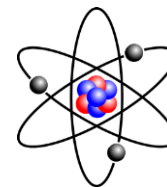


Unit Overview – Atomic structure

Target grade for tests:



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.

<table border="1"> <tr> <td colspan="2">Key learning points</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Atomic structure</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Radioactive decay</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Nuclear equations</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Half life</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Contamination</td> <td></td> <td></td> <td></td> </tr> </table>					Key learning points					Atomic structure					Radioactive decay					Nuclear equations					Half life					Contamination					<p style="text-align: center;">Key Words</p> <p>Beta particle Gamma ray Radioisotope Neutron radiation 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)</p>	
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<p>Links to other subjects:</p> <p>SMSC Evaluate the impact of nuclear power stations and nuclear waste.</p> <p>Numeracy Emulating nuclear equations. Substituting numerical values into equations using appropriate units. Interpretation of graphs.</p> <p>Literacy Describe observations in practical work. Describing the difference between fusion and fission. Describing the differences between alpha, beta, gamma and neutron radiation.</p>																																				
Research	Note-making	Group work & discussion	Memorisation	Precision & accuracy	Independence	Reflection																														