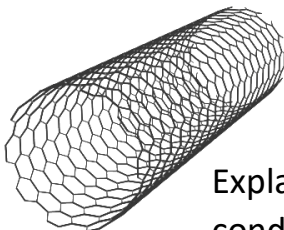


Chemistry 1 a Week Activity		Higher	13 th Week
Name: Class:			
Balance the following equations. TaF ₅ + ... Ca → Ta + ... CaF ₂ Al + ... HCl → AlCl ₃ + ... H ₂	Name the following compound. $\begin{array}{cccc} \text{H} & \text{H} & \text{H} & \text{H} \\ & & & \\ \text{H}-\text{C} & -\text{C} & -\text{C} & =\text{C}-\text{H} \\ & & & \\ \text{H} & \text{H} & & \end{array}$ 		
Name the type of bond present in a molecule of hydrogen chloride, HCl. 	State the formula of ethanoic acid. 		
An ion of element X can be represented as $^{125}_{\text{X}}\text{ }^{2-}$ This ion of element X has 54 electrons. Calculate the number of protons and the number of neutrons in this ion. Number of protons: Number of neutrons:			
Describe a test to show the presence of carbonate ions in a sample. 	The element boron has isotopes. These isotopes have the same number of and a different number of		
Draw a dot and cross diagram to show the bonding in a hydrogen chloride molecule.	 The figure shows a carbon nanotube. Explain why carbon nanotubes conduct electricity. 		
Titanium chloride reacts with magnesium to produce titanium and magnesium chloride. $\text{TiCl}_4 + 2\text{Mg} \rightarrow \text{Ti} + 2\text{MgCl}_2$ Calculate the number of moles in 45 000 grams of titanium chloride. Moles = ...			