

Q1.(2018)

A teacher used a Geiger-Muller tube and counter to measure the number of counts in 60 seconds for a radioactive rock.

The counter recorded 819 counts in 60 seconds. The background radiation count rate was 0.30 counts per second.

Calculate the count rate for the rock.

[3 marks]

Count rate = _____ per second

Q2.(2019)

Polonium-210 ($^{210}_{84}\text{Po}$) is a radioactive isotope that decays by emitting alpha radiation.

Complete the decay equation for polonium-210

[2 marks]

Q3.(2022)

A krypton (Kr) nucleus decays into a rubidium (Rb) nucleus by emitting a beta particle.

Complete the nuclear equation for this decay by writing the missing number in each box.

[2 marks]