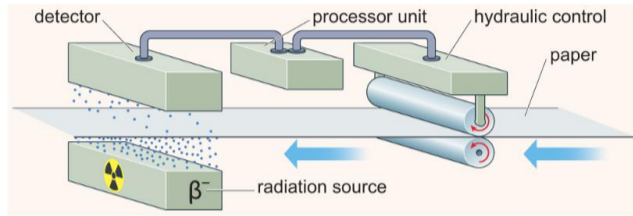


Nuclear fusion
How is nuclear fusion different to nuclear fission?



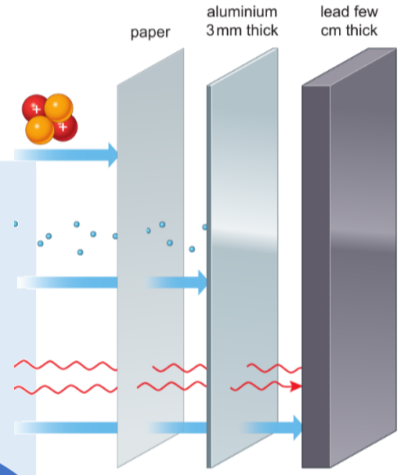
Nuclear fission
How is fission used in nuclear power stations

Nuclear energy
What are the advantages of using nuclear power to generate electricity?

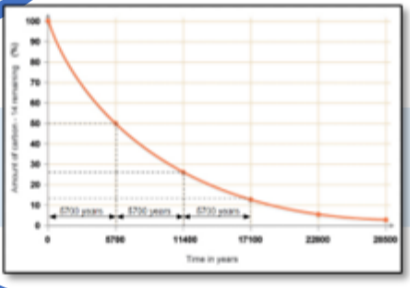


Radioactivity in medicine
How is radiation used to treat tumours?

Dangers of radioactivity
What precautions should be taken to protect people using radiation?



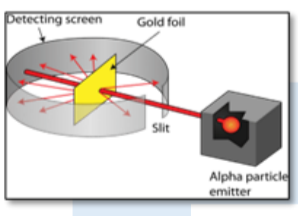
Half-life
How can half-life be used to work out how much of a substance decay?



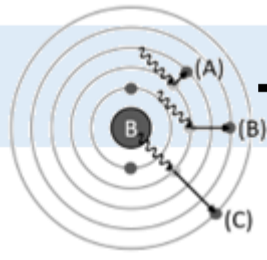
Using radioactivity
How is radioactivity used to preserve food / in industry and smoke alarms?

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?

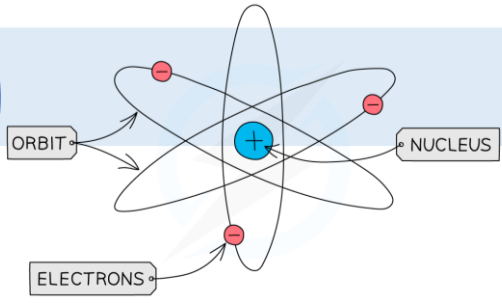


Electrons and orbits
What happens to atoms when they absorb or emit electromagnetic radiation?



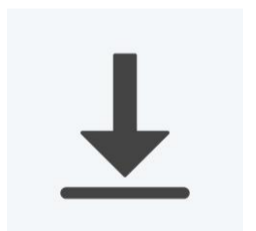
Background radiation
What are the sources of background radiation?

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



Atomic models
How has our model of the atom changed over time?

- 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



- Retrieve:**
- P1.2.1 sound and 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)

Make sure you can write definitions for these key terms.

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



LESSON 1