

10 Group 2 – Part 1 —Answers

Answers

Work through these after trying the questions yourself.

10.1 Two outer electrons; it forms a 2+ ion.

10.2 Reactivity increases down the group; the atoms get larger, so the outer electrons are further from the nucleus and held less tightly, so they are lost more easily.

10.3 $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$.

10.4 Calcium hydroxide, $\text{Ca}(\text{OH})_2$, and hydrogen, H_2 .

10.5 $\text{MgCl}_2 + \text{H}_2$.

10.6 Barium atoms are larger than magnesium atoms, so their two outer electrons are further from the nucleus and more shielded. They are held less tightly and lost more easily, so barium is more reactive and reacts with water faster.