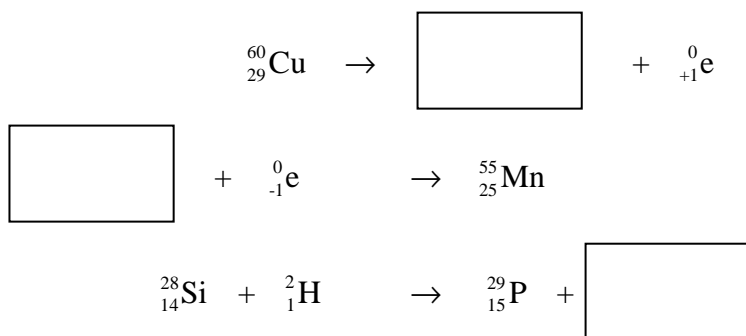


Marks
3

- Balance the following nuclear reactions by identifying the missing nuclear particle or nuclide.



- Calculate the following properties of the ${}^{13}\text{N}$ nuclide, given that its half-life is 9.96 minutes.

3(a) the decay constant in s^{-1}

Answer:

(b) the molar activity in Ci mol^{-1}

Answer: