



PETA KONSEP CONCEPT MAP

- Nombor pengoksidaan berkurang
Oxidation number decreases
- Menerima elektron/*Receives electrons*
- Kehilangan oksigen/*Loss of oxygen*
- Penambahan hidrogen/*Gain of hydrogen*

Agen pengoksidaan
Oxidising agent

Agen penurunan
Reducing agent

Penurunan
Reduction

Bertindak
sebagai
Acts as

Pengoksidaan
Oxidation

Dua proses berlaku serentak
Two processes happen at the same time

Keseimbangan Redoks
Redox Equilibrium

- Nombor pengoksidaan bertambah
Oxidation number increases
- Membebaskan elektron
Releases electrons
- Penambahan oksigen/*Gain of oxygen*
- Kehilangan hidrogen/*Loss of hydrogen*

Penukaran
Conversion



Tindak balas
penyesaran
*Displacement
reaction*

- Penyesaran logam
Metal displacement
- Penyesaran halogen
Halogen displacement

Sel kimia
Voltaic cell

Menentukan E°_{sel}
Determine E°_{cell}

Menulis notasi sel
Writing cell notation

Sel elektrolisis
Electrolytic cell

Larutan
akueus
*Aqueous
solution*

Keadaan
leburan
*Molten
state*

Pengekstrakan
logam daripada
bijihnya
*Extraction of metal
from its ore*

Cara/Method

- Elektrolisis/*Electrolysis*
- Penurunan oleh karbon
Reduction by carbon

Pengaratn
Rusting

Redoks dan pengaratn
Redox and rusting

Pencegahan pengaratn
Rusting prevention

Keupayaan elektrod piawai, E°
Standard electrode potential, E°

Meramal/*Predicts*

Kekuatan agen pengoksidaan/penurunan
Strength of oxidising/reducing agent

Bahan dioksidakan/diturunkan
Oxidised/Reduced substance

3 faktor pemilihan
ion dinyahcas
*3 factors for selective
discharge of ions*

Aplikasi
elektrolisis
*Application of
electrolysis*

(1)
Nilai E°
 E° value

(2)
Kepekatan larutan
Concentration of solution

(3)
Jenis elektrod
Type of electrode

Penyaduran
logam
*Metal
electroplating*

Penulenan
logam
*Purification of
metal*