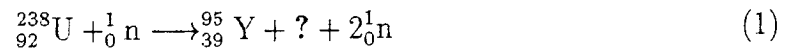


Uranium 238 can absorb a neutron and fission into two pieces. Identify the nucleus missing in the reaction below.

1)



2)

Describe the resultant nucleus in each of the following reactions:

(a) ${}_{90}^{234}\text{Th}$ decaying by beta decay.

(b) ${}_{88}^{226}\text{Ra}$ decaying by alpha decay.

(c) ${}_{49}^{115}\text{In}$ decaying by alpha decay.

3)

What was Louis de Broglie's main contribution to the quantum theory?