

9 Periodicity (Period 3) – Part 2 — Answers

Answers

Work through these after trying the questions yourself.

9.1 (a) basic \ (b) acidic.

9.2 It reacts with both acids and bases.

9.3 Aluminium oxide, Al_2O_3 .

9.4 NaCl is ionic, so it just dissolves (giving a neutral solution); PCl_5 is covalent, so it hydrolyses (reacts with water) to give an acidic solution and HCl .

9.5 Hydrogen chloride (HCl).

9.6 Magnesium oxide. MgO is a metal (basic) oxide, so it dissolves to give an alkaline solution, raising the pH. SO_3 is a non-metal (acidic) oxide, which would lower the pH instead.