



HERITAGE GLOBAL ACADEMY

**2, OLAIYA CLOSE, OFF OKIKI STREET, ISAWO ROAD, AGRIC BUS STOP IKORODU,
LAGOS STATE.**

Subject: Information and Communication Technology (ICT)

Class: JSS 1 - 3

CURRICULUM FOR AGRIC SCIENCE

JSS 1 FIRST TERM

WEEKS	TOPICS / CONTENTS	
1	<p>DIFFERENT INFORMATION AGE</p> <p>I. Stone age, Iron age, Middle age, Industrial age, Electronic Age, Information Age</p> <p>II. State the Present Information Age</p> <p>III. Identify the Tools associated with each Age.</p>	
2	<p>HISTORICAL DEVELOPMENT OF COMPUTERS</p> <p>I. Early counting devices – fingers, Stones, Sticks, Pebbles, Cowrie, Grains, etc</p> <p>II. Mechanical Counting and Calculating Devices – Abacus, Slide rule, etc.</p> <p>III. Electro - Mechanical counting devices –John Napier bone, Blaise Pascal machine, Gottfried Leibnitz Machine, Joseph Jacquard Loom, Charles Babbage Analytical Machine and Phillip Emeagwali</p>	

	<p>IV. Electronic Counting Devices and Modern Computer-Herman Hollerith Punch Cards, John Von Neumann Machine</p> <p>V. Modern Machine</p>	
3	<p>GENERATIONS OF COMPUTERS</p> <p>Describe each Generation of Computer in Terms of -</p> <p>I. Year of Development</p> <p>II. Technology</p> <p>III. Speed of operation</p> <p>IV. Storage capacity</p>	
4	<p>BASIC COMPUTER CONCEPT</p> <p>I. Definition of Computer</p> <p>II. Parts of a Computer System, e.g. Monitor, Keyboard, System Unit, Mouse, etc.</p> <p>III. Category of the Parts of the Computer</p> <p>IV. Description of a Computer as an Input and Output device.</p>	
5	<p>DATA AND INFORMATION</p> <p>I. Meaning, Sources and examples of data and information</p> <p>II. Qualities of a good information – Accurate, Comprehensive.</p> <p>III. Meaningful, Relevant, Timely,</p>	

	Suitable etc.	
6	<p>INFORMATION TRANSMISSION</p> <p>I. Meaning of information transmission</p> <p>II. Ancient methods of transmitting information – Oral, Fire lighting, Whistling, Beating drums, Town crying, Drawing diagrams, Making representations.</p> <p>III. Modern methods of transmitting information – GSM, Radio, Television, Computer, etc</p>	
7	<p>INFORMATION EVOLUTION AND COMMUNICATION TECHNOLOGY (ICT)</p> <p>I. Electronic (Define Electronic Devices with Examples)</p> <p>II. Non - Electronic (Define Non Electronic Devices with Examples)</p> <p>III. Mode of Receiving Information</p> <ul style="list-style-type: none"> • Audio, e.g. Radio, GSM, etc. • Video, e.g. Pictures, Charts, etc. • Audio – Visual e.g. Television, Monitor, etc. 	
8	<p>ICT APPLICATION IN EVERYDAY LIFE</p> <p>I. Definition and Meaning of I C T</p> <p>II. Uses of ICT</p> <ul style="list-style-type: none"> • Communication • Timing and Control 	

	<ul style="list-style-type: none"> • Information processing and management etc. III. ICT and the Society	
10	ICT and Society (a) ICT in Education (b) ICT in Banking Industry (c) ICT in Medical Sciences	
11	ICT and Society (a) ICT in Government (b) ICT in Law (c) ICT in the Airline industry	
12 & 13	EXAMINATION	

JSS 1 SECOND TERM

WEEKS	TOPICS / CONTENTS	
1	Revision On Introduction To The Computer Monitor	
2	I. Definition of computer monitor II. Description of a monitor as an output device III. Types of Monitor – Monochrome and Color Monitor (Define them). IV. Identify the Prompt and Cursor	
3	THE SYSTEM UNIT I. Internal features of the system unit and uses:	

	<ul style="list-style-type: none"> • CPU and Its Components (CU, ALU and MM) <p>- Define the Central Processing Unit (CPU) and List the Functions of Control Unit, Arithmetic and Logic Unit (ALU), Main Memory (MM)</p> <ul style="list-style-type: none"> • Motherboard, Power Supply, Cooling Fan, etc. <p>II. External Features of the System Unit and Uses</p> <ul style="list-style-type: none"> • List and Explain Functions of Some External Features • The power button, The reset button, The drives, The ports etc 	
4	<p>COMPUTER ETHICS</p> <p>I. Definition of Computer Ethics</p> <p>II. Computer Room Management Ethics – Maintaining Dust Free Environment, Appropriate Ventilation, Appropriate Lighting System, etc.</p> <p>III. Laboratory rules and regulations – Arrange chairs and tables in a Comfortable manner, arrange the computers and their peripherals in an orderly manner, etc.</p> <p>IV. Observe Computer Room Rules and Regulations</p>	
5	<p>WORD PROCESSING I</p> <p>I. Definition of Word Processing</p> <p>II. Definition of Word Processor</p> <p>III. Uses of Word Processor</p> <p>IV. Examples of Word Processor</p> <p>V. Loading and Exiting Word Processor</p>	
6	WORD PROCESSING II	

	I. Creating II. Loading and Exiting Word Processor III. Creating, Saving and Retrieving Files	
7	DATA PROCESSING I. Definition II. Data Processing Cycle III. Stages of Data Processing – Data Gathering, Input Collection, Input Stage	
8	FEATURES OF A COMPUTER State the Features of a Computer that makes it an Excellent Tool for Data:- I. Accuracy II. Speed III. Storage, etc	
9	THE KEYBOARD AND ITS SECTIONS I. Definition of keyboard II. Types of keyboard – Standard and Enhanced keyboard	
10	SECTIONS OF THE KEYBOARD List the sections of the keyboard	
11	REVISION	
12 & 13	EXAMINATION	

JSS 1 THIRD TERM

WEEKS	TOPICS / CONTENTS	
1	Revision On Definition Of Computer Processing	

	List it relative uses on the society	
2	<p>IMPORTANCE OF COMPUTER AS A TOOL FOR PROCESSING DATA</p> <p>I. Increase Accuracy</p> <p>II. Efficient Storage Facility</p> <p>III. Fast Access to Information</p> <p>IV. Handles Repetitive Task</p>	
3	<p>THE DEVICE</p> <p>I. Define the Term Device</p> <p>II. Classes of device – (List and Explain the Classes of Device)</p> <ul style="list-style-type: none"> • Mechanical Device • Electrical Device • Electronic Device 	
4	<p>TYPES OF COMPUTER</p> <p>I. Definition of digital computer and examples</p> <p>II. Definition of Analog computer and examples</p> <p>III. Definition of Hybrid computer and examples</p>	
5	<p>USES AND APPLICATIONS OF COMPUTER</p> <p>Uses of Computer in - Schools, Hospitals, Government offices, Banks, etc.</p>	
6	<p>ADVANTAGES AND DISADVANTAGES OF COMPUTER</p> <p>I. State the Advantages of Computer</p> <p>II. Mention the Disadvantages of Computer</p>	
7	<p>MASTERY OF THE KEYBOARD</p> <p>I. Definition of Keyboard</p>	

	II. Types of Keyboard III. Sections of the Keyboard IV. Correct Sitting Position (Explain) V. Using keyboard to type names, letter, etc.	
8	SCREEN POINTING DEVICES I. Definition of Screen Pointing Devices II. Types of Screen Pointing Devices – Mouse, Trackball, pointing Stick, Touch Pad, Joystick and Light Pen	
9 & 10	MOUSE TECHNIQUES I. Define mouse techniques II. Explain each mouse technique – Clicking, Double Click, Right Click, Drag and drop.	
11	REVISION	
12 & 13	EXAMINATION	

JSS 2 FIRST TERM

WEEKS	TOPICS / CONTENTS	
1	REVISION ON CLASSIFICATION OF COMPUTERS I. Sizes of Computers II. Generation III. Degree of Versatility IV. Types	
2	THE COMPUTER SYSTEM Components of Computer System –	

	Hardware, Software, People - Ware	
3	<p>HARDWARE COMPONENTS</p> <p>I. Definition of hardware components</p> <p>II. Input Devices</p> <p>III. Output Devices</p> <p>IV. Storage Devices</p> <p>V. Arithmetic and Logic Unit</p>	
4	<p>SOFTWARE</p> <p>I. Definition of Software</p> <p>II. Types of Computer Software – System and Application Software</p> <p>III. Give Examples of Each Type of Computer Software</p>	
5	<p>PEOPLEWARE</p> <p>I. Define computer Professional</p> <p>II. State the Types of Computer Professionals</p> <p>III. Give Examples of Computer Users</p>	
6	<p>OPERATING SYSTEM</p> <p>I. Definition of an operating system</p> <p>II. Examples of Operating System – DOS, Window, Linux and Unix</p>	
7	<p>FUNCTIONS OF OPERATING. SYSTEM</p> <p>I. Resource allocation</p> <p>II. System monitoring</p> <p>III. Utilities</p>	
8	<p>NUMBER BASE</p> <p>I. Decimal</p> <p>II. Binary</p>	

	III. Octal IV. Hexadecimal	
9	CONVERSION OF NUMBER BASES I. Convert decimal to binary and vice versa II. Convert decimal to Octal and vice versa III. Convert decimal to Hexadecimal	
10	UNITS OF STORAGE IN COMPUTER I. State the Various Units of Storage and their Values – Bits, Bytes, Nibble, Kilobytes, Megabyte and Gigabyte II. Convert from One Unit to Another III. Differentiate between Kilometer, Kilogram, Kilowatt and Kilobyte. IV. Distinguish between kilobyte, Megabyte and Gigabyte	
11	REVISION	
12 & 13	EXAMINATION	

JSS 2 SECOND TERM

WEEKS	TOPICS / CONTENTS	
1	REVISION ON PROGRAMMING LANGUAGE I. Meaning of Computer Programming Language II. Examples of Computer Programming Language – Logo, BASIC, COBOL, FORTRAN, etc.	
2	BASIC LANGUAGE I. State the Meaning of the Acronym BASIC II. BASIC Character Set, Key BASIC	

	Statements, Simple BASIC statements.	
3	<p>SIMPLE BASIC STATEMENT</p> <p>I. Examples of Simple Statements</p> <p>II. Write a Simple BASIC Program</p> <p>III. Run Simple BASIC Program</p>	
4	<p>GRAPHIC PACKAGE I</p> <p>I. Meaning of Graphic Packages</p> <p>II. Examples of Graphic Packages – Paint, Corel Draw, Instant Artist, Photo Shop</p>	
5	<p>FEATURES OF GRAPHIC PACKAGE</p> <p>Title, Toolbar, Menu Bar, Printable Bar, Color Bar, etc.</p>	
6	<p>GRAPHIC PACKAGES II - PAINT ENVIRONMENT</p> <p>I. Features of Paint Environment</p> <p>II. Paint Tools and their Functions</p> <p>III. Use Paint to Draw and Color Simple Objects</p>	
7	<p>ICT AS A TRANSFORMATION TOOL</p> <p>I. Meaning of ICT (Information and communication technology)</p> <p>II. Examples - Computers, Telephone (GSM), Cellular network, Television, Satellite Communication and Internet.</p>	
8	<p>BENEFITS OF ICT GADGETS</p> <p>I. Timely, Better and Cheaper Access to Knowledge and Information, Speed up Transaction and Processes, Causes Human Being to interact with other Worldwide.</p> <p>II. Disadvantages – Job losses, Threatens other Areas/ Field of Human Endeavors, etc.</p>	
9	ICT GADGETS	

	<p>I. The GSM (Call, Create, Send, Store, Retrieve and Read Messages on GSM Sets)</p> <p>II. Differentiate between GSM, Fax Machines and Telephone.</p> <p>III. Create and Send Messages to one another using the GSM.</p>	
10	<p>ICT GADGETS</p> <p>I. Fax machine (Send and Receive Fax Messages)</p> <p>II. Telephone</p> <p>III. Create and Send Messages to one another using the GSM and Fax</p> <p>IV. Store and retrieve information on a GSM handset.</p>	
11	REVISION	
12 & 13	EXAMINATION	

JSS 2 THIRD TERM

WEEKS	TOPICS / CONTENTS	
1	<p>REVISION ON THE INTERNET</p> <p>I. Definition of the Terms</p> <p>II. Internet (The Largest Computer Network in the World)</p> <p>III. E – Mail Address (Electronic Mail Address)</p>	

	IV. World Wide Web (WWW)	
2	<p>INTERNET BROWSER</p> <p>I. Microsoft internet Explorer, Net scope, Mozilla, etc</p> <p>II. Creating E – Mail Account, Website Address, Open an Email</p>	
3	<p>BENEFITS OF INTERNET</p> <p>I. Information exchange, E – learning, e – Entertainment, Faster and Cheaper</p> <p>II. Abuses of Internet - Fraud and Pornography</p>	
4	<p>INTERNET ENVIRONMENT</p> <p>I. Characteristics and Features of internet Environment</p> <p>II. Uses of Internet</p>	
5	<p>NETWORK GROUPS</p> <p>I. Search Engines (Identify Different Network Groups)</p> <p>II. List out different Search Engines</p>	
6	<p>FILE SHARING</p> <p>I. Definition of Network</p> <p>II. Types of Network - Local Area Network (LAN), Metropolitan Area Network (MAN), Wide Area Network (WAN)</p> <p>III. Description of the Types of Network</p>	
7	<p>COMPUTER ETHICS I</p> <p>Responsible ways of the Internet -</p> <p>I. Avoiding liquid dropping into the system,</p> <p>II. Using dust cover,</p> <p>III. Protection from power problem, etc</p>	
8 & 9	COMPUTER ETHICS II	

	Abuse/Misuse of computer:- I. Invasion of privacy, II. Computer virus, etc. III. The Sitting Posture Using Anti – Glare Protector IV. Positioning of Monitor Base.	
10	SAFETY MEASURES II I. The use of Computer Laboratory II. Sitting Arrangement in the Laboratory III. Care and Maintenance of ICT Gadgets	
11	REVISION	
12 & 13	EXAMINATION	

JSS 3 FIRST TERM

WEEKS	TOPICS / CONTENTS	
1	REVISION ON THE INTERNET Examples of Search Engines – google.com, mama.com, ask.com, yahoo.com, etc.	
2	USES OF SEARCH ENGINES Use the Search Engines to obtain Information and Download Materials on the Internet	
3	DIGITAL DIVIDE I. Concept of Digital Divide II. Features of Old Economy - Time Consuming, Labor Based, Mechanical, Constrained by Space, Time and Mechanical III. Limitation of Old Economy	

4	<p>FEATURES OF NEW ECONOMY</p> <p>I. Digital, Time, Space and distance is irrelevant, Knowledge based, etc.</p> <p>II. Benefits of new economy – Low capital, business, create new jobs, etc.</p>	
5	<p>DIGITAL LITERACY</p> <p>1. Meaning of Digital Literacy</p> <p>2. Characteristics of Digital Literacy</p>	
6	<p>DIGITAL LITERACY (CONT'D)</p> <p>3. Digital Literacy use in Education, Workforce and Society</p>	
7	<p>DATABASE</p> <p>I. Operational Definition of Database</p> <p>II. Database Terminologies – Fields, Records, Files, Keys, etc. (State and Explain the Database Terminology)</p>	
8	<p>FORMS OF DATABASE</p> <p>I. Flat File</p> <p>II. Hierarchical</p> <p>III. Relational</p> <p>IV. Preparation of Results Sheet</p> <p>V. Start and open an existing database, Input, Store and Retrieve Information from a Database Application.</p>	
9	<p>SPREADSHEET</p> <p>I. Examples of Spreadsheet Packages – Excel, Lotus 123, STATVIEW, etc.</p> <p>II. Uses of spreadsheet packages - preparation of daily sales, budget, Examination Results</p>	
10	<p>SPREADSHEET PACKAGES (CONTINUATION)</p> <p>I. Spreadsheet Features and Terminologies –</p>	

	Row, Column, Cell, Worksheets, Charts, Data Range, etc. II. Load and existing spreadsheet packages.	
11	REVISION	
12 & 13	EXAMINATION	

JSS 3 SECOND TERM

WEEKS	TOPICS / CONTENTS	
1	GRAPHIC Creating Graphs – Line graphs, Histogram, Pie charts, Legends, etc	
2	EDITING GRAPHS I. Formatting Graphs – Line graphs, Histogram, Pie charts, Legends, etc. II. Identify and Select Data Range and Area for Graph Construction	
3	THE WORKSHEETS I. Starting Worksheets II. Data Entry III. Editing IV. Saving V. Retrieving Worksheets VI. Formatting worksheets (Text, Cell and column, naming, etc.)	
4	CALCULATIONS I. Addition, Average, Counting, Multiplication,	

	Division, etc II. Printing of Worksheets.	
5	COMPUTER CAREER OPPORTUNITIES I. Computer Professionals - Computer Manager, System Analyst, Programmers II. Computer Education, Computer Engineers and Technicians, and Operators III. State the Functions of each of the Professional	
6	QUALITIES OF GOOD COMPUTER PROFESSIONALS Computer Professional Bodies – I. Nigeria Computer Society (NCS) II. Institute of Management Information System (IMIS) III. Computer Professional Registration Council of Nigeria (CPRN) IV. Information Technology Association of Nigeria (ITAN) V. Nigeria Internet Group (NIG)	
7	LOGIC CIRCUIT I. Introduction to Logic II. Interpreting Logic Gate and Circuit	
8	CONSTRUCTION OF TRUTH TABLES FOR, OR, AND, NOT, ETC.	
9	COMPUTER GAMES I. Introduction to Computer Game II. Types of Computer Games	
10	COMPUTER GAMES (CONTINUATION) I. Advantages of Playing Computer Games	

	II. Disadvantages of Playing Computer Games	
11	REVISION	
12 & 13	EXAMINATION	

JSS 3 THIRD TERM

WEEKS	TOPICS / CONTENTS	
1	<p>COMPUTER VIRUS</p> <p>I. State the Meaning of Computer Virus</p> <p>II. Types of Computer Virus – Book Sector, Executable File Virus, Attack on Document</p> <p>III. Examples of Computer Virus – Trojan Horse, Sleeper, Logic Bomb, Alabama Virus and Christmas Virus</p>	
2	<p>SOURCES OF VIRUSES</p> <p>I. Infected Diskettes</p> <p>II. Infected CD – ROMS</p> <p>III. E – mail</p> <p>IV. Internet Download</p> <p>V. Illegal Duplication of Software, etc</p>	
3	<p>VIRUS WARNING SIGNS</p> <p>I. Slowing Down of Response Time</p> <p>II. Presence of Tiny Dots</p> <p>III. Wandering Across the Screen</p> <p>IV. Incomplete Saving of File</p> <p>V. Corruption of the System Setup Instructions</p> <p>VI. Appearance of strange characters.</p>	

4	<p>VIRUS DETECTION (ANTI VIRUS)</p> <p>I. Norton Anti Virus</p> <p>II.</p> <p>McAfee Virus Scan</p> <p>III. Dr. Solomon's Took Kite, etc.</p>	
---	---	--