Nuclear Radiation (Part A)

Ionisation—

Activity—

Define...

Units of activity

What is the relative ionising effort of each type of radiation?

Relationship to calculate activity

Describe the nature of α, β and γ radiations

Describe the relative penetration and absorption of each type of radiation.

Natural sources of background radiation

Artificial sources of background radiation

List applications of nuclear radiation

What are the dangers of ionising radiation to living things?

Relationship to calculate absorbed dose

Define...

Units of absorbed dose

Absorbed Dose

Nuclear Radiation (Part B)

Define Equivalent Dose

Unit of Equivalent Dose

Define Equivalent Dose Rate

Relationship for Equivalent Dose Rate

Relationship for Equivalent Dose

What is nuclear fission?

Describe how fission is used to generate electricity

What is the radiation weighting factor?

State the radiation weighting factors for different types of radiation.

What are some of the challenges of nuclear fusion?

What is nuclear fusion

List the annual exposure safety limits for the public and for workers in the radiation industries.

Define half life

Describe an experiment to measure half-life