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| **Topic heading** | **Syllabus Ref** | **Idea cluster** | **Question 1** | **Question 2** | **Question 3** | **Question 4** |
| **KS3 Atoms and the Periodic Table** | **KS3 C2** | **Atoms and Elements** | **Atoms consist of:**  **A A dense nucleus with electrons orbiting close to the nucleus**  **B A low density nucleus with electrons orbiting close to the nucleus**  **C A dense nucleus with electrons orbiting at a great distance from the nucleus**  **D A low density nucleus with electrons orbiting at a great distance from the nucleus** | **Electrons:**  **A are positively charged**  **B are negatively charged**  **C have no charge**  **D can be positively and negatively charged** | **Elements are substances:**  **A made from two or more different types of atoms**  **B made from only one type of electron**  **C made from compounds**  **D made from only one type of atom** | **Atoms of different elements can bond together to form:**  **A Mixtures**  **B Compounds**  **C Atoms**  **D Molecules** |
|  |  |  | **C** | **B** | **D** | **B** |
|  |  | **Periodic Table** | **Metal elements are found:**  **A on the right of the Periodic Table**  **B in the centre and on the right of the Periodic Table**  **C on the left of the Periodic Table**  **D in the centre and on the left of the Periodic Table** | **Elements in the same group have:**  **A similar chemical properties**  **B the same chemical properties**  **C different chemical properties**  **D the same physical properties** | **Non-metal elements are found:**  **A on the right of the Periodic Table**  **B in the centre and on the right of the Periodic Table**  **C on the left of the Periodic Table**  **D in the centre and on the left of the Periodic Table** | **In the Periodic Table:**  **A Elements are listed in alphabetical order**  **B Elements are organised in groups according to their properties**  **C Elements are randomly arranged**  **D Elements with similar properties form rows** |
|  |  |  | **D** | **A** | **A** | **B** |
|  |  | **Reactions** | **A more reactive metal element:**  **A Cannot displace a less reactive metal element in a compound**  **B Can displace a less reactive metal element in a compound**  **C Cannot displace a less reactive non-metal element in a compound**  **D Can displace a less reactive non-metal element in a compound** | **Metals often react and bond with:**  **A Other metals to form compounds**  **B Other metals to form molecules**  **C Non-metals to form compounds**  **D Non-metals to form molecules** | **Metal oxides react with:**  **A Alkalis to form a salt and carbon dioxide**  **B Acids to form a salt and oxygen**  **C Alkalis to form a salt and hydrogen**  **D Acids to form a salt and water** | **Non-metal elements react with oxygen to form:**  **A Alkaline oxides**  **B Alkaline hydroxides**  **C Acidic Hydroxides**  **D Acidic oxides** |
|  |  |  | **B** | **C** | **D** | **D** |
|  |  | **Conductors & Insulators** | **An electric current is**  **A The movement of atoms**  **B The movement of compounds**  **C The movement of electrons**  **The movement of molecules** | **Materials can be statically charged by rubbing due to:**  **A Electrons moving from one insulator onto another**  **B Atoms moving from one insulator onto another**  **C Electrons moving from one conductor onto another**  **D Atoms moving from one insulator onto another** | **Metals are electrical conductors because:**  **A Their atoms move when connected in a complete circuit**  **B They have electrons in fixed positions throughout the metal**  **C They become charged**  **D They have electrons that are free to move through the metal** | **An insulator becomes positively charged when:**  **A Electrons are transferred onto the material**  **B Electrons stay where they are**  **C Electrons are lost from the material**  **D They gain positive charges** |
|  |  |  | **C** | **A** | **D** | **C** |
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