# IGCSE Chemistry (9-1) Specification 2(d)

## (d) Reactivity series

**Students should:**

**2.15** understand how metals can be arranged in a reactivity series based on their reactions with:
- water
- dilute hydrochloric or sulfuric acid

**2.16** understand how metals can be arranged in a reactivity series based on their displacement reactions between:
- metals and metal oxides
- metals and aqueous solutions of metal salts

**2.17** know the order of reactivity of these metals: potassium, sodium, lithium, calcium, magnesium, aluminium, zinc, iron, copper, silver, gold

**2.18** know the conditions under which iron rusts

**2.19** understand how the rusting of iron may be prevented by:
- barrier methods
- galvanising
- sacrificial protection

**2.20** understand the terms:
- oxidation
- reduction
- redox
- oxidising agent
- reducing agent

in terms of gain or loss of oxygen and loss or gain of electrons

**2.21 practical:** investigate reactions between dilute hydrochloric and sulfuric acids and metals (e.g. magnesium, zinc and iron)

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