

Chemistry 1 a Week Activity Foundation Answers		44 th Week
Name: Class:		
Give the formula of potassium sulfate. K₂SO₄	Give the formula of a hydroxide ion . OH⁻	
Complete the balanced equation for the overall reaction by putting numbers in the spaces. 2Al₂O₃ → 4Al + 3O₂		
In terms of electrons, what is reduction? Reduction is the gain of electrons.	The ⇌ symbol in the word equation shows that the reaction goes forwards and backwards at the same time. Give the name of this type of reaction. <u>Reversible</u> (reaction)	
The formula of the iron oxide is Fe ₂ O ₃ . Calculate the maximum mass of iron that can be obtained from 240 tonnes of iron oxide, Fe ₂ O ₃ . (relative atomic masses: O = 16, Fe = 56) Mols = Mass ÷ Mr Mass = mol × Mr Mols = 240 ÷ 160 Mass = 3 × 56 1 mole of Fe₂O₃ reacts with two moles of Fe. Mols = 1.5 Mass = 168 tonnes.		
Sodium thiosulfate solution, Na ₂ S ₂ O ₃ , reacts with dilute hydrochloric acid. Na₂S₂O₃(aq) + 2HCl(aq) → 2NaCl(aq) + H₂O(l) + SO₂(g) + S(s) When dilute hydrochloric acid is mixed with sodium thiosulfate solution, the mixture turns cloudy. Explain why the mixture turns cloudy. <u>Solid sulfur is formed.</u> This causes the solution to become cloudy.		
Do not accept references to sulfur dioxide gas.		
Give the electronic configuration of a sodium atom . 2, 8, 1	Name the following, MnO₂ . Manganese dioxide	
Give the general formula of an alkane. C_nH_{2n+2}	Give the formula of an ammonium ion . NH₄⁺	
In what states will ionic compounds conduct electricity. Molten and aqueous.		