

- The isotope $^{60}_{27}\text{Co}$ undergoes radioactive decay to produce a stable isotope of nickel. Give the balanced equation for this decay process.

Marks
6

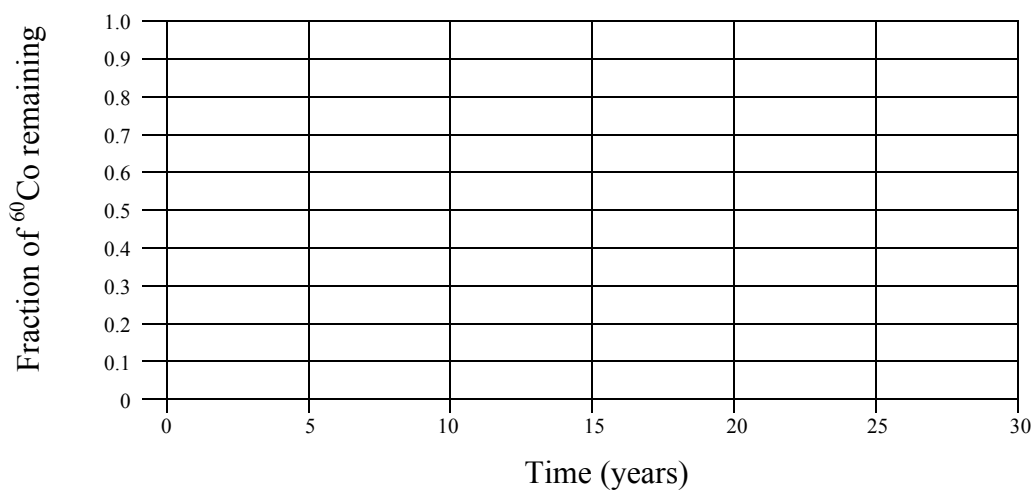
The half-life of ^{60}Co is 5 years. Calculate the value of the decay constant, λ , (in s^{-1}).

Answer:

What is the molar activity of ^{60}Co (in Bq mol^{-1})?

Answer:

Complete the graph below.



Estimate from the graph the fraction of ^{60}Co remaining after 12 years.