

d-block Elements

Textbook page 400-404. You may also wish to revisit Y12 oxidation states and electron configurations, p.48-58.

Define the following terms

- d-block element
- Transition element

Make notes on d-block elements and transition metals.

Use the following questions as a guide

1. Give the electron configuration of each d-block element in period 4 of the periodic table.
2. Note that chromium and copper have unusual configurations. Explain why this is.
3. Give the electron configuration of Fe^{2+} and Fe^{3+} , and describe the order in which the electron shells empty.
4. Explain why, according to the definition of 'transition metal', zinc and scandium are not transition metals.
5. Give three properties of transition metals, and at least one example of each property in use.