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| **Indian School Al Wadi Al Kabir - Syllabus break up for 2014-15** | | | | |
| Class 11  chemistry | Week1 | Week2 | Week3 | Week4 |
| **APRIL** | **Some Basic Concepts of Chemistry**:  General Introduction: Importance and scope of chemistry.  Nature of matter, laws of chemical combination | Dalton's atomic theory:  Atomic and molecular masses, mole concept and molar mass.  Percentage composition, empirical and molecular formula.  Stoichiometry and calculations based on stoichiometry. | **Structure of Atom**  Bohr's model and its limitations,  Concept of shells and subshells, dual nature of matter and light, de Broglie's relationship,  Heisenberg uncertainty principle | Concept of orbitals, quantum numbers, shapes of s, p and dorbitals  Rules for filling electrons in orbitals.  Electronic configuration of atoms, stability of half filled and completely filled orbitals. |
| **MAY** | **Classification of Elements and Periodicity in Properties**  Significance of classification, brief history of the development of periodic table, modern periodic  Periodic trends in properties of elements –atomic radii. | Ionic radii, inert gas radii Ionization enthalpy, electron gain enthalpy, electronegativity.  Valency, Nomenclature of elements with atomic number greater than 100. | **Chemical Bonding and Molecular structure**  Valence electrons, ionic bond, covalent bond; bond parameters, Lewis structure  Polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometryof covalent molecules. | VSEPR theory, concept of hybridization, involving s,p and d orbitals  Shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules, hydrogen bond. |
| **JUNE** | **Hydrogen**  Position of hydrogen in periodic table, occurrence, isotopes, preparation, properties and uses of Hydrogen.  Hydrides-ionic covalent and interstitial. | Physical and chemical properties of water,  Heavy water, hydrogen peroxide -preparation, reactions and structure and use. Hydrogen as a fuel.  **Environmental Chemistry – PROJECT**  **ASSESSMENT I**  **SUMMER VACATION** |  |  |

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| **Indian School Al Wadi Al Kabir - Syllabus break up for SEPTEMBER 2014** | | | | |
| Class 9 | Week1 | Week2 | Week3 | Week4 |
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| **Indian School Al Wadi Al Kabir - Syllabus break up for OCTOBER 2014** | | | | |
| Class 9 | Week1 | Week2 | Week3 | Week4 |
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| **Indian School Al Wadi Al Kabir - Syllabus break up for NOVEMBER 2014** | | | | |
| Class 9 | Week1 | Week2 | Week3 | Week4 |
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| **Indian School Al Wadi Al Kabir - Syllabus break up for DECEMBER 2014** | | | | |
| Class 8 | Week1 | Week2 | Week3 | Week4 |
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| **Indian School Al Wadi Al Kabir - Syllabus break up for JANUARY 2014** | | | | |
| Class 8 | Week1 | Week2 | Week3 | Week4 |
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| **Indian School Al Wadi Al Kabir - Syllabus break up for FEBRUARY 2014** | | | | |
| Class 8 | Week1 | Week2 | Week3 | Week4 |
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