

23 Lattice energy and electron affinity – Part 1 —Answers

Answers

Work through these after trying the questions yourself.

23.1 Negative.

23.2 Strong ionic bonds form, releasing energy.

23.3 The energy to make one mole of gaseous atoms from an element.

23.4 The energy change when one mole of gaseous atoms each gain an electron to form $1-$ ions.

23.5 Negative.

23.6 In magnesium oxide both ions carry a *double* charge ($2+$ and $2-$), whereas in sodium chloride the charges are only $1+$ and $1-$. The larger charges attract far more strongly, so much more energy is released forming the lattice —a more negative lattice energy.