

Solutions

2.1 A To explain a bulk property, name the structure, particles, forces and mobile charge carriers. Simple molecular substances can have strong covalent bonds inside molecules but weak attractions between molecules.

2.2 neutrons=mass number–atomic number=35–17=18.

2.3 False. Melting a simple molecular substance usually overcomes intermolecular attractions; it does not require breaking all covalent bonds within each molecule.

2.4 ionic bond. ionic bond means Attraction between oppositely charged ions.

3.1 12protons,13neutrons; electrons12 then10. Ion formation changes electrons. An isotope has the sameZ but a different neutron count; it need not have a different charge.