

1 Atomic structure and periodic trends

– Part 2 —Answers

Answers

Work through these after you have tried the questions yourself.

2.1 $1s^2 2s^2 2p^4$ (8 electrons).

2.2 the outer, highest-energy electrons; they are the ones gained, lost, or shared in reactions, so they control the atom's chemistry.

2.3 (a) it decreases across a period; (b) it increases down a group.

2.4 NaCl –sodium is Na^+ and chlorine is Cl^- , and the +1 and –1 balance.

2.5 MgCl_2 –one Mg^{2+} needs two Cl^- to balance the charge.