



IDENTIFY THE PARTICLE

In each case identify the particle.

- 1 An atom with 6 protons and the same number of neutrons as a ^{14}N atom
- 2 An atom with one more proton and the same number of neutrons than an atom of ^{39}K
- 3 An atom with 10 protons and the same number of neutrons as an atom of ^{24}Mg
- 4 An atom with one fewer proton and the same number of neutrons as an atom of ^{66}Zn
- 5 An atom with the same number of protons and two more neutrons as an atom of ^{79}Br
- 6 An atom with two fewer protons and the same number of neutrons as an atom of ^{50}Cr
- 7 An ion with one more proton and two more neutrons as an atom of ^{20}Ne but the same number of electrons
- 8 An ion with two fewer protons and two fewer neutrons as an atom of ^{40}Ar but the same number of electrons
- 9 An ion with two more protons and two more neutrons as an atom of ^{60}Ni but the same number of electrons
- 10 An ion with two more protons and three more neutrons as an atom of ^{20}Ne but the same number of electrons
- 11 An ion with one fewer proton, one fewer neutron and the same number of electrons as an atom of ^{129}Xe .
- 12 An ion with one more proton, two more neutrons, but the same number of electrons as an ion of $^{85}\text{Rb}^+$
- 13 A particle with two fewer protons, two fewer neutrons and the same number of electrons as an atom of ^{20}Ne
- 14 A particle with one fewer proton, two fewer neutrons and one more electron as a $^{48}\text{Ti}^{2+}$ ion
- 15 A particle with one fewer proton, two more neutrons and the same number of electrons as a $^{127}\text{I}^-$ ion

$^{13}_6\text{C}$