CONCEPT MAP

FORM 4

PERIODIC TABLE OF ELEMENTS

The historical development of the Periodic Table
- Antoine Lavoisier
- J.W. Dobereiner
- John Newlands
- Lothar Meyer
- Dmitri Mendeleev
- Henry Moseley

Elements are arranged according to increasing proton number

Transition Elements

Physical properties
- Shiny
- High melting points
- High densities

Special properties
- Form coloured compounds
- Have variable oxidation numbers
- Have catalytic properties
- Form complex ions

Group

Metals

Reactivity increases down the Group 1 elements

- Physical and chemical properties of Group 1 elements
- Reactions with
  - water
  - oxygen
  - halogens

Non-metals

- Reactivity decreases down Group 17
- Group 18 elements are inert

- Physical and chemical properties of Group 17 elements
- Reactions with
  - water
  - sodium hydroxide
  - iron

Period

As we go across the Period from left to right,
- the elements changes from metal to semi-metals to non-metals
- the oxides changes from basic oxide to amphoteric oxide to acidic oxide