

MATHEMATICS

1. Solve for x in the following equations;

(a) $2^x = 64$

(b) $5^x = \frac{1}{625}$

(c) $27^{x+2} = 9^x$

2. Simplify the following;

(a) $\log_{10} 1000$

(b) $\log_3 27$

(c) $\log_7 343$

3. Convert;

(a) 124_{ten} to a number in base eight

(b) 101.011_{two} to base ten

(c) 134_{five} to base two

ENGLISH LANGUAGE

GRAMMAR

Question 1-10

Change the verb below to a noun and form a sentence with the verb and noun words.

- 1.) Deny
- 2.) Operate
- 3.) Report
- 4.) Detain
- 5.) Ignore
- 6.) Announce
- 7.) Bribe
- 8.) Arrive
- 9.) Create
- 10.) Wreck

COMPREHENSION

New Concept English for Senior Secondary school 1

Unit 1, pages 3-5. The family feud

Question 1-10.

SPEECH

From the Words Lettered A-D, Identify the One With the Sound / j/.

- | | |
|------------|-------------|
| 1.) A jam | 4.) A hue |
| B George | B chew |
| C guage | C rude |
| D yam | D jew |
| 2.) A June | 5.) A blue |
| B True | B juice |
| C crude | C Sluice |
| D usual | D behaviour |
| 3.) A blue | 6.) A. Lucy |
| B amuse | B ruler |
| C fruit | C companion |
| D plural | D grew |

- 7.) A clue
B value
C. Jewel
D. Queen

- 8.) A. Union
B. Sword
C wear
D hello

- 9.) A quell
B woke
C employer
D wangle

- 10.) A accuse
B away
C studied
D grouping

BIOLOGY

1a. Define biology

1b. Mention ten branches of biology and their meaning respectively

1c. State the reason why virus is seen as non- living thing

2a. What is classification?

2b. Explain the rules of writing scientific name

2c. State any two reasons for classification.

3a. State five kingdoms of living things and give one example each

3b. State three examples each of monocotyledonous and dicotyledonous plants

3c. Briefly explain complexity in higher organisms.

GOVERNMENT

- 1a. Provide a detailed definition to the following:
 - i. A state
 - ii. A nation
 - iii. Government as an institution of a state
 - b. As a potential political enthusiast, identify five (5) convincing reasons for studying government.
 - c. With relevant examples, examine any (3) differences between a state and a nation.
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- 2a. Briefly explain any four (4) components of a state.
 - b. Highlight any five (5) roles of government in the maintenance of law and order.
 - c. Identify any four (4) forms of power.
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- 3a. State the organs of government and give two (2) functions of each organ.
 - b. Highlight any five (5) characteristics of government and explain any two (2) of your choice.
 - c. Mention any four (4) branches of government as an academic field of study.

AGRICULTURAL SCIENCE

- 1a. Define agriculture
- 1b. State three importance of agriculture
- 1c. Briefly discuss the problems faced by farmers in Nigeria

- 2a. Highlight four branches of Agriculture
- 2b. Explain two branch of agriculture.

- 3a. Enumerate three problems of Agricultural development in Nigeria.
- 3b. Profer the possible solution to the problems mentioned above.

ANIMAL HUSBANDRY

- 1a. Define Animal husbandry
- b. State four branches of animal husbandry.
- c. State four career opportunities in animal husbandry.

- 2a. Explain subsistence agriculture
- b. State four characteristics of commercial agriculture.
- c. State four economic importance of farm animals.

- 3a. Explain Commercial agriculture
- b. Differentiate between subsistence agriculture and commercial agriculture.
- c. Explain four classification of farm animals.

CHEMISTRY

1. Define the following terms:
 - a. Chemistry
 - b. Elements
 - c. Compounds

2. Differentiate between:
 - a. Theory and hypothesis.
 - b. Heavy chemicals and fine chemicals.
 - c. Physical change and chemical change
 - d. Compounds and mixtures.

- 3a. Discuss two (2) applications of Chemistry.
- b. Briefly discuss the adverse effects of Chemistry.
- c. List two careers in Chemistry.

PHYSICS

- 1a. Define Physics
 - b. Differentiate between fundamental and derived quantities.
 - c. State five (5) fundamental quantities and their units
 - ii. State three (3) derived quantities and show how they are derived.
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- 2a. Explain the term 'dimension'
 - b. State the two usefulness of dimension
 - c. Work out the dimension of the following physical quantity:
 - i. Velocity
 - ii. Force
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- 3a. Define the following terms: work, energy and power
 - 3b. A boy with mass 50kg climbs 20 steps, each of 0.2m high in 30 seconds, calculate the power expended. [$g = 10\text{m/s}^2$]
 - 3c. State the law of conservation of energy.

GEOGRAPHY

- 1a. With the aid of diagram, explain the earth structure
- b. Explain the inner structure components of the earth.
- c. Explain the major spheres of the outer structure.

- 2a. Using the diagram, explain the solar system
- b. Discuss the characteristics of mercury
- c. What are the importances of solar system.

- 3a. Differentiate between earth rotation and earth revolution
- b. State five effects of earth rotation
- c. Differentiate between equinox and solstice

ISLAMIC RELIGIOUS STUDIES

- 1a. Briefly discuss the incident that led to the revelation of the holy Quran according to Suratul Alaq.
- b. List out the Makkan Surah and the Medinah Surah.
- c. State 5 distinction between Makkan and Medinah Surah.

- 2a. State 5 differences between the Quran and the Sunnah.
- b. Define the term Hadith.
- c. State 5 differences between Quran and hadith.

- 3a. State the Six sound collections of Hadith.
- b. State 3 differences between Hadith and Sunnah.
- c. State the six articles of faith.

CHRISTIAN RELIGIOUS STUDIES

- 1a. How does John portray Jesus as the true vine?
- 1b. How does Jesus describe himself in St. John's Gospel as the living water?
- 1c. Describe the event in Bethany which made Jesus speak of himself as resurrection and the life.

- 2a. How does John represent Jesus as the door and the good shepherd?
- 2b. How does John describe Jesus as the lamb of God?
- 2c. Enumerate any **five (5)** signs of the second coming of Jesus Christ.

- 3a. Describe the coming of the Lord according to Paul's teaching.
- 3b. What is Paul's teaching on new life in Christ?
- 3c. Describe any four (4) characteristics or the nature of New Life and relate them to your daily life experience.

FINANCIAL ACCOUNTING

- 1a. Define book keeping
 - b. What is accounting
 - c. Identify four users of accounting information
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- 2a. Enumerate three importance of book keeping and accounting
 - b. Describe accounting ethics
 - c. Mention two of the ethics of accounting
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- 3a. State the principle of double entry.
 - c. Define source documents
 - d. Identify four source documents that you know.

DATA PROCESSING

- 1a. Define data model
 - b. Explain the concept of data modeling
 - c. What is conceptual data modeling?
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- 2a. Who was Dr. Edger Grand Codd?
 - 2b. Write short notes on Microsoft access Tables.
 - 2c. Describe how to create Microsoft Access form.
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- 3a. What is entity?
 - 3b. Mention three (3) components of entity-relationship.
 - 3c. Explain two (2) types of relationship.

FURTHER MATHEMATICS

1. Simplify the following :
 - a. $(2x)^{\frac{1}{2}} \times (2x^3)^{\frac{3}{2}}$
 - b. $4a^3b \times 3ab^{-2}$
 - c. $\frac{75a^2b^{-2}}{5a^3b^{-3}}$

- 2a. Find the mean, median and mode of : 10, 11, 14,14,15,15,15,16,16,17
- b. A number is chosen at random from the following set of numbers {31, 32, 33 ...44, 45}. What is the probability that it is?
 - i. a multiple of 4
 - ii. a prime number
- c. Solve $4^{c-1} = 64$

- 3a. Solve: $4(4^x - 2^x) + 1 = 2^x$
- b. If $8 = 2^{x+y}$ and $1 = 3^{x-y}$, find x and y
- c. Find the value of a if $16^{3a} = \frac{1}{4}(32^{a-1})$

COMMERCE

- 1a. What is Commerce?
 - b. Mention four and explain two functions of commerce.
 - c. With the aid of a suitable diagram, illustrate the division of commerce.
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- 2a. Explain the meaning of trade.
 - b. State any four aids to trade.
 - c. Explain two out of four aids to trade mentioned above.
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- 3a. What is E-Commerce?
 - b. List and explain two division of e-commerce
 - c. Who is a sole proprietor?

CIVIC EDUCATION

- 1a. Define justice
 - b. Explain any three (3) types of justice
 - c. Is Nigeria a just society? Give two (2) reasons for your answer.
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- 2a. What is selflessness?
 - b. Explain the term 'Community service'.
 - c. How does selflessness relate to community service?
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- 3a. Define law.
 - b. Explain any two (2) types of law.
 - c. Civil law can further be divided into several categories. Identify any four (4).

FRENCH

- 1a. Parlez brièvement de l'histoire de la langue française, à peu près trente mots.
- b. Que veut dire de L'Académie Française.
- c. L'Académie française a formée à quelle année ?

- 2a. Lomé est le capital de quel pays en Afrique.
- b. Quel est le capital de Burkina-Faso ?
- c. Citez au moins cinq pays Francophones en Afrique et leurs capitales.

- 3a. Conjuguez les verbes suivants à l'imparfait.
 - i. Parler
 - ii. Danser
- b. Conjuguez les verbes suivants au présent à l'indicatif.
 - i. Jouer
 - ii. Regarder
- c. Conjuguez les verbes suivants au future simple
 - i. Dormir
 - ii. Quitter

ECONOMICS

- 1(a) What do you understand by the term “Economics”?
 - (b) Explain the concept of want in Economics.
 - (c) Why is Economics regarded as a social science?
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- 2(a) Vividly explain the concept of scarcity as it relates to human endeavour in Economics.
 - (b) Explain the term “Ends” in Economics.
 - (c) Explain the concept of choice in Economics.
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- 3(a) State any two importance of Economics in the society.
 - (b) What is Opportunity cost?
 - (c) State two importance of opportunity cost to the government.

VISUAL ARTS

- 1a. What is art?
 - b. With the aid of diagram, explain the branches of art
 - c. Highlight five importance of art to the society
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- 2a. What is festival?
 - b. State five importance of festival
 - c. Mention Five festivals you witnessed.
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- 3a. Explain Nigeria art tradition
 - b. Star five Nigerian art traditions and their origins
 - c. Mention four functions of Nigerian art traditions

DYEING AND BLEACHING

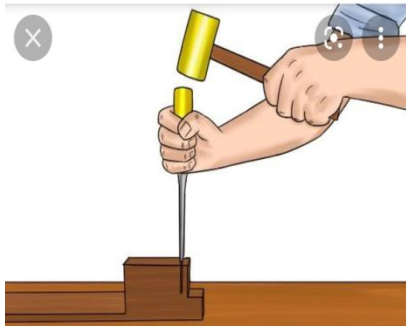
- 1a. Write briefly on the history of tie and dye in Nigeria
 - b. State five importance of textile to the society.
 - c. Explain the usefulness of a tjanti
-
- 2a. Who is a fashion designer?
 - b. State three materials used in fashion design
 - c. Explain the process if dyeing a fabric
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- 3a. Write briefly on the history of batik in Nigeria
 - b. Mention five materials used for batik production
 - c. Explain motif

YORUBA

1. Fún ẹ̀kọ́ ilé ní oríkì.
2. Kọ àbùdá ọ̀mọ̀lúàbí márùn ún.
3. Kíni ìtumọ̀ lítírésọ̀ ọ̀lọ̀rọ̀ geere.

FURNITURE MAKING

- 1a. List and explain the **two (2)** categories of wood with **three (3)** examples each.
 - b. Differentiate between woodworking and woodwork with **two (2)** examples each.
 - c. List **five (5)** factors which help to produce safe working conditions.
- 2a. Describe a wood workshop?



- b. Identify the wood working operation shown above.
 - c. State **two (2)** safety precautions that must be observed during the operation.
- 3a. Enumerate **FOUR (4)** safety devices used in the wood workshop and their functions.
- b. Briefly explain what is meant by wood conversion.
 - c. What is an accident?
 - b. State **FOUR (4)** causes of accidents in the workshop.

TECHNICAL DRAWING

- 1a. Sketch the following drawing instruments and state their functions;
 - i. A pair of compasses.
 - ii. French curves.
 - b. Differentiate between complementary and supplementary angles.
 - c. Differentiate between Isometric and Orthographic projections.
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- 2a. With the aid of diagrams differentiate between concentric circles and eccentric circles.
 - b. Sketch the symbol of first angle projection.
 - c. Draw a given line $AB = 120$ mm and divide into twelve equal parts.
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- 3a. Construct triangle ABC with base angles of 45° and 60° , having base length $AB = 65$ mm. What is the length AC?
 - b. Using pair of compasses, ruler and pencil only, construct the following angles;
 - i. 45°
 - ii. 105°
 - iii. 135°
 - c. Highlight **FIVE (5)** careers related to Technical drawing.

COMPUTER STUDIES

1a. Define the term COMPUTER

b. Explain the two main components of the computer system

c. What is a PERIPHERAL?

2a. Mention 5 common Peripherals

b. What is Data?

c. What is Information?

3a. Mention 4 qualities of a good information

b. Mention 5 input devices

c. Mention 5 Output devices.

LITERATURE-IN-ENGLISH

1. Compose a poem with the following specifications:
 - a. The poem must be of ten lines;
 - b. The rhyme scheme should be thus: ababc babac;
 - c. Pick out two figures of speech from the poem;
 - d. Produce one example each of the figures of speech.