



GAYAZA JUNIOR SCHOOL P. 6 HOLIDAY PACKAGE ENGLISH TERM 1 2020.

Name:	
Use the correct form of the word given in brackets to complete the sentences.	
1. If Jethroattention to the points we raised, he would understand	
clearly. (pay)	
2. Children should be given to use any language they want while	
debating. (free)	
3. Bad drivers always drivers always drive their cars (reckless)	
4. Martha said that she was writing a letter (now)	
5. The teacher'swas very detailed. (speak)	
6. The driver (signal)	
7. Do you know what the is about? (argue)	
8. My sister (teach)	
9. You areto cause an accident. (like)	
10.Our uncle has justhis hair. (dye)	
11.We the snake with stones. (hit)	
12.Alice haspretty dresses for her quadruplets. (sew)	
13. Your niece is (discipline)	
14.To whom is your sister? (marry)	
15.The seamstressthe dress neatly. (hem)	
16.Sarah's sewing machine haddown by the time I went there. (bre	ak



17.Tina hadthe thimble when I met her. (lose)
18. Robert prefers sewing to (knit)
19. The baker put twoin the dough. (pinch of salt)
20.Bread is made from aof flour, water and yeast. (mix)
21.She some flour onto the cake. (sprinkle)
22.Sandpaper is used forthe wood. (smooth)
23. There was a lot ofwhen our cow disappeared. (anxious)
24.My father bought achair for the old woman. (metal)
25.The tailorsewed the wedding gown. (skill)
26.Be careful whenthe cloth. (stitch)
27.The veterinary doctorthe cows now. (treat)
28. They presentedviews in a clear manner. (they)
29.Joy raised a point ofto the pre-current speaker. (inquire)
30.The chefs dowork at the restaurants. (excel)
31.I don't know yoursister's name. (old)
32.Daddythe dinner table for super yesterday. (to lay)
33. The headteacher said that henot pay the chefs. (will)
34. Hadijah washed all the plates (self)
35 had she rung the bell when we lined up infront of the office. (scare)
36.Read the story below and answer the questions about it in full sentences.

A Carpenter's Pride.

A carpenter is someone who makes things out of wood. Carpenters usually make furniture such as tables, chairs, benches and desks. For one to be a good carpenter, one should be trained in carpentry skills and have the materials and tools required for one's job. Some of



the materials a carpenter uses are wood, timber, nails, glue, sand paper and varnish. The tools include a saw, a plane, a drill and a hammer.

All these materials and tools are important for a carpenter's work. It is out of wood which often comes in the form of planks of timber that the carpenter creates the things he makes. Wood is, therefore, the carpenter's raw material. He also needs tools to shape this raw material into objects. The objects should not only be useful but also pleasant to the eye and touch. With the saw the carpenter will cut the wood, with the plane he will make it fairly smooth, with the drill he will make holes in it, and with the hammer he will drive nails into it.

For most types of objects that the carpenter makes, nails and glue are very important- in fact, they are essential. Without them, the carpenter would not be able to join the different pieces of sawn and planed wood together. Both nails and glue ensure that the different parts are firmly fixed where they are joined. Otherwise, the carpenter's customers might end up with things which are weak, wobbyly and short-lived.

A carpenter also has to make things he creates look nice. He, therefore, polishes them with sand paper and applies varnish to them. The sand paper takes care of rough surfaces, whereas the varnish makes the surfaces look shiny and beautiful. A carpenter's job is only done when the varnished surface has dried. Then he can sit beside what he has made and look at it with pride.

Questions:

1.	What do carpenters make?

2. What is the carpenter's raw material?

3.	Why are nails and glue important to a carpenter?
4	What would be again to a give of femilians if the against a give and again.
4.	What would happen to a piece of furniture if there were no nails or glue?
5.	What does a carpenter need sand paper?
6.	What are the carpenter's main tools?
7.	Why do you think the surface of a chair should be smooth?
Q	Why do you think carpentry is a useful skill?
0.	with do you tillik carpetitly is a disertif skill:
9.	What is a hammer used for?
10	.Give another words to mean: "beautiful".

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37. Read the letter below and answer the questions in full sentences.

Juliana Natasha c/o Nambale Junior School, P. O. Box 7490, Mbale. 19th March, 2020.

Dear Mummy,

How are you and the rest of the family? You know I miss you, my daddy and baby Deborah so much.

The purpose of writing this letter is to request you to open for me a junior's account in Centenary Bank. I have seen three pupils so far who have this type of account in my class. This account will help me to save my money so that when I grow I have money to start my own business. Mummy, our teacher taught us the importance of saving.

I shall be grateful to hear from you especially after receiving this letter.

From your loving daughter,

Juliana Natasha.

Questions:

1.	Who wrote this letter?	

2. When was the letter written?

3.	Why did Juliana write the letter?
4.	To whom did Juliana write the letter?
5.	What is Juliana's favourite bank?
6.	In which school is Juliana?
7.	What shows that Juliana is in boarding?
8.	What type of account does Juliana want to have?
9.	Who taught the writer the importance of saving?
10	.Why do you think it is good for a child to have a bank account?
	ewrite the sentences as instructed in the brackets. He reduced speed. He reached the zebra crossing. (Begin: When)

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2. 7	The driver stopped. The traffic lights turned red. (Join using:because)
3. 1	The cyclist set off when he wore the helmet. (Begin: As soon as)
4. I	He is a very intelligent traffic officer. (Begin: What!)
5. 7	There wasn't any cars on the road. (Rewrite using:some)
6. I	Pamela likes cars more than bicycle. (Use:prefer)
7. I	t is a very busy road. The traffic jam is always heavy. (Join using:suchthat)
8. 7	The accident was fatal. Many people died on spot. (join using:sothat)
9. I	f you play on the road, you will be knocked down. (Begin: Unless)
	First aid should be given to causalties before they are taken to the hospital. (Use:must)
11.1	Neither the motorcyclist nor the motorist has a permit. (Begin: Both)
12.I	He raised a point of inquiry. He did not ask. (Use:even though)
13.7	Γhe speaker was shabby. The speaker was confident. (Use:although)



14. The audience was excited. The motion was not interesting. (Begin: Though)
15. The chairperson was not lively. He made the audience jolly. (Use:even though)
16.I had a note book. I did not take notes during the debate. (Join using:although)
17.We were all allowed in. We arrived late for the debate. (Begin: Even though)
18.The time keeper had not watch but he managed the time well. (Begin: Though)
19.The pupils were sick but they went to school. (Use:although)
20.She stood up. She did not say anything. (Begin: Despite the fact that)
21.The speaker went on discussing. He was stopped. (Begin: In spite of the fact that)
22.If the teacher sees you teasing your friends, he will punish you. (Begin: If the teacher sa)
23.You will speak confidently if you have enough knowledge about the motion. (Use:would)
24.If you speak loudly the secretary will note down all your point. (Begin: If you spoke)
25. You will explain your points well if you have enough time. (Use:if you had)

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26	5.If I get enough money, I will go to the village for my holidays. (Use:	would)
27	7.If I get a chance to talk to the secretary, I will tell more about my opi	nions. (Use:would
28	3.The debate will begin if the chairperson comes. (Use and end	·
29	9. We will lose points if he raises a point of order. (Begin: We would	
30	O.He will get more points if the speaker talks about immorality in the s (Begin: If the speaker talked)	•
31	L.If you chose a motion, we would be able to debate it. (Begin: If you	choose)
	Give one word for the underlined group of words.	
32	2.The group of people listening to the speaker clapped when the speak	ker mentioned a very
	educative view.	
22		
33	3.The <u>formal proposal discussed in the debate</u> was too complicated for	r the pupils to
	731C7711CC	

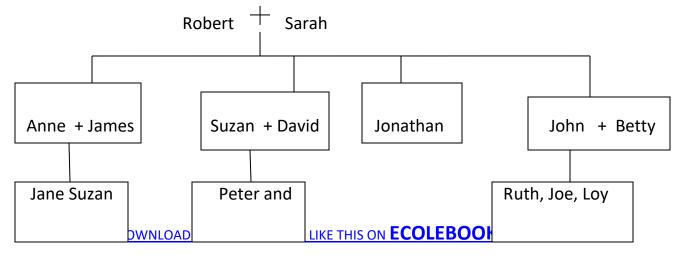
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34. The person who records time in a debate was unfair to the opposers' side.



35. The <u>person who makes a speech</u> had a lot of information to put across.
36. The girl who notes down points in a debate did not record all the points raised.
37.The person who supports the motion in a debate was so lively.
38.I was the person who disagrees with the motion during the debate.
39.The motorist got the accident at a place where two or more roads meet.
40.My <u>sister's daughter</u> got married to a pastor.
41.My <u>brother's son</u> cannot identify his father.
42.Our mother gave birth to two children at the same time last year.
43.Samalie is one of the three children born at the same time to the same mother.
9. Study the family tree below and answer the questions in full sentences.

39





Margaret	Martin	and Mark
44.How does Betty ca	Il Suzan?	
	nship between John and Ma	
46. How many grandch	nildren does Mr. Robert have	
47.How is Robert rela	ted to Sarah?	
48.How many nephew	s does Jonathan have?	
49.Who is Mark's grar	ndmother?	
	nship between Jane and Pet	er?
51.What relationship	does Anne have with Marga	
52.What does this fan	nily tree show?	





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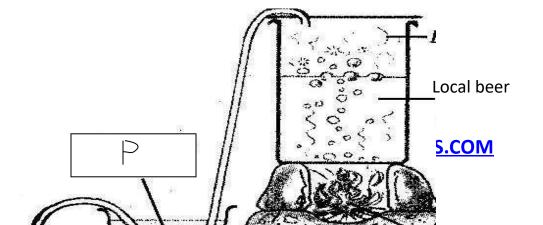
P. 6 Science questions on alcoholism, smoking and drug abuse.

1.	What	is alcohol?		
2.	Who	is an alcoholic?		
3.	List any two locally made alcohols in the society.			
	(i)		(ii)	
4.	I. Mention any three raw materials for making local alcohol.			
	(i)		(iii)	

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UB	я	EC	먇	81	œ	9	93
~	•						

	(ii)	
5.	Give t	wo types of alcohol.
	(i)	(ii)
6.	Define	e fermentation method.
	•••••	
	•••••	
7.	Identi	fy the fungi used during fermentation process.
8.	Menti	ion any two alcoholic drinks produced by the fermentation method in Uganda.
	(i)	(ii)
9.	What	is distillation?
10	.What	scientific name is given to the substance collected during distillation?
11	.State	2 physical processes involved in distillation process.
	(i)	
	(ii)	
12	Study	the diagram below and answer the questions that follow

12. Study the diagram below and answer the questions that follow.



Р

	er
	Υ
a.	Which method of making alcohol is shown above?
b.	Name the liquid marked Y.
c.	Apart from the above method, name any other method of making alcohol.
d.	Why is the tube marked P long and coiled?
e.	State the use of cold water in the process above.
13.	How is alcohol useful in baking industry?
14.N	Mention any two drinks distilled in Uganda today.
(i)(ii)
15.5	State any three uses of alcohol in the society.
(i)
(ii)
(iii)



16.What is alcoholism?	
17.Why is it bad to drink alcohol and drive?	•••
18.State any three reasons why people drink alcohol.	••
(i)	
(ii)	
(iii)	
19. Mention any two signs of brain damage.	
(i)	
(ii)	
20. Give two effects of alcohol to;	
(a) individual	
(b) Family	
(c) Community	
21. Name three body organs damaged by alcohol.	
(i)	
(ii)	
(iii)	
22. Why is it not advisable to drink alcohol and drive?	
23.At what age in Uganda one is allowed to take alcohol?	
23.7 tt What age in ogainal one is anowed to take dicorior.	
24.Identify two life skills of avoiding alcohol.	•••
/:\ /:\	
(1)	



(ii)	
25.State a	any two Ugandan laws that govern alcohol.
(i)	
(ii)	
26.What i	is smoking?
27.Name	two types of smoking.
(i)	
(ii)	
28.Identif	fy two body organs affected by smoking.
(i)	
(ii)	
29.Give tv	wo dangerous drug substances found in tobacco.
(i)	
(ii)	
30.State a	any two side effects of smoking to pregnant women.
(a)	
(b)	
	on any two life skills of avoiding smoking.
(i)	
(ii)	
	is a drug)
32.What i	is a drug:
	two types of drugs.
(i)	

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(ii)
34.V	What are essential drugs?
(State any two characteristics of essential drugs. i)ii)
36.0	Give any two examples of essential drugs.
(i) (ii)
37.∖	Why is it dangerous to take drugs without prescription?
38.	Study the diagram below and answer the questions that follow. Paracytamol 2 x 3 Maracytamol 2 x 7 Exp S / / 6 Exp S / / 9
a.	What will happen if the patient takes the above drug?
b.	Assuming the drug is not expired, how many tablets does a patient supposed to take with in 24 hours?
C.	Which type of drug is shown above?



39		tion any one way of storing drugs.
40		are narcotics?
41	.Why a	are narcotics harmful to people?
42		any two examples of narcotics.
	(i)	(ii)
43	.Give t	the meaning of these terms;
	(i)	Drug abuse
	(ii)	Drug misuse
	(iii)	Drug of dependency
44	.Why	do people drug abuse?
45	.Identi	ify any two life skills of avoiding drugs of dependency.
	(i)	
	(ii)	



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Holiday work mathematics for primary 6 2020.

SET CONCEPTS

1.(a) What is a set?

(b) Name the following set symbols.

U _____

ξ _______3

←→ = _____

(c) Name the following type of sets.

(i) $M = \{L, E, N, G, T, H\}$ (ii) $N = \{T, H, E, N, G, L\}$

п (M) = _____

Set M and Set N are _____

(ii) $K = \{ M, A, T, H, S \}$ $P = \{ 0, 2, 4, 6, 8 \}$

п(K)= _____ п(P) = ____

∴ set K and set P are _____

2. Given that:-

Set E = $\{ 0, 1, 2, 3, 4, 5 \}$ Set F = $\{ 2, 3, 5, 7, 11 \}$

a) Find $\pi(E \cap F)$

b) Find F - E

c) List all the elements in F¹



- d) Find EUF
- e) Find π(E) only.
- 3. Describe the following sets.
- (i) $A = \{0, 1, 2, 3, 4, 5, ...\}$

Set A is a set of _____

(ii) B = $\{2, 3, 5, 7, 11, 13\}$

Set B is a set of

(b) List all the members of the described sets below.

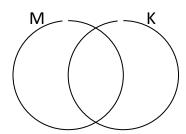
C = { all factors of 12 }

C = {

- (ii) D = $\left\{ \text{ multiples of 5 between 4 and 31} \right\}$ D = $\left\{ \right\}$
- (iii) E = { flying desks in our classroom }
 E = {
- 4. Given that:-

Set $M = \{ a, b, c, d, e, f \}$ $K = \{ a, e, i, o u \}$

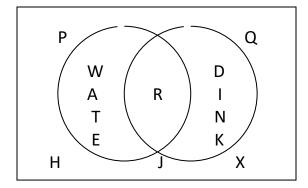
a. Put the above sets on the Venn diagrams below.



b. Find π (M U K)

- c. List all the elements in M¹
- d. List all the subsets in set k only.
- 5. Study the venn diagram below and answer the questions on it.

3



- a) List all the elements of P.
- b) List all the elements of Q.
- c) List all the elements of $(P \cap Q)^1$
- d) List all the elements of the E.
- e) List all the elements of (P U Q)¹
- f) Find π (P Q)
- g) Find π (P Q)
- h) List all the elements in P U Q.



- i) Find π (P \cap Q)
- j) List all the elements in set Q¹
- 6. a) Given that:-

Set
$$R = \{ 3, 5, 7 \}$$

List all the subsets of R.

b) Given that:-

$$T = \{ 1, 3, 5, 7 \}$$

Use the formula 2ⁿ to find number of subsets.

c) Given that:-

$$V = { all factors of 9 }$$

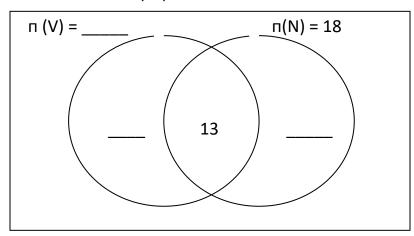
- (i) List all the elements of V.
- (ii) Use the formula to find number of subsets in set V.
- (iii) Given that set $W = \{ F, I, V, E \}$
 - (i) How many proper subsets has set W?
- (iv) Set $X = \{ \text{ multiples of 2 less than 11 } \}$
 - (i) List all the elements of set X.
 - (ii) How many proper subsets has set X?



- 7. a) Set K has 8 subsets. What is the number of elements in set K?
- b) Set P has 64 subsets. How many elements has set P?
- c) Set Q has 15 proper subsets. How many elements are in set Q?
- d) Set M has 128 proper subsets. Find the number of elements in set M.
- 8. In a class of 28 pupils, 10 like volley ball only (V), 5 like Net ball only (N) and 13 like both Volley ball and Netball.

Use the above information to complete the Venn diagram below.

$$\Pi(E) = 28$$



- (a) How many pupils like only one game?
- (b) How many pupils like volley ball?

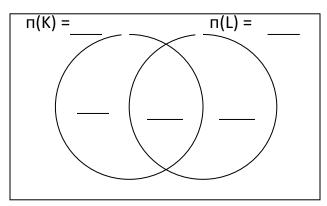
- (c) How many pupils like Netball?
- (d) What is the probability of picking a pupil who likes both games to be the games captain?

9. In a class of 50 pupils, 25 eat rice (R), 30 eat Posho (P), M eat both food stuffs while 3 eat neither of the two food stuffs. Represent the above information on the Venn diagram below.

- a) Find the value of m.
- b) How many pupils eat posho only?
- c) How many pupils eat one type of food?

d) What is the probability of picking a pupil who eats both food stuffs?

11. Given that π (K) = 15, π (L) = 20, π (K U L) = 3 and π (K \cap L) = 9. Draw a Venn diagram to organize the above information.



a) Find $\pi(K - L)$

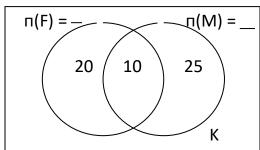
b) Find $\pi(L - K)$

c) Find $\pi(K \cap L)'$

d) Find π(K U L)'

12. The Venn diagram represents a group of 60 people, 20 like fish only, 10 people like both

Fish and meat, 25 people eat meat only and K eat non of the two.



- (a) Find the value of K.
- (b) How many people eat fish but not meat?
- (c) How many people eat meat?
- (d) How many people eat fish?
- (e) What is the probability of choosing a person who likes fish?
- 13. During the end of year party attended by 60 pupils, 40 ate meat (M), 32 ate beans (B), Y pupils ate both meat and beans while 5 pupils did not eat any of the two dishes.
 - (a) Use the above information to complete the Venn diagram.

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____ r ____

- (b) How many pupils ate both dishes?
- (c) How many pupils ate one type of dish?
- (d) Find the probability of selecting a pupil who ate beans only?

WHOLE NUMBERS.

- 1. Teacher formed numbers using digits 2, 0, 8 and 6.
- a. Identify the smallest number formed.
- b. Identify the largest number formed.
- c. Find the sum of the smallest and largest numbers formed.
- d. Write the place value of every digit for the above sum got in c.
- e. In the number 749805, write the place value of every digit.
- f. Identify the place values of the underlined digits.
 - (i) <u>2</u>349<u>8</u>7

(iii) <u>9</u>53<u>0</u>78

(ii) 98437 (iv) 49380 g. In the number 792045, state the place value of 9. h. In the number 7089, what is the place value of 0? 2. (a) In the number 345987, write the value of every digit. (b) What is the value of 4 in 9486. (c) What is the value of 9 in 958204? d) Work out the value of 9 hundreds. e) What is the value of 6 ten thousands. 3. a) Calculate the sum of the value of 8 thousands and the value of 3 tens. b) In the number 43982, find the sum of the value of 9 and the place value of 4. c) In the number 83594, find the difference between the place value of 3 and the value of 5. d) In the number 2784, divide the value of 2 by the place value of 7.

e) What is the product of the value of 5 and the place value of 3 in 85934?

- 4. (a) Write 4832 in expanded form using place values.
 - (b) Expand 89432 using place values.
 - (ii) (a) Expand 4073 using values.
 - (b) Write 23149 in expanded form using values.
 - (iii) (a) Expand 30259 using powers of 10.
 - (b) Expand 265347 using powers of 10.
 - (c) Write 8 in expanded form using powers of 10.
- 5. (a) What number has been expanded to give;
 - (i) $(6 \times 10,000) + (0 \times 1000) + (2 \times 100) + (9 \times 10) + (7 \times 1)$

(ii)
$$(4 \times 10^3) + (1 \times 10^2) + (0 \times 10^1) + (8 \times 10^0)$$

(iii)
$$(9 \times 1000) + (4 \times 10) + (3 \times 1)$$

(iv)
$$(3 \times 10^4) + (6 \times 10^2) + (2 \times 10^1) + (9 \times 10^0)$$

$$(v)$$
 40,000 + 6000 + 300 + 20 + 4

- 6. (a) Write the following figures in words.
 - (i) 705

(iv) 200000

(ii) 1498

(v) 22222

(iii) 90642

- (vi) 10908
- (b) Write the following number words in figures.
- (i) Three thousand eight hundred forty nine.
- (ii) Four hundred eighty three.



- (iii) Seventy eight thousand four hundred ninety one.
- (iv) Five hundred fifty five thousand five hundred fifty five.
- (v) Ninety two thousand sixty four.
- (vi) Forty thousand two hundred seven.

GUIDELINES TO UNDERSTANDING ROMAN NUMERALS.

BASIC SYMBOLS OF ROMAN NUMERALS.

ROMAN NUMERALS	I	V	Х	L	С	D	М
HINDU ARABIC	1	5	10	50	100	500	1000
NUMERALS							

Repeated Roman Numerals.

II = 2	XX = 20	MM = 2000
III = 3	XXX = 30	MMM = 3000

Additional Roman Numerals.

6 = 5 + 1	7 = 5 + 2	8 = 5 + 3
= V + 1	= V + II	= V + III
6 = VI	7 = VII	8 = VIII
60 = 50 + 10	70 = 50 + 20	80 = 50 + 30



= L + X	= L X XX	= L + XXX
60 = LX	70 = LXX	80 = LXXX
600 = 500 + 100	700 = 500 + 200	800 = 500 + 300
= D + C	= D + CC	= D + CCC
600 = DC	700 = DCC	800 = DCCC

Note: When a smaller numeral follows a bigger numeral there we add.

Subtractional Roman Numerals.

Note:- When a smaller numeral is written before a bigger numeral, there we subtract.

i.e - IV means subtract 1 from 5.

XC means subtract 10 from 100.

Convert the following to Roman numerals.

a)
$$34 = 100 + 30 + 4$$
 b)
= C + XXX + IV
 $134 = CXXXIV$

Exercise

- 1. Convert the following to Roman Numerals.
 - a) 36

d) 252

(g) 605

b) 49

e) 77

(h) 948

c) 165

f) 84

(i) 194

2. Daddy bought 148 exercises books from the stationery. Express the number of books bought in Roman numerals.

3. Maria reads 283 pages every week. Express the number of pages she reads in 3 weeks in Roman numerals.

4. If Daddy was born in 1984. Calculate his age and give the answer in Roman numerals.

5. On Mr. Kakeeto's farm there are 58 cattle and 48 sheep and 12 goats. Write the total number of animals on the farm in Roman numerals.

Converting Roman numerals to Hindu Arabic numerals.

$$XC = 100 - 10$$

$$XC = 90$$

= 98



- 6. Mummy's poultry unit has CCLIX birds. Express the number of birds in Hindu-arabic numerals.
- 7. Daddy's car uses XLIX Litres of petrol from home to his place of work. Express these litres in Hindu-arabic numerals.
- 7. Primary Six class has CCXXIX pupils. Write the number of pupils in Hindu-arabic numerals.
- 8. Write the following in Hindu-arabic numerals.
 - a) XCIV

(d) DCLXVIII

b) CMLV

(e) CDXXIV

c) DCCLIX

- (f) CLV
- 9. Add CDLIX + CXI (give your answer in Hindu-arabic numerals).

FINDING CONSECUTIVE COUNTING NUMBERS.

Example:

The sum of 3 consecutive counting numbers is 36.

a) Find the number. Let the first number be K.

1 st No.	2 nd No.	3 rd No.	Sum
K	K + 1	K + 2	36



$$K + K + 1 + K + 2 = 36$$

(Collect the like terms)

$$K + K + K + 1 + 2 = 36$$
 $3 K + 3 = 36$
 $3 K + 3 - 3 = 36 - 3$
 $3 K = 33$ (divide both sides by 3)
 $\frac{3K}{3} = \frac{33}{3}$
 $K = 11$

The numbers are;

.. The numbers are 11, 12 and 13.

EXERCISE

- 1) The sum of 3 consecutive counting numbers is 21. Find the numbers.
- 2) The sum of 3 consecutive counting numbers is 39. Find the numbers.
- 3) Find 3 consecutive counting numbers whose sum is 51.

- 4) The sum of 4 consecutive counting numbers is 86. Find the numbers.
- 5) Find the consecutive counting numbers whose sum is 93.

FINDING CONSECUTIVE EVEN AND ODD NUMBERS.

Examples:

The sum of 3 consecutive odd numbers is 21. List them. Let the first odd numbers be m.

1 st No.	2 nd No.		3 rd No.		Sum	
M	M + 2		M + 4		21	
M + m + 2 + m + 4 = 21			3 m = 15			
M + m + 2	+ 4	=	21		<u>3m</u>	= 12
3 m + 6		=	21		3	3
3 m + 6 - 6		=	21 - 6		m	= 5
The numbers are:- M			m + 2	m + 4		
	5		5 + 2		5 + 4	
Therefore the numbers are 5, 7, 9						

2. The sum of 4 consecutive even numbers is 36. Find the numbers.

Let the first even number be b.

1 st No.	2 nd No.	3 rd No.	4 th No	Sum
b	b + 2	b + 4	b + 6	36



Therefore the numbers are 6, 8, 10, 12.

EXERCISE:

1. The sum of 3 consecutive even numbers is 24. Find them.

2. The sum of 3 consecutive odd numbers is 93. Find them.

3. The sum of 4 consecutive even numbers is 52. Find them.



4. The sum of 3 consecutive even numbers is 42. Find them.

5. Find a set of 3 consecutive odd numbers whose sum is 189.

FACTORS AND MULTIPLES.

A factor:- Is a number which divides a multiples exactly.

OR: Factors:- are two or more numbers multipled to get a multiple.

1. Find the factors of 5.

Factors of 5.

$$1 \times 5 = 5$$
 $5 \div 1 = 5$ $5 \div 5 = 1$

2. Find the factors of 6.

Exercise

Find and list all the factors of the following;

a) Factors of 10.

b) Factors of 24.

c) Factors of 12.

d) Factors of 36.

e) Factors of 16.



f) Factors of 20.

COMMON FACTORS (CF) AND GREATEST COMMON FACTORS (G.C.F).

Greatest Common Factor (GCF)

Highest Common Factor (HCF)

Lowest Common Factors (LCF)

Note: HCF and GCF are referred to as the biggest Common Factor.

The L.C.F of 2 or more numbers is always 1.

Examples:

Find the L.C.F and G.C.F of 6 and 12.

F6 F12 F6 =
$$\{1, 2, 3, 6\}$$

1 x 6 = 6 1 x 12 = 12 F12 = $\{1, 2, 3, 6\}$
2 x 6 = 12 C.F = $\{1, 3, 6\}$
3 x 4 = 12 L.C.F = 1
G.C.F = 6

Exercise

1. Find the H.C.F of 20 and 15.

2. Find the L.C.F and G.C.F of 24 and 30.

3. Find the G.C.F of 6 and 9.

4. Work out the H.C.F of 12 and 18.

5. Find the L.C.F of 30 and 45.

6. Find the L.C.F and G.C.F of 20 and 24.

7. Find the G.C.F of 8 and 12.

A multiple:- Is a product of 2 or more factors.

N.B: Multiples are endless.

1. Find and list all the multiples of 4 less than 21.

Multiples of 4 less than 21 (M4 \leq 21)

$$1 \times 4 = 4$$

$$4 \times 4 = 16$$

$$2 \times 4 = 8$$

$$5 \times 4 = 20$$

$$3 \times 4 = 12$$

$$6 \times 4 = 24$$

3. Find and list of all the multiples of 9 between 10 and 50.

M9

$$1 \times 9 = 9$$

$$4 \times 9 = 36$$

$$2 \times 9 = 18$$

 $3 \times 9 = 27$

$$5 \times 9 = 45$$

$$6 \times 9 = 54$$

$$10 \angle M9 \angle 50 = \{18, 27, 36, 45\}$$

Exercise

Find and list all the multiples of the following;

1. List the multiples of 6 less than 45.

2. List the multiples of 4 between 3 and 21.

3. List the first six multiples of 8.

4. List the first multiples of 5 less than 51.

5. List the multiples of 7 between 0 and 64.

6. List the first five multiples of 12.

FINDING THE LOWEST COMMON MULTIPLE (LCM).

Find the LCM of 4 and 5.

<u>M4</u>	<u>M5</u>	$M_4 = \{ 4, 8, 12, 16, 20, \}$
1 x 4 = 4	1 x 5 = 5	$M5 = \{ 5, 10, 15, 20, \}$
2 x 4 = 8	2 x 5 = 10	
3 x 4 = 12	3 x 5 = 15	
4 x 4 = 16	4 x 5 = 20	$CM = \left\{ 20 \right\}$
5 x 4 = 20		L.C.M = 20

Exercise

1. Find the L.C.M of 8 and 12.

2. Work out the L.C.M of 12 and 18.

3. Find the L.C.M of 4, 6 and 9.

4. Find the L.C.M of 7 and 14.

5. Find the L.C.M of 6, 12, and 9.

6. Find the L.C.M of 15 and 20.



7. Find the L.C.M of 9 and 15.

8. Find the L.C.M of 2, 3 and 4.

PRIME FACTORISATION

Example: Prime factorization. - Is a way expressing a composite number as a product of prime factors.

Prime factorise 36 and give its prime factors in subscript form (set notation).

Example II

Prime factorise 54 and give its prime factors in power form or multiplication form.

$$3 \quad 9 \quad \longrightarrow \quad 9 \quad \div \quad 3 = 3$$

$$\rightarrow$$
 9 ÷ 3 = 3 54 = 2¹ x 3³ (power form)

$$3 \quad 3 \quad \longrightarrow 3 \div 3 = 1$$

1

EXERCISE

- 1. Prime factorise each of the following and give its prime factors in set notation subscription form.
 - a) 24

c) 84

e) 45

b) 28

d) 30

f) 144

2. Prime factorize each of the following and give its prime factors in both multiplication and power form.

a) 120

d) 150

g) 84

b) 64

e) 660

h) 490

c) 84

f) 280

i) 36

Example:

Which number has been prime factorised to get;

Let the number be K.

$$K = (2 \times 2) \times (2 \times 3) \times 3$$

$$= (4 \times 6) \times 3$$

Example II

Find the number whose prime factorization is $2^2 \times 3^2 \times 5^1$

Let the number be m.

$$M = 2^2 \times 3^2 \times 5^1$$

$$= (2 \times 2) \times (3 \times 3) \times 5$$

$$= 4 \times 9 \times 5$$

$$= 36 \times 5$$

EXERCISE

Find the numbers whose prime factorization is given below.

1.
$$x = \{ 2_1, 2_2, 3_1 \}$$

5.
$$Y = 2^2 \times 3^2$$



$$2.K = 2^{1}, 2^{2}, 3^{1}, 3^{2}$$
 6. $R = 2^{1} \times 3^{2} \times 5^{2}$

6.
$$R = 2^1 \times 3^2 \times 5^2$$

3.
$$N = 2^1$$
, 3^1 , 5^1 7. $L = 2^2 \times 5^1 \times 7^1$

7.
$$L = 2^2 \times 5^1 \times 7^1$$

4.
$$P = \{ 3_1, 5_1, 7_1 \}$$
 8. $K = 2^2 \times 3^2 \times 5^1$

8.
$$K = 2^2 \times 3^2 \times 5^1$$



FINDING UNKNOWN PRIME FACTOR.

Example:

The prime factors of 60 are: 2 x 2 x 1 x p x 5. Find P.

 $2 \times 2 \times 5 \times p = 60$

Therefore P = 3.

4 x 5p

= 60

20 p

= 60

<u>20</u>P

= 60

20

20

Р

= 3

EXERCISE

1. Find π if the prime factors of 30 are 2 x π x 5.

2. The prime factors of 36 are $2^2 \times K^2$. Find x.

3. The prime factorization of 90 is P \times 3² \times 5. Find P.



4. The prime factorization of 100 is $2^2 \times K$. Find K.

5. The prime factorization of 36 is $2 \times 3 \times 3 \times n$. Find n.

EXPRESSING A NUMBER AS PRODUCT OF ANOTHER NUMBER.

Example I:

Express 32 in powers of 2.

EXERCISE

1. Express 64 in powers of 2.

- 2 32
- 2 16
- 2 8
- 2 4
- 2 2



2. Express 49 in powers of 7.

3. Express 256 in powers of 4.

4. Express 343 in powers of 7.

5. Express 729 in powers of 9.

VALUES OF PRIME FACTORS.

Example I

Find the value of 43 + 32

$$= 4^3 + 3^2$$

$$= 4 \times 4 \times 4 + 3 \times 3$$

$$= 16 \times 4 + 9$$

Example II

Find the value of;

$$=$$
 $2^3 + 3^2 + 5^0$

$$= 2 \times 2 \times 2 + 3 \times 3 + 1$$

$$= 4 \times 2 + 9 + 1$$

EXERCISE

Evaluate the following.

1.
$$2^2 + 3^2$$

5.
$$5^2 + 4^2$$

$$2. 4^2 + 3^2$$

$$6. 2^2 + 3^2 + 4^1$$

$$3. 2^2 + 4^2$$

7.
$$3^4 + 2^2 + 2^0$$

$$4. 2^4 + 3^2$$

8.
$$3^4 + 4^2 + 2^1$$

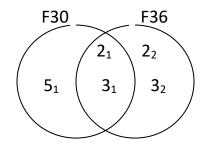


REPRESENTING PRIME FACTORS ON VENN DIAGRAMS.

Example:

Represent the prime factors of 36 and 30 on Venn diagrams.

2	36
2	18
3	9
3	3
	1



$$F36 = \{ 2_1, 2_2, 3_1, 3_2 \}$$

$$F30 = \{ 2_1, 3_1, 5 \}$$

EXERCISE

Draw Venn diagrams to show the prime factors of the following pairs.

1. 24 and 30

4. 24 and 36

2. 30 and 48

5. 12 and 18

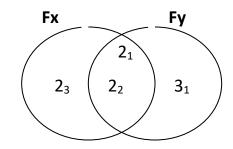
3. 18 and 24

6. 30 and 36

FINDING GCF AND LCM USING VENN DIAGRAMS.

Examples:

Use the Venn diagram below to answer the questions that follow.



a. Find the value of

$$Y = \{ 2_1, 2_2, 3_1 \}$$
 $Y = 2 \times 2 \times 3$
 $= 4 \times 3$
 $= 12$

(i)
$$X = \{ 2_1, 2_2, 2_3 \}$$

 $X = 2 \times 2 \times 2$
 $= 4 \times 2$

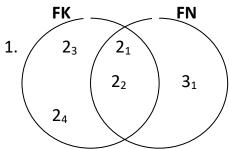
G.C.F = product of intersection set.

ii) Find the L.C.M of x and y.

LCM = Product of the union set

$$= 2 \times 2 \times 2 \times 3$$

Study the Venn diagram below and answer the questions that follow.



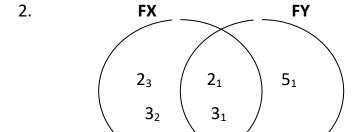
- 3₁
- K ii) N

a. Find the value of;

(i)

b) Find the G.C.F of K and N.

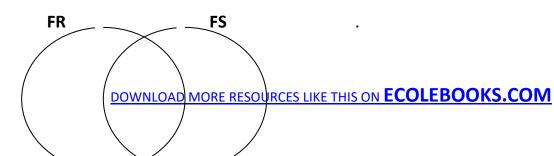
c. Find the L.C.M of K and N.



- a. Find the value of;
- i. X
- ii. Y

c. Find the G.C.F of X and Y.

b. Find the L.C.M of X.





- a. Find the value of;
- i. R ii. S

b. Find the L.C.M of R and S.

c. Find the G.C.F of R and S.

SQUARE OF NUMBERS.

Example:

1. Find the square of 8.

$$8^2 = 8 \times 8$$

= 64

2. Find the square of 12.

$$12^{2} = 12 \times 12 \qquad 12$$

$$= 144 \qquad \times 12$$

$$24$$

$$\frac{12}{144}$$

EXERCISE



Find the square of each of the following;

1. 1

5. 25

2. 6

6.30

3. 11

7. 18

4. 16

8. 0

SQUARE ROOTS OF NUMBERS

Example:

Find the square root of 64.

$$\begin{array}{rcl}
 \sqrt{64} & = & \sqrt{(2 \times 2) \times (2 \times 2) \times (2 \times 2)} \\
 \underline{\sqrt{64}} & = & 2 & \times & 2 & \times & 2
 \end{array}$$

$$\sqrt{64} = 8$$

2	64
2	32
2	16
2	8
2	4



2	2
	1

EXERCISE

Find the square root of each of the following;

1. 81

5. 900

2. 144

6. 1600

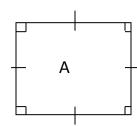
3. 256

7. 484

4. 400

8. 1024

1. The area of a square is 64m2. Find the length of a side



Area = S x S

$$64 = S^2$$

$$\sqrt{64} = \sqrt{S^2}$$

2_	64
2	32
2	16
2	8
2	2
	2

$$\sqrt{(S \times S)} = \sqrt{(2 \times 2) \times (2 \times 2) \times (2 \times 2) \times (2 \times 2) \times (m \times m)}$$

 $S = (2 \times 2 \times 2) m$
 $S = 8 m$

EXERCISE.

1. Find the length of each side of a square whose area is 256 cm².

2. The area of a square garden is 484 m². Find the length of each side.

3. Find the side of a square whose area is 900 cm².



4. Find the side of a square whose area is 1600 cm².

SQUARE OF FRACTIONS.

Example:

Find the square of ½.

$$(\frac{1}{2})^2 = \frac{1}{2} \times \frac{1}{2}$$

$$= \frac{1 \times 1}{2 \times 2}$$

$$= \frac{1 \times 1}{2 \times 2}$$

$$= \frac{1}{4}$$

2. Find the square of $1 \frac{1}{5}$.

$$\left(\frac{1}{5} \right)^2 = \underbrace{(5 \times 1 + 1)}_{5}$$

$$= \frac{6}{5} 2$$

$$= \frac{6 \times 6}{5 \times 5}$$

$$= \frac{6 \times 6}{5 \times 5}$$

$$= \frac{36}{25}$$

EXERCISE

Find the square of the following;

1. 1/3

4. 1 ½

2. 3/3

5. 4 ½



3. 1/5

SQUARE ROOTS OF FRACTIONS.

Example:

1. Find the square root of <u>36</u>.

2. Find the square root of 61/4.

$$6\% = \frac{4 \times 6 + 1}{4}$$

$$= \frac{25}{4}$$

$$\frac{5 \mid 25}{5 \mid 5}$$

$$\frac{2 \mid 4}{2 \mid 2}$$

$$\frac{2 \mid 2}{1}$$

$$\frac{25}{4} = \frac{(5 \times 5)}{(2 \times 2)}$$

$$= \frac{5}{2}$$

$$= 2 \frac{1}{2}$$

EXERCISE

Find the square root of each of the following.

SQUARE OF DECIMALS

Example:

$$0.42 = 0.4 \times 0.4$$

$$= 4 \times 4$$

$$= 4 \times 4$$

$$= 10 \quad 10$$

$$= 4 \times 4$$

$$= 10 \quad 10$$

$$= 16$$

$$= 100$$

10000

EXERCISE:

Find the square of each of the following;



1. 0.9

3. 1.44

5. 0.3

2. 0.24

4. 0.36

6. 0.11

SQUARE ROOTS OF DECIMALS.

Find the square root of 0.36.

$$0.36 = \sqrt{36}$$

$$\sqrt{100}$$

$$\sqrt{\frac{36}{100}} = \sqrt{\frac{(2 \times 2) \times (3 \times 3)}{(2 \times 2) \times (5 \times 5)}}$$

$$\begin{array}{c|cc}
2 & 36 \\
\hline
2 & 18 \\
\hline
2 & 9 \\
\hline
3 & 3 \\
\hline
& 1
\end{array}$$

$$=$$
 $\frac{2 \times 3}{2 \times 5}$



EXERCISE

Find the square of each of the following:

1. 0.16

3. 1. 44

5. 1.96

2. 0.64

4. 2.25

6. 0.81



GAYAZA JUNIOR SCHOOL



P. 6 SST REVISION / HOME WORK FOR TERM ONE.

Migration pattern in East Africa.

1.	Why do people practice rural-urban migration?
2.	In which one way has rural-urban migration affected development of rural-urban migration areas?
3.	State any three problems faced by people living in urban areas.
4.	Mention any two reasons why urban areas are densely populated.
	Political organization of ethnic groups.
5.	State two ways in which ethnic groups organized themselves politically.
	(i)
	(ii)
6.	What is a kingdom?
7.	Give three Bantu tribes that formed kingdoms in East Africa.
	(i)
	(ii)
	(iii)
8.	State any two characteristics kingdoms in East Africa.
	(i)(ii)
9.	Give two ways in which kingdoms are important.



(i)
(ii)
10.In which two ways are kingdoms advantageous in a country.
(i)
(ii)
11. What title was given to the kings of Wanga?
12. Name the Bantu tribe that formed the Wanga kingdom.
13. Name the king of Wanga who became the British collaborator.
14. Name the king of Karagwe who welcomed John Speke and James Grant.
15 Name the clan that ruled Karagua at first
15. Name the clan that ruled Karagwe at first.
16.Who is believed to be the founder of Buganda kingdom?
16.Who is believed to be the founder of Buganda kingdom?
16.Who is believed to be the founder of Buganda kingdom?
16.Who is believed to be the founder of Buganda kingdom?
16.Who is believed to be the founder of Buganda kingdom? 17.How was Kato Kimera related to Isingoma Rukidi Mpunga?
16. Who is believed to be the founder of Buganda kingdom? 17. How was Kato Kimera related to Isingoma Rukidi Mpunga? 18. Mention any three factors that promoted to the growth of Buganda.
16. Who is believed to be the founder of Buganda kingdom? 17. How was Kato Kimera related to Isingoma Rukidi Mpunga? 18. Mention any three factors that promoted to the growth of Buganda. (i)
16. Who is believed to be the founder of Buganda kingdom? 17. How was Kato Kimera related to Isingoma Rukidi Mpunga? 18. Mention any three factors that promoted to the growth of Buganda. (i) (ii)



20. How did the coming of Arab traders promote expansion of Buganda?
21.Mention any three rules of the Kabaka.
(i)
(ii)
(iii)
22. Name the son of Omukama Kyebambe who started Tooro kingdom.
23.Why did Omukama appoint chiefs in Bunyoro kingdoms?
24. How did Bunyoro kingdom expand its territories?
25. What name was given to the soldiers of Omukama Kabalega?
26.Outline any three factors that led to the growth of Bunyoro?
(i)
(ii)
(iii)
27.In which island was Omukama Kabalega exiled?
28.What is a chiefdom?
29. Mention any two tribes that formed chiefdoms in East Africa.
(i)(ii)



30. Give a	ny two roles played by traditional chiefs in Uganda.
(i)	
(ii)	
31.Give ar	ny two benefits of having chiefdoms.
(i)	
(ii)	
32.How ar	e the Bagishu of Uganda similar to the Masai of Kenya?
33.What v	vas the role of the Muramati among the Kikuyu?
34.Mentio	on any two rituals performed among the Masai?
(i)	
(ii)	
Empire	s in East Africa:
35.Who w	ere the founders of Bunyoro-Kitara Empire?
•	ere the Batembuzi called demi-gods?
	the last king of the Bachwezi?
	the last king of the Batembuzi.
39 Where	were the headquarters of the Bachwezi?



40. Give any two examples of royal regalia.
(i) (ii)
41. State any three political contributions of the Bachwezi in E. Africa.
(i)
(ii)
(iii)
42. Give any four causes of the decline of the Chwezi Empire (Bunyoro – Kitara).
(i)
(ii)
(iii)
(iv)
43. Outline any two social contributions of the Bachwezi.
(i)
(ii)
44. How did the size of Bunyoro-Kitara lead to its final collapse?
45.In which way did the Luo Babiito invasion affect Bunyoro Kitara Empire?
46.State the factor that led to the final collapse of the Chwezi Empire.
47. Mention any three kingdoms that were formed after the collapse of Bunyoro-Kitara.
(i)
(ii)
(iii)



48.What does the word "Zenj" mean?
49.Where were the headquarters of the Zenj Empire?
50.What was the main trading centre in Zenj Empire?
51.Who founded the Zenj Empire?
52.Give any two ways in which the blacks benefited from the Arabs in the Zenj Empire. (i)
(ii)
54. What name was given to the strong soldiers of Mirambo?
55.State any two reasons why Mirambo was able to build a strong empire. (i)
56.Who succeeded Nyungu Ya Mawe after his death?
57. What factors made Nyungu Ya Mawe develop Nyamwezi Empire?
58.In which way did Nyungu Ya Mawe's empire come to an end?



Introduction of Christianity in East Africa.



67. Who were the missionaries?
68. Name any one country of origin of the missionaries.
69. Which missionary group sent the first missionaries to Uganda?
70.What is Christianity?
71.Why did Muteesa 1 invite missionaries?
72. What role did H. M. Stanley play in the coming of the Christian missionaries?
73. Name any one missionary group Society that sent the Catholic missionaries.
74.Name the first missionary group to come to Uganda.
75. Give a reason why the missionaries came to Uganda.
76.State any one negative effect of the missionaries.
77. How was Rabai Mpya important to the early missionaries in East Africa?
78.State any one contribution that was made by the following; (a) David Livingstone



(b) Reverend Alexander Mackay	
(c) Ludwig Krapf	
79. Why is Kenneth Borup remembered in the history of Uganda?	
80. Give one way in which the missionaries changed the lives of the people of East Africa	€.
81.Name the missionary who drew the first map of East Africa.	•
82.State any one Christian denomination in Uganda.	
83.Mention any four problems face by missionaries faced in East Africa.	
(1)	
(ii)	
(iii)	
(iv)	
84.In which way have Christians promoted the welfare of the people of East Africa?	
85.Write way have Christians promoted the welfare of the people of East Africa.	
86.How do Christians worship God?	
(i)	
(ii)	
(iii)	

Introduction of Islam in East Africa.



87. Name the king of Buganda who welcomed the first Arab traders?	
88.Write any one reason why the Arabs came to Africa.	ı
89.What was long distance trade?	ı
90.Mention any one tribe in Uganda that took part in the long distance trade.	
91.Outline any four trade items that were brought by Arabs from East Africa.	••••
(i)	
(ii)	
(iii)	
(iv)	
92. Mention any four goods that were brought by Arabs from East Africa.	
(i)	
(ii)	
(iii)	
(iv)	
93. State three reasons why Arabs took long to enter the interior of East Africa.	
(i)	
(ii)	
(iii)	
94. Point out four positive effects of the long distance trade.	
(i)	
(ii)	



(i	ii)
(i	v)
95.V	/hy was slave trade practiced in East Africa?
96.V	/ho is a slave?
97.N	ame the largest slave trade market that was at the coast of East Africa.
98.V	/ho were the Khartoumers?
•••	
 99.G	ive two ways in which slave trade was stopped in East Africa.
(i	
(i	i)
100.	Why did it take long for slave trade to be stopped in East Africa?
<u>P</u>	opulation growth.
101.	What does the term population mean?
102.	Explain the term population growth.
103.	Outline factors that encourage population growth.
	(i)(ii)



104. 	Mention the methods that help in controlling or checking population growth.
 105.	How does a small population density in a country affect its economy?
	Mention four human disasters that help to reduce population density in a
(i)	·
(ii	
(ii	
(iv	·)
107.	In which way does increased medical care led to high levels of population growth?
108.	Give any one effect of high fertility rate among women in a country.
109.	What is the meaning of population census?
110.	In which four ways is population census important to a country?
	(i)
	(ii)
	(iii)
111	(iv)
111.	How long is population census important to a country?
112.	How long does it take for a population census to be conducted in Uganda?



113.	How does fertile soils influence population distribution in an area?
114.	What is the meaning of population distribution?
115.	Identify three areas in Uganda that are sparsely populated.
(i)	
(ii)	
(iii	
116.	Why do shores of lakes and river banks in East Africa have high population?
117.	Mention two problems faced by people who live densely populated areas.
(i)	
(ii)	
<u>Pc</u>	pulation density.
118.	What is the meaning of population density?
119.	Wakiso has a total number of 200,000 people with an area of 200 km ² . Calculate
the	e population density of Wakiso.
120.	What is population explosion?
<u> </u>	



121.	L. Mention any two causes of population explosion.	
(i)		
(ii)		
122.	In which one way does a civil war lead to population explosion?	
123.	Write three disadvantages of low population to a country.	
	(i)	
	(ii)	
	(iii)	
124.	Mention two problems faced by people who live in slums.	
	(i)	
125	Write any two advantages of a high population.	
125.	(i)	
	(ii)	
126.	In which way does a high population density promote industrialization?	
127.	How does a high population affect the natural environment?	
128.	What is a slum?	
129.	Why is miombo woodland in Tanzania sparsely populated?	
130.	Mention economic activities that were carried out by ethnic groups.	
	(i)	



		(ii)
	131.	What is trade?
	132.	Give any three advantages of barter trade.
		(i)
		(ii)
		(iii)
	133.	Outline the effects of barter trade on the pre-colonial people of East Africa.
		(i)
		(ii)
		CHRISTIAN RELIGIOUS EDUCATION.
1.	Who is	s a redeemer?
2.		on examples of redeemers in the Bible who were called by God.
	(i)	
	(ii)	
3.	In whi	ch ways did Abraham show his faith to God?
	(i)	
	(ii)	
4.	How w	vas Gideon useful to the Israelites?
5.	Who le	ed God send Moses to rescue the Israelites from Egypt?
5 .	Why d	id God sent Moses to rescue the Israelites from Egypt?
7.	Menti	on three ways through which God called messengers.
	(i)	



	(ii)	
	(iii)	
8.	Why do	we need to listen to God's messengers in the Bible. (Give four reasons)
	(i)	
	(ii)	
	(iii)	
	(iv)	
9.	In whic	h way did Virgin Mary respond to Angel Gabriel's message?
10.	Which	qualities did Moses have to be called by God? (Give four)
	(i) .	
	(ii) .	
	(iii) .	
	(iv)	
11.	Which	group of people is directly helped by UWESO?
12.	How do	Christians show faith to God today?

END

NOTE: Endeavour to use your textbooks and notes of previous classes to enrich your Knowledge and be able to produce well organized work.