

Solutions

Each answer shows the steps, then the **result**.

2.1

- alpha: a helium nucleus; beta: a fast electron; gamma: a high-energy photon

2.2

- gamma

2.3

- the mass number decreases by 4 and the atomic number decreases by 2

3.1 A

3.2 C

3.3

(a)

- $238 - 4 = 234$

(b)

- $92 - 2 = 90$

(c)

- nucleon number and charge