Electron transfer reactions

International Baccalaureate · IB Diploma · Chemistry · HL · Vocabulary in context

Word	Example
oxidation /ˌɒksɪˈdeɪʃn/	**Oxidation** is the loss of electrons.
reduction /rɪˈdʌkʃn/	**Reduction** is the gain of electrons.
oxidation state /ˌɒksɪˈdeɪʃn steɪt/	Iron has an **oxidation state** of +3 in Fe2O3. Fe2O3 +3
oxidizing agent /ˈɒksɪdaɪzɪŋ ˈeɪdʒənt/	An **oxidizing agent** gains electrons from another substance.
reducing agent /rɪˈdjuːsɪŋ ˈeɪdʒənt/	Carbon is a **reducing agent** in a blast furnace.
half-equation /hɑːf ɪˈkweɪʒn/	The **half-equation** Cu2+ + 2e− → Cu shows reduction. Cu2+ + 2e− → Cu
activity series	The **activity series** puts potassium at the top.
displacement /dɪˈspleɪsmənt/	In a **displacement** reaction, chlorine pushes bromine out of a salt.
primary cell	A **primary cell** is designed for one use.
anode /ˈænəʊd/	The **anode** is the positive electrode.
cathode /ˈkæθəʊd/	Electrons leave the hot **cathode**.
salt bridge /sɒlt brɪdʒ/	A **salt bridge** joins the two half-cells.
secondary cell	A **secondary cell** can be recharged.

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fuel cell /ˈfjuːəl sel/	A **fuel cell** produces electricity while fuel and oxidant are supplied.
electrolytic cell /ɪˌlektrəˈlɪtɪk sel/	An **electrolytic cell** uses electricity to drive a chemical change.
electrolysis /ɪlekˈtrɒləsɪs/	**Electrolysis** of brine makes chlorine.
electrolyte /ɪˈlektrəlaɪt/	Salt water is an **electrolyte**: ions carry the current.
distillation /dɪstɪˈleɪʃn/	**Distillation** separates ethanol from water.
reflux /ˈriːflʌks/	Heat under **reflux** so that nothing boils away.
hydrogenation /haɪˈdrɒdʒəneɪʃn/	**Hydrogenation** of vegetable oil makes margarine.
standard hydrogen electrode /ˈstændəd ˈhaɪdrədʒn ɪˈlektrəʊd/	The **standard hydrogen electrode** has a potential of 0 V. 0 V
standard electrode potential /ˈstændəd ɪˈlektrəʊd pəˈtenʃl/	The **standard electrode potential** of copper is +0.34 V. +0.34 V
cell potential /sel pəˈtenʃl/	The **cell potential** is the voltage between two electrodes.
spontaneous /spɒnˈteɪnɪəs/	A **spontaneous** reaction can happen by itself, without energy being put in all the time.
Faraday constant /ˈfærədeɪ ˈkɒnstənt/	The **Faraday constant** is 96 500 C per mole of electrons. 96 500 C
inert electrode /ɪˈnɜːt ɪˈlektrəʊd/	Platinum is an **inert electrode**.

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electroplating /ɪˌlektrəʊˈpleɪtɪŋ/	**Electroplating** coats an object with a metal using electricity.

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