

5th Year Chemistry November Assessment

Periodic Table

- Compare the difference between Mendeleev's periodic table and the modern periodic table.
- Discuss the trend of atomic radii in the periodic table.
- Discuss the trend in ionisation energy in the periodic table.
- Discuss the trend in electronegativity in the periodic table. • Explain exceptions to these trends.

Definitions

- Atomic number.
- Mass number.
- Relative atomic mass.
- Isotopes.
- Atomic radii.
- Ionisation energy.
- Electronegativity.

The Atom

- Rutherford experiment. • Bohr Spectra.
- Flame test.
- Spectrometer.
- Mass spectrometer.
- Electronic structure.
- Electronic configuration.
- Heisenburg Uncertainty Principle.

Definitions

- Matter • Atoms
- Molecules
- Ions
- Energy level
- Ground state
- Excited state
- Atomic orbital
- Energy sublevel
- Pauli Exclusion Principle, Aufbau Principle, Hunds Rule.

Bonding

- Ionic bonding.
- Covalent bonding.
- Hydrogen bonding.
- Intramolecular and intermolecular bonding.
- Dot and cross diagrams.
- Shapes of covalent bonds.

Definitions

- Transition metals
- Valency
- Sigma bond
- Pi bond
- Anion
- Cation
- Bond energy