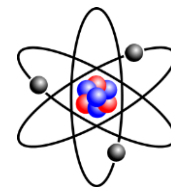


## Unit Overview – P4 Atomic structure



### You will learn about:

You will study the properties of the particles that make up an atom. You learn about the different types of radioactive decay, their uses and hazards.

### You will be able to:

Recall the relative charge and mass of subatomic particles. Be able to use nuclear equations to show the elements formed from alpha and beta decay.

Key learning points		Key Words
Atomic structure		Beta particle
Radioactive decay		Gamma ray
Nuclear equations		Radioisotope
Half life		Neutron radiation
Contamination		Background radiation
		Nuclear equation
		Half-life
		Radioactive contamination
		Tracer
		Irradiation
		Mutation
		Radiotherapy
		Tumour
		Chain reaction
		Control rods
		Fuel rods
		Nuclear fission
		Nuclear Fusion
		Atomic number
		Energy level
		Ionise
		Isotope
		Mass number
		Nucleon
		Activity
		Alpha particle
		Becquerel (Bq)

### Links to other subjects:

#### SMSC

Evaluate the impact of nuclear power stations and nuclear waste.

#### Numeracy

Emulating nuclear equations. Substituting numerical values into equations using appropriate units. Interpretation of graphs.

#### Literacy

Describe observations in practical work. Describing the difference between fusion and fission. Describing the differences between alpha, beta, gamma and neutron radiation.