

Periodic table recall questions

1. What order are elements arranged in the periodic table? **Increasing atomic number**
2. Why are C and Si in the same periodic table group? **Same number of outer shell electrons**
3. Which famous scientist developed the periodic table? **Mendeleev**
4. What type of element forms positive ions? **Metals (and hydrogen)**
5. What are two properties of metal elements? **Good thermal and electrical conductors, high melting points**
6. What are two properties of non-metal elements? **Poor conductors, often low m. pt.**
7. Write down the symbols for the first 4 noble gases.
8. Why are noble gases so unreactive? **Complete outer shell of electrons so very stable**
9. Write down the symbols for the first 4 alkali metals.
10. Why are alkali metals so reactive? **Only need to lose one outer shell electron**
11. Write down the symbols for the first 4 halogens.
12. Explain how halogens react. **Gain an electron to obtain a full outer shell**

Periodic table application questions

1. Describe some key steps in the development of the periodic table.
2. What is the trend in boiling point for noble gases?
3. Explain why alkali metals become more reactive going down the group.
4. Describe how alkali metals react with oxygen, chlorine and water.
5. Describe three properties of metal - halogen compounds e.g. sodium chloride.
6. Describe three properties of non-metal - halogen compounds e.g. hydrogen chloride.
7. What is the trend in melting and boiling point for halogens?
8. Explain why halogens become less reactive going down the group.
9. Write three displacement reaction word equations for halogens reacting with aqueous solutions of halogen salts.