**Chemistry Revision: Metals in the**

Mastery Matrix Points

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| Explain why something is classified as a metal or non-metal |
| Describe the key properties of the transition metals (chromium, manganese, iron, cobalt, nickel and copper) (triple only) |

Key Knowledge

Metals are found on the \_\_\_\_\_ of the periodic table.

Non-metals are found on the \_\_\_\_\_ of the periodic table.

Transition metal properties

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Transition metals are used as \_\_\_\_\_\_\_\_\_.

Transition metals form \_\_\_\_\_\_\_\_\_\_\_ compounds.

Transition metals can form ions with \_\_\_\_\_\_\_\_\_\_ charges, e.g. Fe2+ and Fe3+.

Name these transition metals –

Cr, Mn, Fe, Co, Ni, Cu.

**Periodic Table**

Understanding and Explaining

1. Compare the properties and reactivity of group 1 metals with the transition metals.
2. Describe the reactions of these metals with oxygen, water and halogens.

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| *Metal* | *Reaction with chlorine or other halogen* | *Reaction with water* | *Reaction with oxygen* |
| Cr |  |  |  |
| Mn |  |  |  |
| Fe |  |  |  |
| Co |  |  |  |
| Ni |  |  |  |
| Cu |  |  |  |

1. Explain how you could test an unknown metal to see if it is a group 1 metal or a transition metal.