Suggest and explain the precautions necessary Use the periodic table to identify and What do these 2 How can we tell What is the 'family name' for the elements in group 1? when potassium reacts with water. name a liquid in group 7 symbols mean? how many What is the 'family name' for the elements in group 7? electrons an element has, using the periodic table? Describe and explain the trend in reactivity in Group 1 as you go down the group Use the periodic table to identify and name a solid element similar to chlorine Write balanced symbol equations for these reactions of alkali metals: Sodium with water How many times heavier is Describe and explain the trend in reactivity in Group 7 as you go down the group Potassium with water a magnesium atom than a Lithium with chlorine carbon atom? a sulphur atom than a helium **C4** Sodium with chlorine atom? **Chemical Patterns** Complete this table: Explain how spectroscopy is used to identify Add notes and diagrams to elements in chemical mixtures What are the 2 In what ways are a fluoride In aluminium oxide is made up of make it useful Particle Mass Charge AL³⁺ ions and O²⁻ ions, what must forms (species) that ion, a neon atom and a sodium can exist in? sodium ion the same? How its formula be? Electron What is the What are the do they differ? formulae of these boiling point of Proton water? ionic compounds? When a metal atom Neutron Magnesium oxide Draw a diagram to show the Draw a diagram to show the loses an electron. electrons in shells for beryllium electrons in shells for what charge does it magnesium get? Calcium chloride Ionic salts can conduct Which group of the periodic table do electricity when either When a non-metal beryllium, magnesium and calcium belong to? atom gains an not when solid. electron, what charge Aluminium oxide does it get? Draw the electron arrangements of chlorine (2.8.7) Why do solid compounds made if ions not conduct electricity? Match up names, charges and ions attracted. In what ways are a fluoride ion, a neon atom and a sodium ion the **ANODE** negative electrode attracts + ions same? How do they differ? **CATHODE** positive electrode attracts - ions