

**PHYSICS**

- ❖ Measurement of length, mass , time
- ❖ Forces
- ❖ Energy
- ❖ Energy transfers

**CHEMISTRY**

- ❖ Introducing Science: Science, Scientist, Scientific equipment & apparatus, safety in the science laboratory
- ❖ States of Matter
- ❖ Properties of Matter & Materials
- ❖ Acids and Alkalis

**BIOLOGY**

- ❖ Characteristics of Living Things
- ❖ Cells
- ❖ Living Things in their Environment: Ecology, Ecosystem, food chain
- ❖ Micro-organism : Viruses Fungi, Monera, protocystic kingdoms, Decomposers etc

**GRAMMAR**

- ❖ Parts of Speech-
- ❖ Types of Adverbials-Time, place etc
- ❖ Simple Tense- Present, Past, Future
- ❖ Synonyms & Antonyms
- ❖ Active and passive voice(of verbs)
- ❖ Punctuation- The apostrophe, comma etc
- ❖ Plurals of verbs/nouns: Anomalies in noun plurals

**CREATIVE WRITING**

- Intro-to Essay types
- Descriptive writing- A new learning environment
- Guided composition (using pictures)
- Description of a hero
- Writing advert scripts (copy writing)
- Imaginative writing (An unusual experience)
- Argumentative writing

**CIVIC EDUCATION**

- ❖ Introduction to Civic Education
- ❖ Values : Meaning, importance, factors etc
- ❖ Honesty : Meaning and Attributes, consequences of dishonesty, benefits of honesty
- ❖ Co-operation: Meaning and Attributes, Benefits and factors that promote co-operation
- ❖ Self Reliance: Meaning and Attributes, Benefits

**MATHEMATICS**

- ❖ Place value, ordinary & rounding numbers
- ❖ Factors and Multiples
- ❖ Fractions and percentages
- ❖ Properties of plane shapes
- ❖ Integers, powers and square roots
- ❖ Equations and simple functions
- ❖ Measuring perimeters, using formulae to calculate perimeter, perimeters of circles

**BUSINESS STUDIES**

- ❖ Introduction to Business Studies
- ❖ The office (Def, Types, Sections, Functions)
- ❖ The Office Staff
- ❖ Right Attitude to work
- ❖ Departments in an Office/Organization
- ❖ Introduction to Commerce
- ❖ Division of Commerce
- ❖ Production (Meaning, Types, Effects)
- ❖ Factors of Production
- ❖ Types of Occupation
- ❖ Honesty in Business

**SOCIAL STUDIES**

- ❖ Meaning, scope, nature & importance of SOS
- ❖ Physical Environment (meaning, features etc)
- ❖ Environmental Problems
- ❖ Social environment (Meaning, Types, conflict & conflict resolution
- ❖ Accidents in the home and school
- ❖ Socialization agents and processes

**PHYSICS**

- ❖ Work, Energy and Power
- ❖ Simple Machines (Lever, wheels, axle, screw thread and gears)
- ❖ Simple Machines (Efficiency)
- ❖ Thermal Energy

**CHEMISTRY**

- ❖ Metals and Non-Metals
- ❖ Chemistry in Everyday Life: Respiration & combustion, Burning & explosion, Oxidation, Oxygen and food, Rusting etc
- ❖ Crude Oil and petrochemicals
- ❖ Changes in Matter : Types & Causes
- ❖ Changes in non-living thing: Characteristics of chemical and physical changes

**BIOLOGY**

- ❖ Uniqueness of man: Primate, How man is different from other primates
- ❖ Changes in Living things
- ❖ The Skeletal System and Movement
- ❖ The Respiratory System
- ❖ The Circulatory System
- ❖ The Digestive System

**GRAMMAR**

- ❖ Types of Phrases /Clauses
- ❖ Cohesive devices/Connectives e.g as a result of
- ❖ Synonyms & Antonyms
- ❖ Compounding: Two-components (with/without hyphen)
- ❖ Conjunctions: Definition/ Types & Usage
- ❖ Question Tags: Definition, Rules of tagging
- ❖ The Progressive/Perfect Tense (revisited)

**CREATIVE WRITING**

- ❖ Travel writing
- ❖ Expository writing
- ❖ The formal letter (Application)
- ❖ Argumentative writing
- ❖ Writing Poems
- ❖ Introduction to Article Writing

**CIVIC EDUCATION**

- ❖ Integrity: Meaning and Attributes, Examples of people of integrity in society, the need for
- ❖ Contentment: Meaning, effects of lack of contentment.
- ❖ Discipline: Meaning and Attributes
- ❖ Courage : Meaning, Types and Attributes,
- ❖ Nigeria as a federation : Meaning & characteristics
- ❖ Relationship among Federal, state & local Gov.

**NUMERACY**

- ❖ Place value of larger whole number
- ❖ Prime factors and Multiples.
- ❖ Integers, powers and square roots
- ❖ Congruency and properties of "2d" shapes
- ❖ Inverse and identity of a number
- ❖ Angles in a polygon
- ❖ Pythagoras Rule
- ❖ Inequalities

**BUSINESS STUDIES**

- ❖ The Reception Office
- ❖ Office Correspondence
- ❖ Office Documents (Meaning, Types etc)
- ❖ Trade (Meaning, Importance and forms)
- ❖ Market (Types & their features)
- ❖ Buying and Selling
- ❖ Turn Over Net Profit
- ❖ Distribution
- ❖ Banking Services

**SOCIAL STUDIES**

- ❖ Social Groups: Meaning, Types, characteristics
- ❖ Group Behaviour : Types, mass action
- ❖ Marriage: Meaning, Types, conditions etc
- ❖ Drug Abuse: Meaning, Forms, Consequences
- ❖ Drug Trafficking : Meaning, Reasons, Consequences
- ❖ Poverty: Meaning, consequences, poverty alleviation strategies
- ❖ Corruption: Meaning, Types, causes etc
- ❖ Cultism : Meaning, Causes, consequences, solution
- ❖ Science & Technology in Development

**PHYSICS**

- ❖ Measuring work, energy & power
- ❖ Simple Machines (Forces)
- ❖ Simple Machines (Energy)
- ❖ Efficient Simple Machines (Energy)
- ❖ Efficient Simple Machines (Energy Transfer)
- ❖ Thermal energy (Energy Transfer)

**CHEMISTRY**

- ❖ Radioactivity
- ❖ Resources from Non- Living Things
- ❖ Ozone layer
- ❖ Erosion and flooding
- ❖ Bush burning, Deforestation & Desertification

**BIOLOGY**

- ❖ Drug Abuse
- ❖ Metabolism in the Human Body
- ❖ Reproductive Health
- ❖ Resources from Living Things

**GRAMMAR**

- ❖ Idioms
- ❖ Fronting subordinate clauses in periodic sentences
- ❖ Etymology
- ❖ Mood of verbs (indicative, imperative etc)
- ❖ Adverbs/Adverbials
- ❖ Possessive Pronouns /Adjectives
- ❖ Synonyms & Antonyms

**CREATIVE WRITING**

- Writing newspaper articles
- Producing a local newspaper
- Travel writing (writing too reveal sentence varieties)
- Jingles for adverts
- Narrating a frightening experience
- The formal letter (revisited)
- The informal letter (cont'd)
- An opinionated description of a place

**CIVIC EDUCATION**

- ❖ Intro. to Civic Education : Meaning, scope etc
- ❖ Right Attitude to Work
- ❖ Negative Behaviour : Meaning, types, effect
- ❖ National Population census
- ❖ Protection of Human Rights
- ❖ Protection of Rule of law/Voter Education

**NUMERACY**

- ❖ Equation involving fractions
- ❖ Compound Interest
- ❖ Proportion , Direct, inverse & reciprocals
- ❖ Simultaneous Linear Equation
- ❖ Sine and Cosine of angles
- ❖ Everyday Statistics
- ❖ Area of volume of similar shapes
- ❖ Area of plane shapes

**BUSINESS STUDIES**

- ❖ Office Procedure
- ❖ Office Equipment
- ❖ Wages and Salaries Office
- ❖ Stock and Store Record
- ❖ Advertising
- ❖ Transportation
- ❖ Communication
- ❖ Setting Simple Business Plan

**SOCIAL STUDIES**

- ❖ Water Supply: Sources, keeping water clean
- ❖ Trafficking in Children and Women
- ❖ Harmful Traditional Practices
- ❖ Population : Meaning, Basic unit, control
- ❖ Census: Meaning, Importance, problems
- ❖ The National Economy: Meaning, Egs, sectors
- ❖ Nature of the Nigerian Economy
- ❖ Economic reforms measures in Nigeria
- ❖ Economic Institutions
- ❖ World Transportation System

# Sciences

## PHYSICS

- ❖ Fundamental & Derived Quantities & Units
- ❖ Length and Time
- ❖ Speed, Velocity and Acceleration
- ❖ Mass and Weight
- ❖ Density and Force
- ❖ Motion
- ❖ Energy, Work and Power
- ❖ Pressure

## BIOLOGY

- ❖ Characteristics of living organisms
- ❖ Classification and Diversity of living organisms
- ❖ Adaptation of organisms to their environment, flowering plants
- ❖ Cell structure and organization
- ❖ Levels of Organization -cell, tissue organ
- ❖ Size of specimens- calculate magnification and size of biological specimen using millimeters as units

## GRAMMAR & CREATIVE WRITING

The Noun Phrase/ Essay Types

Collocations/Vocabulary Development(family)

The Noun Phrase vs Noun Clause / My best friend

Uncountable Nouns / Article writing

Synonyms and Antonyms / Summary writing

Idioms/Idiomatic Expressions

Registers (Fishing / law)

## COMPREHENSION

- ❖ New Application -You Write
- ❖ Welcome, African Safari
- ❖ The Family Feud
- ❖ Denver Vacation Activities
- ❖ KL Experience, Prehistoric Wonder
- ❖ Between Morality and the Law
- ❖ Exam Style Questions
- ❖ Fast Foods 1& 2

## CHEMISTRY

- ❖ The particulate Nature of Matter
- ❖ Experimental Techniques (measurements)
- ❖ Criteria for purity
- ❖ Methods of Purification
- ❖ Atom, Element, Compound (periodic table)
- ❖ Bonding: The structure of matter
- ❖ Ions and Ionic bonds
- ❖ Molecules & covalent bonds

## GEOGRAPHY

- ❖ Local Geography (Towns & Villages)
- ❖ Local Geography (Local Government)
- ❖ The earth and other planets
- ❖ Earth Rotation & Revolution
- ❖ Latitude and Longitudes
- ❖ Earth structure and Rocks
- ❖ Major landforms of the World
- ❖ Lowland and the Environment

## NUMERACY

- ❖ Natural numbers, integers, prime numbers, factors, square and square root
- ❖ Set: Notation and Venn diagrams
- ❖ Indices
- ❖ Logarithms and Indices
- ❖ Simple statement; true & false statements.
- ❖ Algebra: use of letters to express numbers and arithmetic, Algebraic expressions
- ❖ Graphs

## ECONOMICS

- ❖ Introduction to Economics (Def., scope, methodology of economics, concept of want, scarcity, scale of preference etc )
- ❖ Basic tools of Economic Analysis (graphs, charts, tables, construction of frequency.
- ❖ Economic System
- ❖ How Market works (meaning of price system, demand and supply curves, market price, elasticity of supply and demand.

**Arts**

**GOVERNMENT**

- ❖ Government: Definition, Structure, characteristics
- ❖ Federal, State and Local Government
- ❖ Government: As an act of governing, Rule making/implementation body
- ❖ Power and Authority
- ❖ Legitimacy and sovereignty
- ❖ Democracy
- ❖ Political culture and socialization
- ❖ Communalism and Feudalism

**GRAMMAR & CREATIVE WRITING**

- The Noun Phrase/ Essay Types
- Collocations/Vocabulary Development(family)
- The Noun Phrase vs Noun Clause / My best friend
- Uncountable Nouns / Article writing
- Synonyms and Antonyms / Summary writing
- Idioms/Idiomatic Expressions
- Registers (Fishing / law)

**COMPREHENSION**

- ❖ New Application -You Write
- ❖ Welcome, African Safari
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- ❖ Denver Vacation Activities
- ❖ KL Experience, Prehistoric Wonder
- ❖ Between Morality and the Law
- ❖ Exam Style Questions
- ❖ East Foods 1&2

**CIVIC EDUCATION**

- ❖ Values
- ❖ HIV/AIDS
- ❖ Youth Empowerment
- ❖ Citizenship
- ❖ Types of Laws and the Rights of an Individual
- ❖ Government
- ❖ Nationalism and Nationalist
- ❖ Local and World Civic Problems

**COMMERCE**

- ❖ Introduction to Commerce
- ❖ History of Commerce
- ❖ Occupation
- ❖ Production, Division of Labour  
Specialization and Exchange
- ❖ Trade (Home Trade)
- ❖ Wholesale Trade
- ❖ Foreign Trade

**NUMERACY**

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**I.C.T**

- Types and Components of computer system
- Practicals - Communications
- Types of Computers
- The Internet
- Input and Output Result
- Practical Document Production

# Sciences

## PHYSICS

- ❖ Light Waves/ Properties of wave
- ❖ Sound waves /Application of Sound waves
- ❖ The human eye
- ❖ Description & properties of force fields
- ❖ Gravitational field and Electric field.

## CHEMISTRY

- ❖ Test, Treatment and Uses of Water
- ❖ Composition of air and Air pollutants
- ❖ Air and Water: Rust prevention
- ❖ Sulphur/ Carbonates
- ❖ Organic Chemistry
- ❖ Names of compounds
- ❖ Fuel (Coal, natural gas & petroleum)
- ❖ Homologous series
- ❖ Alkanes, Alkenes and Alcohols

## GRAMMAR

- ❖ Synonyms and Antonyms
- ❖ Idiomatic Expression
- ❖ Voice of Verbs : Def, Rules & Illustration
- ❖ Collocation : Building construction; Trade
- ❖ Etymology: Illustration of Words and their Origin
- ❖ Phrasal Verbs: Def, Usage & Illustration
- ❖ More on Concord

## CREATIVE WRITING

- ❖ Argumentative Essay “The mother tongue would be a better mode of instruction in schools”
- ❖ Writing an Article for a Local Newspaper  
Practice: Effect of sports on individuals
- ❖ Maintaining coherence in paragraphs/prose :  
Use of connectives
- ❖ Interpretation of graphic information
- ❖ Summary writing : Fighting for funds (ESL)
- ❖ Descriptive Writing : Geographical features of a place (Adequate use of adjectives /adverbs)
- ❖ Summary Writing (Local Content)

## BIOLOGY

- ❖ Transportation (transport in plants)
- ❖ Transport in Humans (The heart)
- ❖ Transport in Humans (Arteries, vein and capillaries)
- ❖ Excretory system
- ❖ Respiration
- ❖ Excretion in Human

## GEOGRAPHY

- ❖ World Population
- ❖ Settlements
- ❖ The Environment (meaning & classification)
- ❖ The Environment (environmental resources/ Problems and hazards).
- ❖ The Environmental conservation
- ❖ Tourism

## NUMERACY

- ❖ Geometry I: Three-Fig bearing, Pythagoras theorem, sine, cosine and tangent
- ❖ Geometry II: sine & cosine rule, Area of triangle, Trigonometry in 3-dimension
- ❖ Matrices
- ❖ Transformation : reflection, rotation, translation, enlargement & combination
- ❖ Probability
- ❖ Sequence and Series
- ❖ Quadratic Equations
- ❖ Simultaneous Equation: Linear & Quadratic

## ECONOMICS

- ❖ Revenue
- ❖ Instruments in Business Finance
- ❖ Population
- ❖ Utility Theory
- ❖ Government Economic policy
  - i. The role of Gov. in a mixed economy
  - ii. Macroeconomic objectives
  - iii. Demand-side & Supply-side policies
  - iv. Policy Conflicts
- ❖ Taxation

**Arts**

<b>GOVERNMENT</b>	<b>GEOGRAPHY</b>
<ul style="list-style-type: none"> <li>❖ Political Participation</li> <li>❖ Centralization and Decentralization</li> <li>❖ Delegates Legislation</li> <li>❖ Citizenship</li> <li>❖ Political Parties/ Party system and pressure grps</li> <li>❖ Elections</li> <li>❖ Types of electoral systems</li> <li>❖ Organization of elections and electoral commission</li> </ul>	<ul style="list-style-type: none"> <li>❖ World Population</li> <li>❖ Settlements</li> <li>❖ The Environment (meaning &amp; classification)</li> <li>❖ The Environment (environmental resources/ Problems and hazards).</li> <li>❖ The Environmental conservation</li> <li>❖ Tourism</li> </ul>
<b>CIVIC EDUCATION</b>	<b>ECONOMICS</b>
<ul style="list-style-type: none"> <li>❖ Citizenship Education</li> <li>❖ Living in Peace and Harmony with Neighbours</li> <li>❖ Traditions, Customs &amp; Beliefs in Nigeria</li> <li>❖ Capitalist Democracy</li> <li>❖ Political Parties</li> <li>❖ Employment</li> <li>❖ Political Apathy</li> <li>❖ Popular Participation</li> <li>❖ Patriotism and how to show it.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Revenue</li> <li>❖ Instruments in Business Finance</li> <li>❖ Population</li> <li>❖ Utility Theory</li> <li>❖ Government Economic policy <ul style="list-style-type: none"> <li>v. The role of Gov. in a mixed economy</li> <li>vi. Macroeconomic objectives</li> <li>vii. Demand-side &amp; Supply-side policies</li> <li>viii. Policy Conflicts</li> </ul> </li> <li>❖ Taxation</li> </ul>
<b>GRAMMAR</b>	<b>NUMERACY</b>
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<b>CREATIVE WRITING</b>	
<ul style="list-style-type: none"> <li>❖ Argumentative Essay: “The mother tongue would be a better mode of instruction in schools”</li> <li>❖ Writing an Article for a Local Newspaper Practice: Effect of sports on individuals</li> <li>❖ Maintaining coherence in paragraphs/prose : Use of connectives</li> <li>❖ Interpretation of graphic information</li> <li>❖ Summary writing : Fighting for funds (ESL)</li> <li>❖ Descriptive Writing : Geographical features of a place (Adequate use of adjectives /adverbs)</li> <li>❖ Summary Writing (Local Content)</li> </ul>	

**PHYSICS**

- ❖ Location of Dams & Energy Production
- ❖ Identification of component parts, Uses of rocket and satellites
- ❖ Features of Niger SAT 1: Description of operation, Uses and Relevance
- ❖ Nicom-SAT 1 : Features of Nicom SAT 1, Description of operation, Uses and Relevance

**MATHEMATICS**

- ❖ Surds
- ❖ Theory of Logarithms
- ❖ Surface, Area and Volume of sphere
- ❖ Longitudes and Latitudes
- ❖ Coordinate Geometry of straight line
- ❖ Introductory Calculus( Integration and Differentiation)

**CHEMISTRY**

- ❖ Sulfur: General properties of sulfur, electron structure of sulfur, allotropes, Uses and compounds. Industrial preparation of hydro sulphate and uses.
- ❖ Oxidation Reduction (Redox) Reaction: Definition, Rules and calculation of oxidation numbers, Redox equations
- ❖ Ionic Theory: Electrovalent and covalent compounds, Electrolytes and non-electrolytes. Weak & strong electrolytes, Electrochemical series
- ❖ Hydrocarbons: Structure and valency of carbon, Meaning and examples Homologous series, Composition and structure. Isomerism.
- ❖ Alkanols: Types, Properties, preparation.
- ❖ Qualitative and Quantitative analysis
- ❖ Petroleum : Origin, Crude oil reserve, Exploration and drilling
- ❖ Metals and their compounds: Physical & Chemical properties of sodium, calcium etc
- ❖ Fats and oil: : Sources, Physical & Chemical properties, saponification, soap and detergents (preparation, uses action etc
- ❖ Giant molecules: Sugar sources, classification, reducing & non-reducing sugars, Test for starch & sugars etc

**BIOLOGY**

- ❖ Relevance of Biology to agriculture:
- ❖ Pests & Diseases of Agricultural importance
- ❖ Food production and storage
- ❖ Micro-organisms in air and water, Groups of micro- organism, concept of culturing , growth of micro-organisms, benefit, harmful effects of some microbes
- ❖ Control of harmful micro-organism, vectors, maintain good health
- ❖ Aquatic habitat: Marine, Estuarine & fresh water habitat: Definition & characteristics
- ❖ Terrestrial Habitat : March, Forest, Grass land or savanna, Arid or desert land
- ❖ Reproduction in unicellular organism & invertebrates
- ❖ Classification of plants
- ❖ Digestive and Respiratory Systems

**DATA PROCESSING**

- ❖ Data Security
- ❖ Crash Recovery
- ❖ Graphs and Charts
- ❖ Logic circuits



