

## Chemistry PPE revision task 2 - answers

### Periodic Table part 2 – Group 0, group 1 and group 7

1. What are the elements in Group 0 called?

**Noble gases.**

2. What are the elements in Group 1 called?

**Alkali metals.**

3. What are the elements in Group 7 called?

**Halogens.**

4. What happens to the boiling point of elements in Group 0 as you go down the group?

**Increase.**

5. Why are the elements in Group 0 so unreactive?

**Full outer shell of electrons.**

6. Why do all elements in Group 1 react in a similar way to each other?

**1 electron in outer shell.**

7. What happens to the reactivity of the elements as you go down Group 1?

**Increases.**

8. Write a word equation for the reaction between sodium and oxygen.

**sodium + oxygen → sodium oxide**

9. Why do all the elements in Group 7 react in a similar way to each other?

**7 electrons in outer shell.**

10. Halogens are diatomic. What does the word 'diatomic' mean?

**These molecules contain 2 atoms.**

11. What happens to the reactivity as you go down Group 7?

**Decreases.**

12. What happens to the melting point and boiling point as you go down Group 7?

**Increases.**

13. Write a word equation for the reaction between lithium and chlorine.

**lithium + chlorine → lithium chloride**

**C. Periodic Table part 3 – Transition metals Chemistry only**

1. Where are transition metals found on the periodic table?  
**Between Group 2 and Group 3.**
2. How do the melting points of transition metals compare to Group 1 metals?  
**Transition metals have a higher melting point than alkali metals.**
3. How do the densities of transition metals compare to Group 1 metals?  
**Transition metals are more dense than alkali metals.**
4. How does the strength of transition metals compare to Group 1 metals?  
**Transition metals are stronger than alkali metals.**
5. Describe the differences between the reactions of the alkali metals and the reactions of transition metals.  
**Alkali metals react vigorously with water and with oxygen from the air. The transition elements react slowly with these reagents if at all.**
6. State two typical properties of transition metals.  
**Have ions with different charges; form coloured compounds.**
7. State one use of transition metals.  
**Transition metals can be used as catalysts.**
8. Explain why copper is used for plumbing.  
**It has a high melting point, it conducts heat and is strong and malleable. It also does not react with water.**