Marks 5

- Write two possible mechanisms for the radioactive decay of ^{55}Fe to ^{55}Mn.

The activity of an isotopically pure 1.000 g sample of ^{55}Fe is measured as 8.750×10^{13} Bq. Calculate the half-life (in days) of ^{55}Fe.
(The molar mass of ^{55}Fe is 54.94 g mol^{-1}.)

Answer:

How many years will it take for the activity of this pure 1.000 g sample of ^{55}Fe to drop to 1.000×10^{9} Bq?

Answer: