

# NEATH PORT TALBOT COLLEGE COLEG CASTELL NEDD PORT TALBOT

## School of Maths & Science Science Practical

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### Interconversion of Dichromate and Chromate Ions

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#### ◆ Aim

To investigate experimentally the interconversion of dichromate ( $\text{Cr}_2\text{O}_7^{2-}$ ) ions and chromate ( $\text{CrO}_4^{2-}$ ) ions.



#### ◆ Safety

##### Control Measures

- The wearing of **safety goggles, gloves and a laboratory coat** at all times will be sufficient to take account of most hazards and significant risks.
- Keep stoppers on bottles as much as is possible.
- All waste is to be placed in the labelled container immediately after use.
- You are reminded of the need of good laboratory practise in order to maintain a safe working environment.



##### Hazards



##### Corrosive

Dilute Sodium Hydroxide

##### Harmful/Irritant

Dilute Sodium Hydroxide, Potassium Dichromate sol.

◆ **Procedure**

**Part A**

To a few cm<sup>3</sup> of potassium dichromate in a test tube add dilute sodium hydroxide solution. Note any colour change.

Colour Change: .....

**Part B**

To a few cm<sup>3</sup> of the solution from A in a test tube add dilute sodium hydroxide solution. Note any colour change.

Colour change:.....

◆ **Questions**

1. Write down an equation for the interconversion of the dichromate/ chromate ions.
2. Explain the observations made above.
3. Explain whether or not this is a redox process.