**THE PRESIDENT’S OFFICE-**

**REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT**

**SCHEME OF WORK**

**TEACHER'S NAME:**

**SCHOOL’S NAME:**

**SUBJECT:** CHEMISTRY

**CLASS:** FORM THREE

**TERM:** 1st& 2nd TERM

**YEAR:** 2024

|  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **COMPETENCE** | **OBJECTIVES** | **MONTH** | **WEEK** | **MAIN-TOPIC** | **SUB- TOPIC** | **PER.IOD** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L RESOURCES** | **REFEFENCE** | **ASSESSMENT** | **REMARKS** |
| **By the end of the topic the student should have developed competences in manipulating chemical equations** | **By the end of the topic the students should be able to establish accurate quantities of the reacting substances in various chemical reactions** | **JANUARY** | **2** | **1.0 CHEMICAL EQUATIONS** | **1.1 Molecular equations** | 4 | To assist students to discuss the rules of prediction reaction products and necessary steps needed in writing a formula equation and balance them | Students to discuss the rules of prediction reaction products and necessary steps needed in writing a formula equation and balance them | Wall charts  marker pens  symbols  chemicals | TIE,(2005), CHEMISTRY FOR SECONDARY SCHOOL BOOK TWO, THP, DSMpg 1-3 | Students to discuss the rules of prediction reaction products and necessary steps needed in writing a formula equation and balance them  Students to discuss major steps of writing balanced ionic equations and balance them. |  |
| **3** | **1.2 Ionic equations** | 4 | To lead a discussion on the differences between molecular and ionic equations | Students to discuss major steps of writing balanced ionic equations and balance them. |
| **By the end of the topic the student should have developed competences in solving problems of hardness of water in daily life** | **By the end of the topic the students should be able to promote knowledge on hardness of water** | **FEBRUARY** | **4**  **1** | **2.0 HARDNESS OF WATER** | **2.1 The concept of Hardness of water** | 1 | To guide students to discuss the meaning of hardness of water | students to discuss the meaning of hardness of water and distinguish hard water from soft water by washing with soap | Wall charts  soap  water(hard)&soft | TIE,(2005), CHEMISTRY FOR SECONDARY SCHOOL BOOK TWO, THP, DSMpg 5-9 | students to discuss the meaning of hardness of water and distinguish hard water from soft water by washing with soap |  |
| **2.2 Types of hardness of water** | 1 | To guide students to carry out an experiment to determine temporary and permanent hard water and state their causes | Students to carry out an experiment to determine temporary and permanent hard water and state their causes | Source of heat  wall charts | Students to carry out an experiment to determine temporary and permanent hard water and state their causes |
|  | **2.3 Treatment and purification of hard water** | 2 | To guide students to perform experiment on removal of hardness by using ca(OH)2 and its importance | Students to perform experiment on removal of hardness by using ca(OH)2 and its importance, state the importance of hard water in daily life | Ca(OH)2 | Students to perform experiment on removal of hardness by using ca(OH)2 and its importance, state the importance of hard water in daily life |
| **By the end of the topic the student should have developed competences in applying chemistry principles in understanding industrial processes** | **By the end of the topic the students should be able to realize chemistry principles in industrial processes** | **F**  **E**  **BRUARY** | **2**  **&**  **3** | **3.0 ACIDS, BASES AND SALTS** | **3.1 Acids and Bases** | 8 | To guide students to collect natural sources of acids and bases, perform an experiment on the reactions of acid with metal,carbonates, oxides and hydroxides, determine reaction of alkali with different materials, prepare the clear solution of potash and discuss applications of neutralization reaction in daily life. | Students to collect natural sources of acids and bases, perform an experiment on the reactions of acid with metal,carbonates, oxides and hydroxides, determine reaction of alkali with different materials, prepare the clear solution of potash and discuss applications of neutralization reaction in daily life. | Lemon  citrus fruits, vinegar,  sour milk  apples,  wood ash, | TIE,(2005), CHEMISTRY FOR SECONDARY SCHOOL BOOK TWO, THP, DSMpg 12-27 | Students to collect natural sources of acids and bases, perform an experiment on the reactions of acid with metal,carbonates, oxides and hydroxides, determine reaction of alkali with different materials, prepare the clear solution of potash and discuss applications ofneutralization reaction in daily life. |  |
| **FERUARY** | **4** | **3.2 Indicators** | 4 | To guide students to prepare the indicator from red, yellow, pink flowers and test the acidity and alkalinity of substances using indicators | Students in groups to prepare the indicator from red, yellow, pink flowers and test the acidity and alkalinity of substances using indicators | Flowers  water  beakers | Students in groups to prepare the indicator from red, yellow, pink flowers and test the acidity and alkalinity of substances using indicators |  |
| **MARCH** | **1** | **3.3 Salts** | 4 | To guide students to brainstorm on the natural sources of salts through questions and answers and analyze solubility of salts in water | Students to rainstorm on the natural sources of salts through questions and answers and analyze solubility of salts in water. | Samples of salts  metals hydroxides, oxide | Students to rainstorm on the natural sources of salts through questions and answers and analyze solubility of salts in water. |
|  | To guide students to do experiment on preparation of soluble salts by reacting metal oxides and carbonates with dilute acids, examining heating effects on salts and explain uses of salts in daily life | Students to do experiment on preparation of soluble salts by reacting metal oxides and carbonates with dilute acids, examining heating effects on salts and explain uses of salts in daily life | Students to do experiment on preparation of soluble salts by reacting metal oxides and carbonates with dilute acids, examining heating effects on salts and explain uses of salts in daily life |
| **By the end of the topic the student should have developed competences in establishing accurate quantities of the reacting substances in various chemical reactions** | **By the end of the topic the students should be able to establish accurate quantities of the reacting substances in various chemical reactions** | **MARCH**  **MARCH** | **2** | **4.0 THE MOLE CONCEPT AND RELATED CALCULATIONS** | **4.1 The mole as a unit of measurement** | 4 | To guide students to discuss the mole as a unit for amount of substances and guide students to construct the molar volume box of 22.4 liters capacity  To lead students to discuss the relationship between the mole and the Avogadro’s constant (L) | Students in groups to compare the mole with other units of measurements and construct the molar volume box  Students to use a chemical balance to measure the molar masses of different compounds and discuss the Avogadro’s constant |  | TIE, (2005) CHEMISTRY F3 & F4, LONGMAN, DSMpg 29-33 | Students in groups to compare the mole with other units of measurements and construct the molar volume box and use a chemical balance to measure the molar masses of different compounds and discuss the Avogadro’s constant |  |
| **3**  **4** | **4.2 Application of the mole concept** | 4  4 | To guide students to discuss the conversion of known masses of elements , molecules or ions to moles. Guiding students to discuss the conversion on known volumes of gases at s.t.p to moles  To lead students to discuss the conversion of masses of solids or volumes of known gases to actual number of particles  To guide students to discuss the methods used to dissolve different substances in water  To guide students to perform some calculation based on the mole concept and balanced equations in groups and then individually | students to discuss the conversion of known masses of elements , molecules or ions to moles  Students to discuss the conversion on known volumes of gases at s.t.p to moles  students to discuss the conversion of masses of solids or volumes of known gases to actual number of particles  students to discuss the methods used to dissolve different substances in water  students to perform some calculation based on the mole concept and balanced equations in groups and then individually | Periodic table  wall chart  molar volume box  manila cards  magic markers | TIE, (2005) CHEMISTRY F3 & F4, LONGMAN, DSMpg 35-38 | students to discuss the conversion of known masses of elements , molecules or ions to moles  to discuss the conversion on known volumes of gases at s.t.p to moles  to discuss the conversion of masses of solids or volumes of known gases to actual number of particles  students to discuss the methods used to dissolve different substances in water  and perform some calculation based on the mole concept and balanced equations in groups and then individually |  |
| **By the end of the topic the student should have developed competences in using the concept of volumetric analysis in solving daily life problems** | **By the end of the topic the students should be able to establish accurate quantities of the reacting substances in various chemical reactions** |  | **4** | **5.0 VOLUMETRIC ANALYSIS** | **5.1 Standard volumetric apparatus** | 2 | To demonstrate to students to brainstorm on how volumetric analysis is used to determine unknown volumes and concentration of volumetric analysis  To guide students on how to use volumetric analysis apparatus | students to brainstorm on how volumetric analysis is used to determine unknown volumes and concentration of volumetric analysis  Students to use water on practice of taking accurate measurements of liquid volumes using pipettes and burettes | Burette  pipette  conical flask  beakers |  | students to brainstorm on how volumetric analysis is used to determine unknown volumes and concentration of volumetric analysis  and use water on practice of taking accurate measurements of liquid volumes using pipettes and burettes |  |
| **MIDTERM TEST** | | | | | | | | | | | | |
| **MIDTERM BREAK 28TH MARCH – 08TH APRIL 2024** | | | | | | | | | | | | |
|  |  | **APR**  **I**  **L** | **2** |  | **5.2 Standard solutions** | 4 | To guide students to interpret the data on the tables of containers carrying commercial acid and demonstrate to student how to carry out the dilution and how to prepare basic solution | Students in groups to discuss the preparation of standard solutions of common acids and bases and practice to perfection the titration process and reading volumes on a burette correct to two decimal places and data recording | Basic solutions  commercial acids |  | Students in groups to discuss the preparation of standard solutions of common acids and bases and practice to perfection the titration process and reading volumes on a burette correct to two decimal places and data recording |  |
|  | **3** | **5.3 Volumetric calculations** | 4 | To guide students in groups and then individually to prepare a standard solution of sodium carbonate and carry out the titration and work out the relative mass of the unknown element  To guide students in groups and individually in the titration experiment find out the percentage purity or impurity of an acid or an alkali To lead a discussion on students activities with emphasis on accuracy | Students in groups and then individually to use the standard sodium carbonate solution to standardize dilute HCl acid  Students in groups and individually in the titration experiment find out the percentage purity or impurity of an acid or an alkali  Students in groups and individually to carry out an experiment to find out number of moles of water of crystallization | Measuring cylinders  pipette  white tiles  titration flasks | TIE, (2005) CHEMISTRY F3 & F4, LONGMAN, DSMpg 39-41 | Students in groups and then individually to use the standard sodium carbonate solution to standardize dilute HCl acid  the titration experiment find out the percentage purity or impurity of an acid or an alkali  to carry out an experiment to find out number of moles of water of crystallization |  |
|  |  |  | **4** |  | **5.4 Application of volumetric analysis** | 4 | To lead students to discuss the usefulness of volumetric analysis  To organize a study visit and provide guidelines to students | Students to discuss the usefulness of volumetric analysis  Students in groups to discuss the findings from the study visit | Wall charts |  | Students to discuss the usefulness of volumetric analysis  And discuss the findings from the study visit |  |
| **By the end of the topic the student should have developed competences in applying chemistry principles in understanding industrial processes** | **By the end of the topic the students should be able to understand effects of electricity on chemical substances** | **MAY** | **1** | **6.0 IONIC THEORY AND ELECTROLYSIS** | **6.1 Ionic Theory** | 4 | To guide students to discuss electrolytes, non electrolytes, weak and strong electrolytes and categorize them | students to discuss electrolytes, non electrolytes, weak and strong electrolytes and categorize them | Common salt  wax  ethanol  sugar |  | students to discuss electrolytes, non electrolytes, weak and strong electrolytes and categorize them |  |
|  | **2** | **6.2 The Mechanism of Electrolysis** | 4 | To guide students to set up the experiment and discuss the migration of ions during electrolysis  To guide students to carry out experiments using different electrodes and electrolytes and identify the products at each case | Students in groups and then individually to set up an experiment and discuss the migration of ions  Students in groups and then individually to carry out experiments using different electrolytes and electrodes and identify the products at each case | Carbon rod  copper rod  sulphuric acid  wall charts | TIE and Bob McDuell, SECONDARY CHEMISTRY F3 & F4, (2005) LONGMAN, DSM pg 42-51 | Students in groups and then individually to set up an experiment and discuss the migration of ions  And carry out experiments using different electrolytes and electrodes and identify the products at each case |  |
|  |  |  | **3** |  | **6.3 Laws of electrolysis** | 4 | To guide students to measure the mass of solid deposited on or eroded from an electrode by a specific current supplied for a specific time and verify faradays first and second laws of electrolysis  To supervise students to discuss the mathematical interpretation of the faraday's second law of electrolysis | students to measure the mass of solid deposited on or eroded from an electrode by a specific current supplied for a specific time and verify faradays first and second laws of electrolysis  students to work out some calculations based on the second law | Electrolytic cell  chemical balance  copper rods |  | students to measure the mass of solid deposited on or eroded from an electrode by a specific current supplied for a specific time and verify faradays first and second laws of electrolysis  and work out some calculations based on the second law |  |
|  | **4** | **6.4 Application of electrolysis** | 4 | To guide students to discuss the purification of copper by electrolysis and essential steps for electroplating an object | students to discuss the purification of copper by electrolysis and essential steps for electroplating an object | Spoon  copper rod  wall charts |  | students to discuss the purification of copper by electrolysis and essential steps for electroplating an object |  |
| **By the end of the topic the student should have developed competences in describing the speeds of reactions** | **By the end of the topic the students should be able to explain the speeds of various chemical reaction in daily life** |  | **4** | **7.0 CHEMICAL KINETICS, EQUILIBRIUM &ENERGETICS** | **7.1 the rate of chemical reactions** | 4 | To guide students to discuss the concept of rapid and slow reactions | Students to demonstrate a very rapid reaction by mixing KI with lead nitrate solutions and aqueous silver | Manila sheets  test tube  graph papers  nails  water |  | Students to demonstrate a very rapid reaction by mixing KI with lead nitrate solutions and aqueous silver  And measure the rate of evolution of hydrogen when zinc is dissolved in dilute HCl Acid |  |
| To guide students to carry out a slow reaction by allowing iron nails to rust under favorable conditions | Students to measure the rate of evolution of hydrogen when zinc is dissolved in dilute HCl Acid |
| **TERMINAL EXAMINATIONS** | | | | | | | | | | | | |
| **TERMINAL LEAVE 31TH MAY – 01TH JULY 2024** | | | | | | | | | | | | |
|  |  | **JUL**  **Y** | **4** |  | **7.2 factors affecting the rate of chemical reactions** | 4 | To guide students to use dil. Hcl and Na2S2O3 to study the effect of concentration on the rate of precipitation of sulphur | students to use dil. Hcl and Na2S2O3 to study the effect of concentration on the rate of precipitation of sulphur | Mortor and pestle  stop watches  measuring cylinders  sylinges  graph papers | TIE and Bob McDuell, SECONDARY CHEMISTRY F3 & F4, (2005) LONGMAN, DSM pg. 54-66 | students to use dil. Hcl and Na2S2O3 to study the effect of concentration on the rate of precipitation of sulphur |  |
| To guide students to use dil. Hcl and Na2S2O3 to study the effect of temperature on the rate of precipitation of sulphur | To guide students to use dil. Hcl and Na2S2O3 to study the effect of temperature on the rate of precipitation of sulphur and plot a graph | to use dil. Hcl and Na2S2O3 to study the effect of temperature on the rate of precipitation of sulphur and plot a graph |
| To instruct students to use blocks of CaCO3 and its powder to study the effect of particles size on the rate of evaluation of carbon dioxide when reacted with dil. Hcl acid | students to use blocks of CaCO3 and its powder to study the effect of particles size on the rate of evaluation of carbon dioxide when reacted with dil. Hcl acid | use blocks of CaCO3 and its powder to study the effect of particles size on the rate of evaluation of carbon dioxide when reacted with dil. Hcl acid |
| To guide students in groups to use solid MnO2 to study the effect of the catalyst on the rate of evolution of oxygen from H2O2. | students in groups to use solid MnO2 to study the effect of the catalyst on the rate of evolution of oxygen from H2O2  and plot a graph | to use solid MnO2 to study the effect of the catalyst on the rate of evolution of oxygen from H2O2  and plot a graph |
| **AUGUS**  **T** | **1** | **7.3 Reversible and Irreversible reactions** | 4 | To guide students to discuss the concept of reversible and irreversible processes and demonstrate one reaction in each case | Students in groups to perform an experiment on reversible and irreversible reactions and discuss the results obtained | Heat source  litmus paper  ice |  | Students in groups to perform an experiment on reversible and irreversible reactions and discuss the results obtained |  |
| **2** | **7.4 Equilibrium reaction** | 4 | To guide students to discuss the differences and similarities between equilibrium reactions and reversible reactions  To guide students to discuss the factors affection the position of equilibrium | students to discuss the differences and similarities between equilibrium reactions and reversible reactions and give examples  students to discuss the factors affection the position of equilibrium according to Le Chateliers principle | Wall charts showing Haber process |  | students to discuss the differences and similarities between equilibrium reactions and reversible reactions and give examples |  |
|  | **3** | **7.5 Endothermic and exothermic reactions** | 2 | To guide students to discuss the concept of endothermic and exothermic reactions  To guide students to discuss the special features of energy level diagrams for exothermic and endothermic reactions | Students to discuss the concept of endothermic and exothermic reactions  students to discuss the special features of energy level diagrams for exothermic and endothermic reactions | Wall charts  diagrams |  | Students to discuss the concept of endothermic and exothermic reactions  And discuss the special features of energy level diagrams for exothermic and endothermic reactions |  |
| **By the end of the topic the student should have developed competences in using technological skills in extraction of metals and conservation of environment** | **By the end of the topic the students should be able to recognize the appropriate methods of extraction of metals and the consequences of environmental destruction** | **AUGUST** | **4** | **8.0 EXTRACTION OF METALS** | **8.1 Occurrence and Location of Metals in Tanzania** | 2 | To guide students to discuss the distribution of metal ores in Tanzania and their types and abundances | students to discuss the distribution of metal ores in Tanzania and their types and abundances | Wall charts  maps | TIE Bob McDuell SECONDARY CHEMISTRY F3 &F4(2005) LONGMAN, DSMpg71-76 | students to discuss the distribution of metal ores in Tanzania and their types and abundances |  |
| **4** | **8.2 Chemical properties of metals** | 2 | To elaborate on that sodium and potassium are very weak physically but they are among the strongest metals chemically  To lead a discussion on the reactivity of different metals with water and steam to include K, Na, Ca Mg, Al, Zn, Pb, Cu | Students to demonstrate the reactivity of different metals and write electronic configuration of the common metals to show the stability obtained after losing electrons  Students to discuss on the reactivity of different metals with water and steam to include K, Na, Ca Mg, Al, Zn, Pb, Cu | Periodic table  charts  sample of different metals | Students to demonstrate the reactivity of different metals and write electronic configuration of the common metals to show the stability obtained after losing electrons |  |
| **MIDTERM TEST** | | | | | | | | | | | | |
| **MIDTERM BREAK 30TH AUGOST – 16TH SEPTEMBER 2024** | | | | | | | | | | | | |
|  |  | **SEPT** | **4** |  | **8.3 extraction of metal by electrolytic reduction** | 4 | To guide students to discuss how the reactivity series is used to select the best method for extracting a metal from its ore and explain the extraction of sodium metal by Down's process | students to discuss how the reactivity series is used to select the best method for extracting a metal from its ore and explain the extraction of sodium metal by Down's process | Wall charts |  | students to discuss how the reactivity series is used to select the best method for extracting a metal from its ore and explain the extraction of sodium metal by Down's process |  |
| **OCTOBER** | **1** | **8.4 extraction of metal by chemical reduction** | 2 | To guide students to discuss the extraction of iron in the blast furnace | Students to discuss and write the important reaction equations taking place in the blast furnace | Wall charts |  | Students to discuss and write the important reaction equations taking place in the blast furnace |  |
| **8.5 environmental consideration** | 2 | To guide students to visit the following sites:  Quarries, Mineral mines, Coal mines and lead a discussion on environmental destruction and their implications | students to visit the following sites:  Quarries, Mineral mines, Coal mines and lead a discussion on environmental destruction and their implications | Land maps  wall charts |  | students to visit ,Quarries, Mineral mines, Coal mines and lead a discussion on environmental destruction and their implications |  |
| **By the end of the topic the student should have developed competences in using technological skills in extraction of metals and conservation of environment** | **By the end of the topic the students should be able to recognize the appropriate methods of extraction of metals and the consequences of environmental destruction** | **OCTOB**  **ER** | **2** | **9.0 COMPOUNDS OF METALS** | **9.1 Oxides** | 4 | To guide students to prepare metal oxides by heating elements calcium and magnesium in air and discuss the results  To guide students in groups to use guideline to test and classify metal oxides into groups of soluble, insoluble, basic and amphoteric  To guide students in groups to discuss the uses of oxides of metals | students to prepare metal oxides by heating elements calcium and magnesium in air and discuss the results  students in groups to use guideline to test and classify metal oxides into groups of soluble, insoluble, basic and amphoteric  students in groups to discuss the uses of oxides of metals | Wall charts  sample of different metals  heat source | TIE Bob McDuell SECONDARY CHEMISTRY F3 &F4(2005) LONGMAN, DSM pg.78-79 | students to prepare metal oxides by heating elements calcium and magnesium in air and discuss the results  and use guideline to test and classify metal oxides into groups of soluble, insoluble, basic and amphoteric and  discuss the uses of oxides of metals |  |
| **3** |  | **9.2 Hydroxides** | 4 | To guide students in their work and make general comment  To provide guidelines to students on the properties and uses of metal hydroxides | Students to prepare the hydroxide of calcium by adding the metal directly in water  Students to prepare insoluble hydroxides by reaction the solutions of NaOH, KOH with aqueous solutions of soluble salts and classify metal hydroxides  Using guidelines students to perform experiments on the chemical properties of some common metal hydroxides and state their uses | KOH  NaOH  water  chlorides of Fe, Mg, Zn, Cu  beakers  test tube |  | Students to prepare the hydroxide of calcium by adding the metal directly in water  And prepare insoluble hydroxides by reaction the solutions of NaOH, KOH with aqueous solutions of soluble salts and classify metal hydroxides  perform experiments on the chemical properties of some common metal hydroxides and state their uses |  |
| **OCTOB**  **ER** | **4** | **9.3 Carbonates and Hydrogen carbonates** | 4 | To supervise students' work and give general comments  To provide guidelines to students to find the properties of metal carbonates and their uses | Students to prepare soluble carbonated by passing carbon dioxide to an alkali and then prepare insoluble carbonates by passing excess of carbon dioxide into lime water, and prepare precipitate insoluble carbonates by adding sodium carbonate solution to a solution of a salt of a heavy metal eg, CuSO4  Students in groups to prepare a table of soluble and insoluble carbonates  Using guidelines students to determine the chemical properties of metal carbonates and their uses | Carbonates of metals  wall charts  lab. apparatus |  | Students to prepare soluble carbonated by passing carbon dioxide to an alkali and then prepare insoluble carbonates by passing excess of carbon dioxide into lime water, and prepare precipitate insoluble carbonates by adding sodium carbonate solution to a solution of a salt of a heavy metal eg, CuSO4  to prepare a table of soluble and insoluble carbonates |  |
| **NOVEMB**  **ER** | **1** | **9.4 Nitrates** | 2 | To demonstrate on the preparation of metal nitrates and explain their chemical properties  To guide students to discuss the uses of metal nitrates | Students in groups to carry out an experiment to identify a nitrate from unknown mixtures, in the solid, and liquid form  Students to discuss the uses of metal nitrates | Wall charts |  | Students in groups to carry out an experiment to identify a nitrate from unknown mixtures, in the solid, and liquid form  And discuss the uses of metal nitrates |  |
| **9.5 Chlorides** | 2 | To guide students to prepare insoluble chlorides by adding Hcl in an aqueous salt of lead or silver.  To guide students to discuss chemical properties of metal chlorides and their uses | Students to prepare soluble chlorides by mixing dil. Hcl with oxides, hydroxides, carbonates and metals  students to discuss chemical properties of metal chlorides and their uses | Litmus paper  any alkali | TIE, (2005) CHEMISTRY F3 & F4, LONGMAN, DSM pg 86-88 | Students to prepare soluble chlorides by mixing dil. Hcl with oxides, hydroxides, carbonates and metals  And to discuss chemical properties of metal chlorides and their uses |  |
| **2** | **9.6 Sulphates** | 4 | To supervise students in their work and give general comments | Students to dissolve a metal, a carbonate, a hydroxide or an oxide in dil. H2SO4 and isolate the crystal  Students to perform an experiment to study the properties of sulphates and describe their uses | Wall charts  lab. Reagents |  | Students to dissolve a metal, a carbonate, a hydroxide or an oxide in dil. H2SO4 and isolate the crystal  To perform an experiment to study the properties of sulphates and describe their uses |  |
|  | **2**  **3** | **REVISION** | |  |  |  |  |  |  |  |
|  |  | **ANNUAL EXAMS & ANNUAL HOLIDAYS** | | | | | | | | |