3055 BA SANGAM COLLEGE

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LESSON NOTES

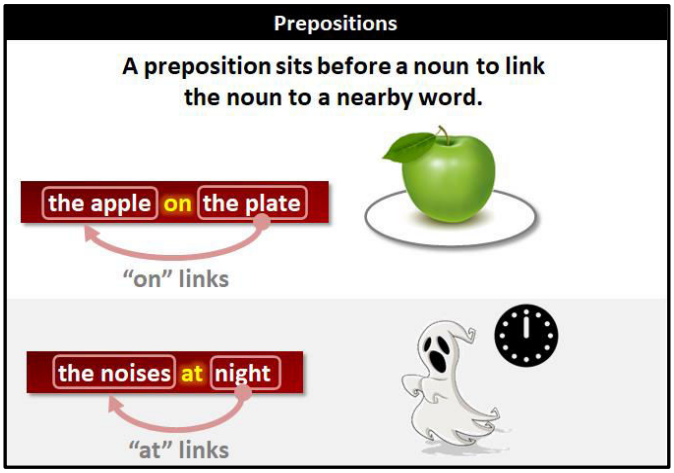
School: Ba Sangam College **Year/Level: 12** **Name: _____**

Subject: English **Week: 6** **Year: _____**

Strand	Writing and Shaping
Sub Strand	Language features and rules
Content Learning Outcome	Use correctly the conventions of written English including grammar, usage, spelling and punctuations to communicate ideas logically.

PARTS OF SPEECH - PREPOSITION

- A preposition shows the relationship of a noun or a pronoun to another word. A preposition is usually followed by a noun or pronoun. Some prepositions tell you about position or place. Some are used to talk about time.



Examples

The cat sat **on** the mat. Here the preposition **on** shows us where the cat was sitting.

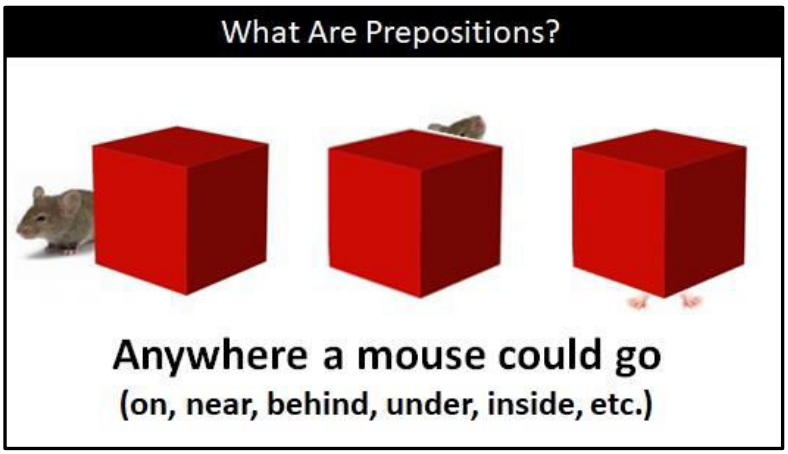
The sun dropped **below** the horizon. The preposition **below** shows where the sun had set.

Eat your popcorn **during** the show. The preposition **during** shows when the popcorn should be eaten.

Some Common Prepositions are:

above, about, across, against, along, among, around, at, before, behind, below, beneath, beside, between, beyond, by, down, during, except, for, from, in, inside, into, like, near, of, off, on, since, to, toward, through, under, until, up, upon, with, within

When next time you are thinking about prepositions, think about the mouse in the picture given.



EXERCISE (25 marks)

Complete the sentences with one of the prepositions from the box.

at – by – for - in – of – out – to – under

1. When we met _____ university it was friendship _____ first sight.

2. I went home _____ midnight because I was so tired.

3. They didn't give her any alcohol because she was _____ age.

4. I was so distracted that I put salt into my coffee _____ accident.

5. There is no solution _____ this problem.

6. John has a reputation _____ being late all the time.

7. She hasn't got any money left. _____ other words, she's broke.

8. Could you call tomorrow? I'm not _____ such a good mood today.

9. She took me _____ the hand, and we walked along the beach.

10. I washed his car _____ exchange _____ some pocket money.

11. This is my first visit _____ Singapore.

12. I had a lot of fun _____ the summer camp and improved my English _____ the same time.

13. I studied history and geography _____ university.

14. The bridge was closed _____ the weekend because it was _____ repair.

15. I always buy eggs _____ the dozen.

16. His talent _____ singing was impressive.

17. We had to learn all the poems _____ heart.

18. The decision that the officials made is still _____ review.

19. I left him _____ charge _____ all the network servers.

20. I'm sorry but the book is _____ of print at the moment.

21. We have to tidy up the house. It's _____ such a mess.

22. _____ general, I think that Americans are very friendly.

23. I couldn't hide my love _____ her any longer

24. I try to buy fruit and vegetables that are _____ season.

25. The question took him _____ surprise.

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WORKSHEET 6

School: Ba Sangam College **Year / Level: 12**

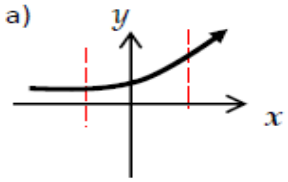
Subject: Mathematics **Name of Student: _____**

Strand	3 – Graphs
Sub strand	3.1 – Study and Interpret Graphs
Content Learning Outcome	Revision of Relations and Functions Objective: ➢ Indicate whether a relation is function or not.

Relation has two sets of elements.
Domain: First element which are the x values.
Range: Second element which are the y values.
Function is where the domain or [x values/first element] is not repeated.
For graphs, use a vertical line test, i.e. when drawing a vertical line through the graph, the line should cut the graph at only one point. Then it will be a Function, otherwise it's Not Function.

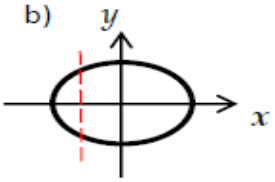
To evaluate *f(a):* since $x = a$, substitute a in place of x and find the answer, i.e. y value.
Example:1 Indicate if the following relations are function

a)



Vertical line cuts once,
therefore it is a function

b)



Vertical line cuts more than once,
therefore it is NOT a function

Example:2 A relation is given by $(x, 2x)$ where x {-1,0,1}
i). List the range

$x = -1$	$x = 0$	$x = 1$
$y = 2x$ $y = 2\ (-1)$ $y = -2$	$y = 2x$ $y = 2\ (0)$ $y = 0$	$y = 2x$ $y = 2\ (1)$ $y = 2$

Therefore Range is $y\epsilon\ \{-2, 0, 2\}$

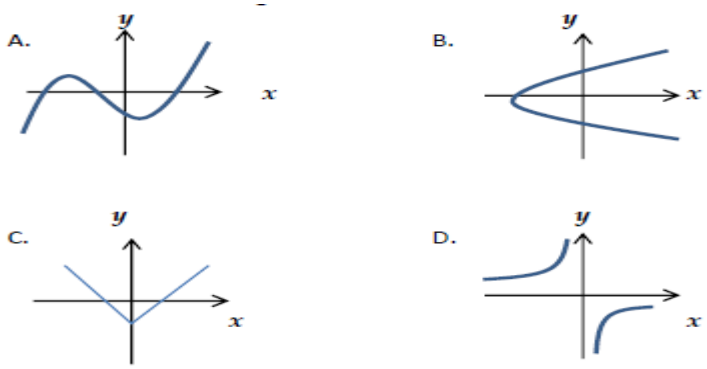
ii). List the relation as a set of ordered pairs.
$(x, y) = \{(-1, -2), (0, 0), (1, 2)\}$

ii). Give the inverse of the relation

Inverse= $\{(-2,-1),(0,0),(2,1)\}$

ACTIVITY

1. Decide whether the following relation is a function or not? **(1 mark each)**



2. A relation is given by $(x, 3x)$ where x { 2, 1,0,1,2}

   a). List the range. **(2 marks)**

   b). List the relation as a set of ordered pairs. **(2 marks)**

   c). Write the domain of inverse relation. **(2 marks)**

3. An equation is given as y = 3x + 1 for x Ɛ { - 1 , 0, 1 }

   a) Solve for y – values **(2 marks)**

   b) Write as ordered pairs **(2 marks)**

   c) List the domain and range **(2 marks)**

   d) Plot the points on the Cartesian plane. **(2 marks)**

   e) Write ordered pairs of the inverse. **(2 marks)**

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LESSON NOTES

School: Ba Sangam College **Year/ Name:** 12_____
Subject: Agricultural Science week 6

Strand	As 12.3 Agronomy
Sub Strand	As 12.3.2 Horticulture
Content Learning Outcome	At the end of these lessons, the student will investigate, select and practice appropriate improvement methods on established plants.

LESSON 1: INTRODUCTION

Lesson outcome: At the end of this lesson the student will discuss the history and importance of plant improvement

Notes

Plant improvement began when people began farming. Due to the need of the growing world population, plants have been selected and modified to improve the quantity and quality of harvest from the same area of land.

Dump Heap Hypothesis Theory

Wandering peoples discarded remains of plant foods in piles in cleared areas, then returned to the sites and discovered that the same types of plants they had eaten the year before were growing where rubbish had been piled.

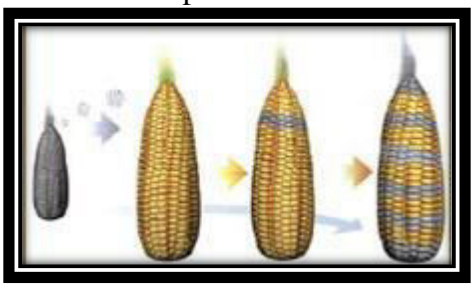
Activity Worksheet 6

1. Discuss the role of plant improvement in human history

_____
_____
_____
_____
_____

(3 marks)

2. The diagram below illustrates the development of maize over time



http://museumtamal.org

Discuss the reasons for this development.

_____
_____
_____
_____
_____

(3 marks)

3. Differentiate between variety and improved variety?

_____
_____
_____
_____

(2 marks)

4. State two ways in which global change has threatened the foundation of human civilization?

_____
_____
_____
_____
_____

(2 marks)

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LESSON NOTES

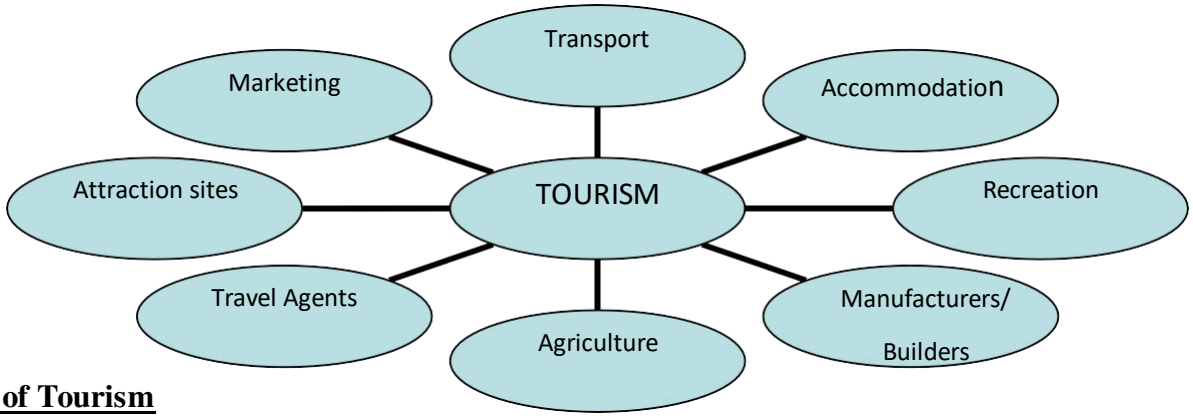
WORKSHEET 6

YEAR 12: GEOGRAPHY NAME:_____

Strand	2.3 Tourism
Sub Strand	12.2.3.1
Content Learning Outcome	Tourism and tourists and A

TOURISM AND TOURISTS

- Tourism is simply an industry which caters or deals with tourists.
- There are many sectors which contribute to tourism being a fast earning industry and having multiple economic benefits to any country.



Types of Tourism

- *Mass or Mainstream tourism,*
- *Leisure tourism*
- *Historic tourism*
- *Adventure tourism*
- *Nature tourism*
- *Cultural tourism*

A HISTORICAL PERSPECTIVE

- In some countries, tourism began because of its natural beauty and/or beautiful climate, historical events which occurred with existing historical evidence.
- Some countries were trading points, stop-over destinations for travelers and refueling stations.
- Tourism developed when the number of tourists increased leading to an increase in provisions for their diverse needs and desires.

- Due to the many physical, historical and cultural attributes of each nation in the world, tourism has diversified into the many forms that are functional in present times.
- Locals have also promoted many other hidden potentials within their locality which are tourist attractions today or will become potential attraction sites upon further development or restructuring.
- Tourism has prospered in all countries as it has generated high returns for the host country and also due to its multiplying effects which has boosted the socio-economic status of these nations.
- its ability to influence westernization and modernization makes it more acceptable and adoptable without much resistance from the people.
- In some cases the tourism industry has become the backbone for the host country.

Activity

A. Definition – Define the following terms

1. Marketing

_____
_____ (1 mark)

2. Leisure Tourism

_____
_____ (1 mark)

3. Recreation

_____
_____ (1 marks)

4. Stop- over destination

_____
_____ (1 mark)

5. Cultural Tourism

_____
_____ (1 mark)

B. Short Answer Questions

1. Discuss 2 roles played by the tourism industry in the development of a country.

_____
_____
_____ (2 marks)

2. State 2 reasons for the people to travel from one place to another.

_____
_____
_____ (2 marks)

3. State socio-economic importance of tourism of tourism.

_____(1 mark)

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WORKSHEET 6

School: **Ba Sangam College** Year: **12**

Subject: **Biology** Name:

Strand	**1 – Structure and Life Processes**
Sub strand	**1.4 – Comparative Form and Function in Plants and Animals**
Content Learning Outcome	**Nutrition- Describe the structures and processes associated with the manufacturing and intake of food in selected organisms.**

External Digestion

- Where food is digested outside by secreting enzymes and then absorbed by diffusion.

Bacteria and Fungi

- Are decomposers
- Secrete digestive enzyme on dead matter → wait for food to decompose → absorbed using active transport.
- Are immobile- can stay with the food, till digestion and absorption finishes.

Nutrition in Annelids

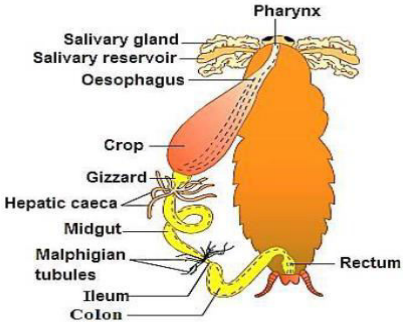
- Annelids- simple tube-like gut
- More efficient digestive system- with 2 openings

Earthworm Nutrition

1. Earthworms suck soil through **muscular pharynx** in the mouth.
2. Food moves by **peristalsis** through esophagus to the crop.
3. **Crop**- stores food, **gizzard**- grinds food.
4. Food is digested and absorbed into the small intestine. (**Typhlosole** – found in intestine – increases SA for absorption)
5. The undigested food is egested out of anus.
6. Blood absorbs digested food from the small intestine and carries it to the body cells.

Nutrition in Arthropods- Have complex tube-like gut.

Cockroach Nutrition



1. **Mandibles** – cuts up the food.
2. **Maxillae** – holds the food.
3. **Saliva** – from salivary glands – moistens the food.
4. **Crop**- stores food.
5. **Gizzard**- grinds food.
6. **Caecum**- excretes digestive enzyme into mid-gut.
7. **Mid-gut**- digests and absorbs food.
8. **Hind-gut**- absorbs water from faeces.
9. **Anus**- from where undigested food is egested out.

Intestinal Parasites

- They obtain their food from their host.
- They do not need digestive system- directly absorb digested food from their host.

Vertebrate Animal Digestive System (most complex digestive system)

Nutrition in Birds

Adaptation for feeding

- Birds do not have **teeth**- instead have **gizzard**. (teeth is heavy- adds weight during fight)
- **Crop**- as food storage.

Nutrition in plants

- **Sunlight absorption** -broad leaves for light absorption, Pigments present in thylakoid memebrane,small leaves allow light to filter light to lower branches.
- **Carbondioxide absorption**- stomata present at the bottom surface of leaf are open to allow diffusion of CO_2 , thin leaves for faster diffusion, spongy mesophyll filled with air spaces.
- **Water Absorption**- root hairs increases SA for absorption, veins in leaves helps transport water and minerals, roots show positive geo and hydrotropism.

Exercise

1. Why don't birds have teeth? How do they grind up their food?
   _____
2. Why is most plant material so difficult to digest? Describe three ways herbivorous mammals are adapted to digest plants.
   _____
3. Give at least two adaptations in plants that allow them to obtain maximum:
   (i) Sunlight
   _____
   (ii) CO_2
   _____
   (iii) Water
   _____
4. Fungi and bacteria have external digestion.
   (i) Explain what external digestion means.
   _____
   (ii) What is the potential disadvantage of external digestion?
   _____
   (iii) Why is this disadvantage not a problem for fungi?
   _____
5. Describe two ways grasshoppers are adapted for eating grass.
   _____
6. What is the advantage of a gut with two opening over a gut with just one?
   _____
7. Why do you think insects do not have external digestion or a sac – like gut?
   _____
8. What is the advantage of a gut with specialised chambers?
   _____
9. What is the function of Caecum?
   _____
10. What is the purpose of Symbiotic bacteria?
    _____
11. What is the purpose of a Crop?
    _____
12. State the difference between mandibles and maxillae?
    _____
13. What is the similarity between hind gut in insects and large intestine in humans?
    _____
14. What is the function of gizzard?
    _____
15. What is the similarity between villi in small intestine of humans and typhlosole in earthworm's intestine?
    _____
16. State the importance of bacteria?

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LESSON NOTES

School: Ba Sangam College **Year/Level: 12** **Name:**

Subject: Applied technology **Week 6** **Year:**

_____

Strand	Applied Eng.
Sub Strand	Carpentry and Joinery
Content Learning Outcome	By the end of this topic, students will: know the function and parts of the door.

Parts of a cabinet panel door

Stiles- are vertical side pieces

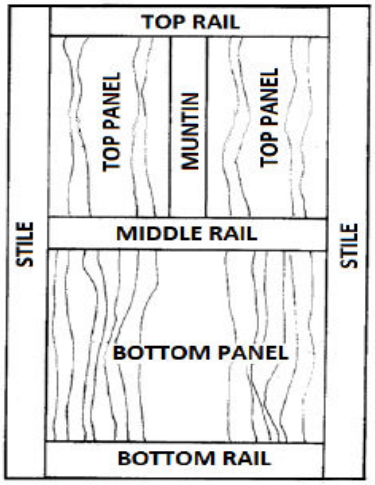
Top rail, middle rail, bottom rail:

are the horizontal pieces

Muntin- is the centre upright piece.

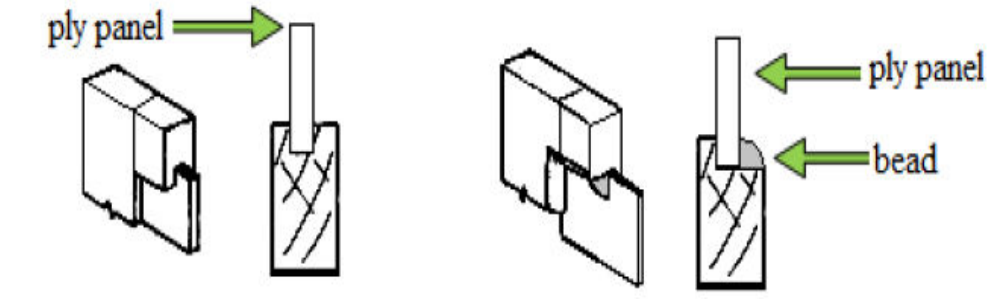
purpose is to break up a large area

so that the panel does not bulge/ shrink



Types of doors used in cabinet construction

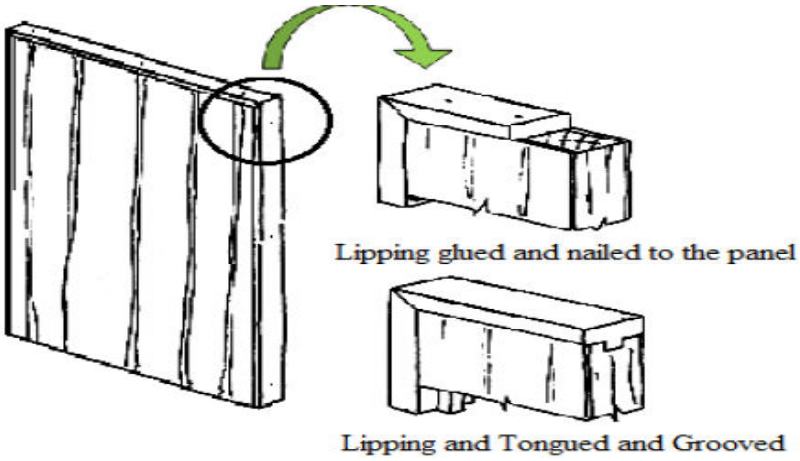
1. *Framed and panelled door (groove in panel)*
2. *Framed and panelled door (rebated in panel)*
3. *Framed door with raised panel*
4. *Flush door*



Method 1- grooved in panel. Method 2 - rebated in panel

Construction of panel doors

Core boards are best for this door because it does not shrink or warp



Assembling the Door

Care should be taken when assembling the door joint to ensure that:

- All meeting surface are well glued.
- The door is not in winding i.e. twisted.
- The door is square; this is tested by measuring from corner to corner, not by using a try square.

Construction of framed door

- Timbers are cut to size
- The stile is usually cut longer then the required size to prevent splitting

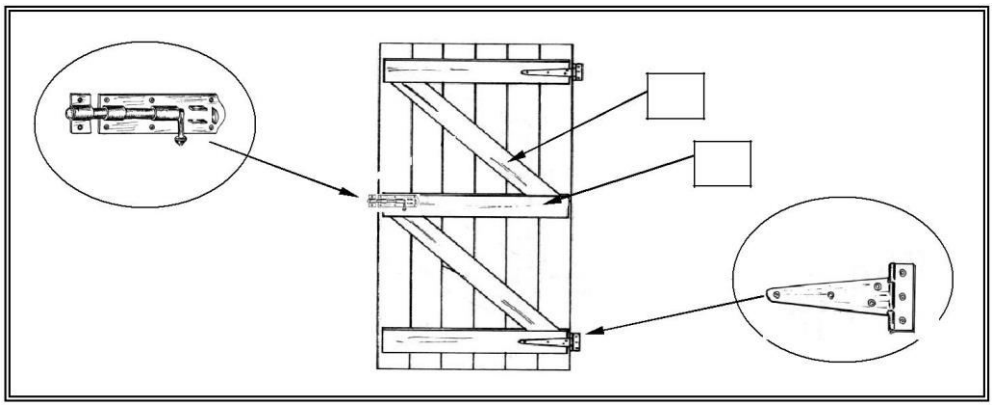
Assembling the door

All care must be taken when assembling the door joints to ensure that

1. All meeting surfaces are well glued
2. The door is not winding (twisting)
3. The door is square. Ie. Tested by measuring corners to corners not by using try square

Questions (20 marks)

(a) Study the diagram below and answer the questions that follow:



(i) Identify the type of door shown.

(ii) List at least two steps to be taken to have the hinge fixed to the frame.

(iii) Name the parts labelled 1 & 2.

(iv) Identify the hinge used on the above door.

(v) Identify the lock used on the door.

(vi) Sketch the method of joining narrow strips of timber to form a large board as used for the door above.

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WORKSHEET NO: 6

YEAR: 12

SUBJECT: Technical drawing and design

TOPIC OF LESSON: Interpenetration

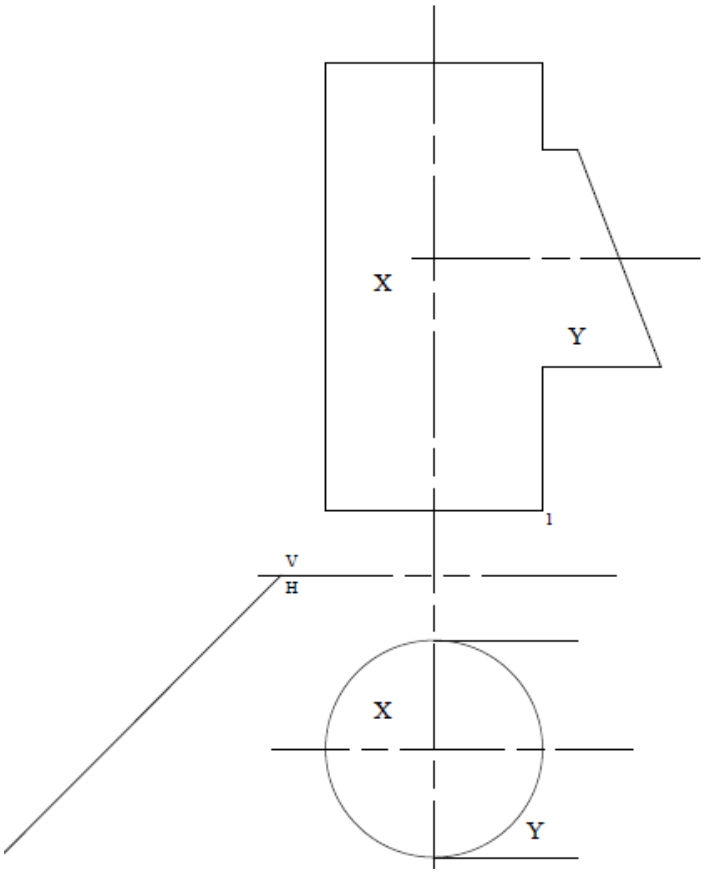
PREVIOUS LEARNING/PRIOR ASSOCIATED LEARNING

Students have done Development.

Activity

Given : 1st angle orthographic drawing of a Cylinder to Cylinder (Pipe) which has been joined at 90°

Required : 1. Complete the Plan
2. Draw the Line of intersection
3. Project the Right End Elevation
4. Show the hole in the part Development of Cylinder X
5. State the Scale of the drawing if the Actual diameter of the Cylinder is 250mm? Scale:_____



Reference

Year 12 text book

Sangam Education Board – Online Resources

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LESSON NOTES

School: Ba Sangam College **Year:** 1201 **Name:**_____

Subject: Accounting

Strand	4- Accounting Reports
Sub Strand	Non- Profit Organisation
Content Learning Outcome	Explore Non – Profit Organisations and their financial reporting

Lesson Objectives: Students should be able to

- Explain the nature, significance and purposes of non-profit organisations.
- Discuss the procedures of forming non-profit organisations in Fiji.
- State the role of office bearers in a club.
- Identify the records kept by the clubs.
- List the sources of income for a club.
- Differentiate between incorporated and unincorporated club.
- Describe the importance of auditing financial reports of non-profit organisations.
- State the differences between financial reports of trading business and non-trading concern.

Topic: Non- Profit Organisation

Nature of Clubs and Associations

Non-profit organisations are usually formed according to the passion of a group of people who share the same interests. Example: Red Cross, Mothers Club, Rotary Club, Church and other Religious Bodies.

Purpose of Non- Trading Concern

 Provide service to the public or its members for a defined purpose without being profit oriented.

Procedure of forming a Club

 Members get together with common interest to establish the organisation.
 Members than elect the office bearers of the organisation.
 The office bearers with the other members choose the name of the club and may register or may not register the club.
 There must be a set of constitutional rules governing the objects, membership, general meetings, appointment of officers, and control of funds.

Office Bearers of the Non – Trading Concern

1. President - Is the person who is overall in-charge of the club and has final say in the decision making process.
2. Secretary -Appointed person who records the minutes of all the meeting in the minute book.
3. Treasurer- The person in-charge of looking after the financial affairs of the club.
 He or she prepares and presents the financial report of the club in the meetings.
4.Committee members

- Are people involved in the decision making process apart from the executive members.

Entrance Fees - are payable by new members upon joining the club. This item is capitalised, therefore must be taken to the Statement of Financial Position (Balance Sheet) under Accumulated Funds.

Records kept by the Club

1. Register of Members - Is a book or computer entries which keep all information of its members. E.g. name of the member, address, subscriptions etc.

2. Minute book - Contains signed minutes of every meeting and is the official record of the club.

3. Correspondence file - All letters and correspondence are filed for future reference.

Sources of income for the Clubs

Subscription (major source)	Donations	Fundraising
Profit from trading activities	Interest on fixed term deposit	

Lesson Activities

1. Which of the following statement is **true** for Receipts and Payments Account of a club?

A. Includes balance day adjustments.

B. Follows accrual basis of accounting.

C. Records cash and credit transactions.

D. Records both revenue and capital expenditure items. **(1 mark)**

2. State the role of the following office bearers in a club: (**2 marks)**

(i) **Secretary**

_____

(ii) **Treasurer**

_____

3. State **one** reason for auditing financial reports of a registered club. **(1 mark)**

_____

_____

4. Identify the term used to describe the difference between Assets and Liabilities in non-trading business activity. **(1 mark)**

_____

_____

5.What is the capital of a Non-Profit Organization generally known as? **(1 mark)**

_____

_____

6.State the main aim of a not-for-profit organisation. **(1 mark)**

_____

_____

7.Name any two accounts required to be prepared in Financial Statements by Not-For-Profit Organizations at the end of the year. **(2 marks)**

_____

_____

8.Not-for-profit organisations have some distinguishing features from that of profit organisations. State any one of them. **(1 mark)**

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WORKSHEET 6

School: **Ba Sangam College** Subject: **Chemistry**

Year:**12** Name:

Strand	**4 Materials**
Sub strand	**4.1 Inorganic Chemistry**
Content Learning Outcome	**Investigate the properties of oxides.**

4.1.1 The Periodic Table

- The Periodic Table is a tabular arrangement of the chemical elements, organised on the basis of their atomic number, electron configurations, and recurring chemical properties and the elements can be classified as metals, non-metals and metalloids.

Oxides of Period 3 elements

- Oxides are chemical compounds with one or more oxygen atoms combined with another element. Examples include Na_2O, MgO, Al_2O_3, SiO_2 and SO_3.
- An oxide that combines with water to give an acid is termed as an **acidic oxide.**
- An oxide that combines with water to give a base is known as a **basic oxide.**

Note:

- An **amphoteric oxide** is a substance that can chemically react as **both, an acid and a base.**

1. Basic Oxides

- Basic oxides are the oxides of metals and Group I and Group II elements form basic oxides.
- If soluble in water, they react with water to produce hydroxides (alkalis).
- Examples include Sodium oxide (Na_2O), Magnesium oxide (MgO).

. i. **Sodium oxide (Na_2O)**

- White solid at 20 °C.
- Melting point is 1275 °C.
- Has ionic bonding with giant ionic structure.
- Conductor of electricity in solution and molten state, but not in solid state.
- Reacts with water to form sodium hydroxide (basic solution).
- $Na_2O(s) + H_2O(l) \rightarrow 2NaOH(aq)$

ii. Magnesium oxide (MgO)

- White solid at 20 °C.
- Melting point is 2825 °C.

- Ionic bonding with giant ionic structure.
- A conductor of electricity in solution and molten state but not in solid state.
- Only slightly soluble in water and reacts to forms a very small amount of magnesium hydroxide (basic solution). $MgO + H_2O \rightarrow Mg(OH)_2$

EXERCISE

1. Most of the oxides of non-metallic elements are
A. ionic and basic.
B. ionic and acidic.
C. covalent and basic.
D. covalent and acidic. **(1 mark)**

2.An oxide that combines with waterto form acid is knows as _____.

(1 mark)

3.Amphoteric Oxides can react with _____.

(1 mark)

4. Complete the following equations:
i. $Na_2O(s) + H_2O(l) \rightarrow$

_____

_____

_____**(1 mark)**

ii. SO_3 (g) + -------- $\rightarrow H_2SO_4(aq)$

_____

_____

_____ **(1 mark)**

5. Describe the trend in bond type and the nature of the oxides of Period 3 elements.

_____

_____

_____

_____ **(2 marks)**

The End

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LESSON NOTES

SCHOOL: BA SANGAM COLLEGE **YEAR: 12** **Name:_____**

SUBJECT: ECONOMICS

Strand	Macroeconomics
Sub Strand	Government Budget
Content Learning Outcome	Examine the different types of budget with their effects on the economy.

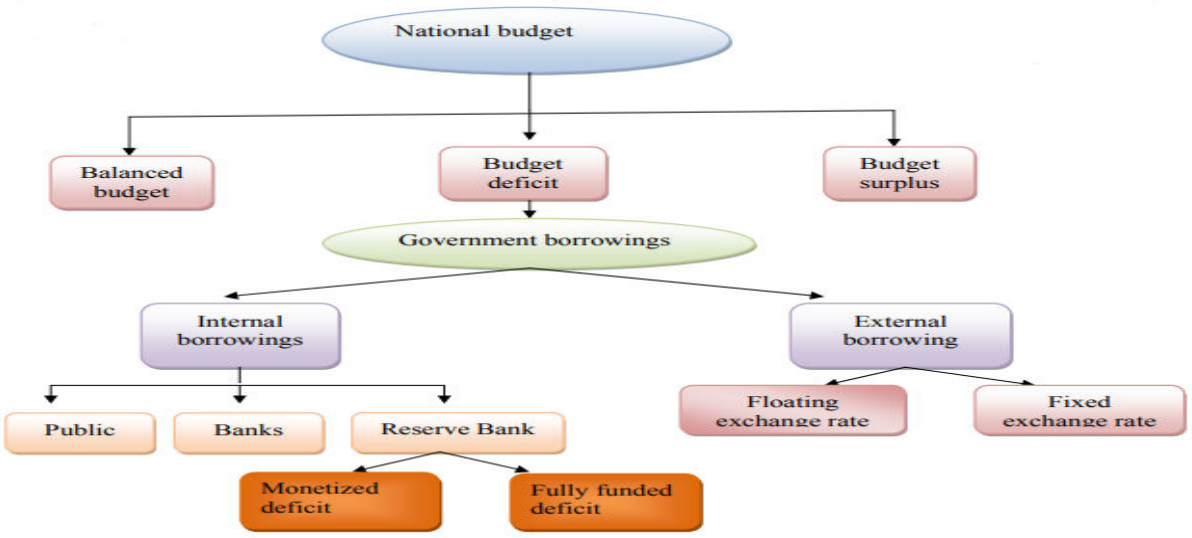
LESSON NOTES

TYPES OF GOVERNMENT BUDGET

Budget surplus –Budget surplus leads to a contractionary effect on the economy. It leads to decrease in the level of income, output and employment in the economy

Budget deficit-. Budget deficit results in an expansionary effect of the economy.

WAYS OF DEFICIT FINANCING AND ITS EFFECTS



A.- Internal borrowing - Borrowing from Reserve Bank simply means printing more money. This will increase domestic money supply resulting to inflationary pressure in the economy. This situation is called monetizing the deficit.

-Borrowing from private sector government -leads to crowding out effect.

B. External borrowing- Borrowing from overseas financial institution such as IMF, ADB and World Bank. Borrowing from overseas from overseas will lead to increase in national debt.

ACTIVITY

MULTIPLE CHOICES **(5 marks)**

1. The result of a surplus in national budget is

A. Contractionary effect in the economy B. Expansionary effect in the economy
C. Increase in employment in the economy D. Increase in economy activity in the economy.

2. Borrowing from general public by selling government bonds would result in

A. Decrease in money supply in the economy B. Crowing out effect
C. Multiplier effect D. Leakage effect

3. Negative effect of borrowing on the economy would be

A. Increase in Compensating deficit B. Increase in output in the economy
C. Increase in debt servicing burden. D. Increase in investment

4. Government trying to bring fairness in income distribution and wealth through progressive taxation and welfare benefits is example of

A. Allocative role B. Stabilization role C. Regulative role D. Redistributive role

5. Which of the following is not a fundamental role of government?

A. Allocative B. Stabilizing C. Marketing D. Distributive

B. Classify the following into **internal and external borrowings** **(3 marks)**

1. More money printed by Reserve Bank _____.
2. Borrowing from Asian Development Bank _____.
3. Selling government securities to general public _____.

C. Use the information given below to answer the questions that follows.

Government Expenditure - $20 million (m)
Total tax revenue – $ 15m
Investment- 15 m **Saving- 10 m**

1. State two forms of government expenditures
   _____ **(1 mark)**
2. Calculate to show whether the economy is operating under budget surplus or a deficit
   _____ **(1 mark)**
3. Identify one way of deficit financing and explain its effect on the economy.
   _____
   _____ **(2 mark)**

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WORKSHEET 6

School: Ba Sangam College **Year / Level: 12**

Subject: Computer Studies **Name of Student**: _____

Strand	1 – Computers and Applications
Sub strand	1.5 Computers and Networks
Content Learning Outcome	Describe different types of communications and networks, network setup and explore the security measures.

5.3 Computer Networks

- A computer network is formed when two or more computers are connected to each other either to exchange data or share information and resources.
- Network connections between computers are typically created using cables (wires).
- However, connections can be created using radio signals (wireless/Wi-Fi), telephone lines (and modems) or even, through a satellite links for very long distances.

Using a computer connected to a network allows us to:

- Easily share files and data
- Share resources such as printers and Internet connections
- Communicate with other network users (email, instant messaging, video-conferencing, etc.)
- Store data centrally (using a file server) for ease of access and back-up (Keep all of our settings centrally so we can use any workstation)

In particular, if we use a computer connected to the internet, we can:

- Make use of on-line services such as shopping (e-commerce) or banking
- Get access to a huge range of information for research
- Access different forms of entertainment (games, video, etc.)
- Join on-line communities (e.g. MySpace, Facebook, etc.)

Common Network Devices

1. **Network Interface Card (NIC)**
   - These are expansion cards located within the system unit that connect the computer to a network.
2. **Network Operating System (NOS)**
   - Control and coordinate the activities of all computers and other devices on a network.
3. **Client**
   - A node that requests and uses resources available from other nodes.
4. **Server**
   - A node that shares resources with other nodes.
5. **Host**
   - Any computer system that can be accessed over a network.
6. **Switch**
   - A central node that coordinates the flow of data by sending messages directly between sender and receiver nodes.
7. **Router**

- ❖ Is a network device that connects together two or more networks
- ❖ A common use of a router is to join a home or business network (LAN) to the Internet (WAN)

8. Bridge

- ❖ Is a network device that typically links together two different parts of a LAN
- ❖ A bridge links independent parts of a LAN so that they act as a single LAN

ACTIVITY

1. State three advantages of computer connected to internet. (3 marks)

   _____

2. Define Computer Network. (1 mark)

   _____

   _____

3.

   a) Differentiate between switch and a router. (2 marks)

   _____

   _____

   b) Differentiate between a client and a server. (2 marks)

   _____

   _____

   _____

   _____

4. List and explain two benefits of a computer connected to a network. (2 marks)

   _____

   _____

5. Fill in the table of common network devices.

No.	Picture of Device	Name	Function
1			
2			
3			

(6 marks)

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WORK SHEET 6

School: Ba Sangam College **Year:1202**

Subject: Home Economics

Strand	2 HEC 12.2 Food and Nutrition
Sub strand	HEC 1 2. 2.1 Kitchen Safety Hygiene and Management
Content Learning Outcome	HEC 12.2. 1.1 Distinguish features of industrial kitchen and the use of advanced kitchen equipment.

Kitchen Safety Hygiene and Management

Features of Industrial Kitchen

1. Architectural features, such as high ceilings, exposed beams, original floorboards and large windows, are present.	7. Metal furniture If the kitchen is open plan, ensure the dining and living room furniture reflect the industrial aesthetic.
2. Wooden floorboards-are an alternative to polished concrete floors. It suits the industrial theme.	8. Open shelving -Choose open shelving instead of wall cabinets to create a hardworking, industrial environment.
3. Stainless steel- it has hygienic nature and can be used for bench tops, cupboard doors.	9. A bold use of black embraces the Industrial style – carry the theme through to all elements.
4. Freestanding units' -The sink unit, fridge and oven are also separate freestanding pieces. This allows the focus to be on the exposed brick wall.	10. Pressed metal- It can be left in its natural silver state or painted any colour. Originally used for ceilings, it also works on splash backs, walls and as cladding under a breakfast bar.
5. Exposed brickwork and pipes- Copper water pipes bring warmth and originality to the kitchen.	11. Statement lighting -Industrial pendant lights are popular and easy to come by nowadays, and large metal lights can be sprayed in any colour to suit the overall scheme.
6. Vintage bar stools -Modern stools are an appropriate choice, and look for materials	12. Large Windows for industrial kitchen allows light to enter the kitchen. It also assists

such as wood and metal.	in natural ventilation**.**

Activity

1. Identify any **four** features of industrial kitchens and state its reasons.
   (4 marks)

   _____

   _____

   Why do chefs prefer using stainless steel sink in the kitchen?
   (1 mark)

   _____

2. What is the **purpose** of having large windows in the kitchen?
   (2 marks)

   _____

   _____

3. What does use of black colour embraces? (1 mark)

   _____

4. Identify some items that can be added in the industrial kitchen to give it an aesthetic look.

   _____(2 marks)

5. Why do people prefer open shelves in their kitchen?
   (2 marks)

   _____

6. Identify some of the architectural features of the kitchen. (2 marks)

   _____

7. Collect a picture of any industrial kitchen from the magazines or old newspapers or illustrate an industrial kitchen consisting of any features of the industrial kitchen mentioned in the notes. (6 marks)

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WORKSHEET 6

SCHOOL:BA SANGAM COLLEGE YEAR 12

SUBJECT: PHYSICS NAME OF STUDENT: _____

STRAND	**FLUIDS**
SUB-STRAND	Properties of fluids
Content Learning Outcome	➢ Apply Bernoulli's effect to related problems ➢ Use fluid viscosity concept to relate to shear stress in fluids

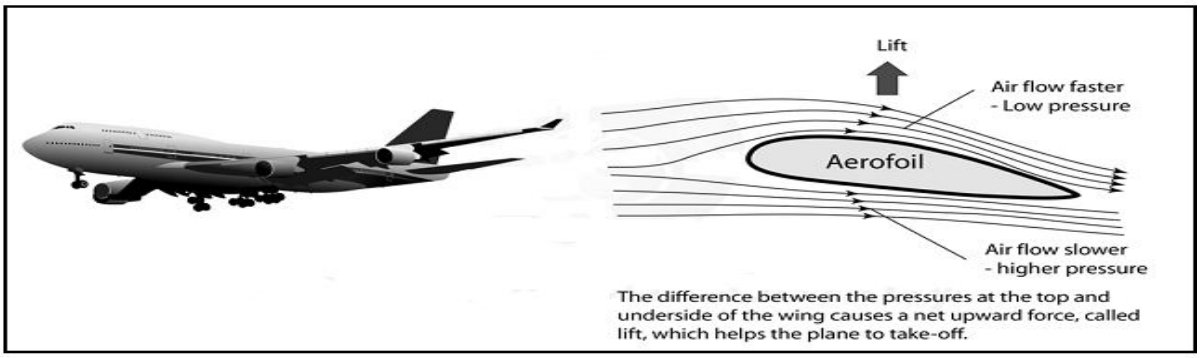
PROPERTIES OF FLUIDS

Bernoulli found that as the speed of a gas or liquid increases, its pressure drops. This means that air rushing over a surface, for example, pushes against the surface less than if the air were still.

" The Bernoulli principle states that **the pressure in a fast moving stream of air is lower than in a slower stream of air.**''

That is, fast air will produce low pressure and slow moving air will produce high pressure.

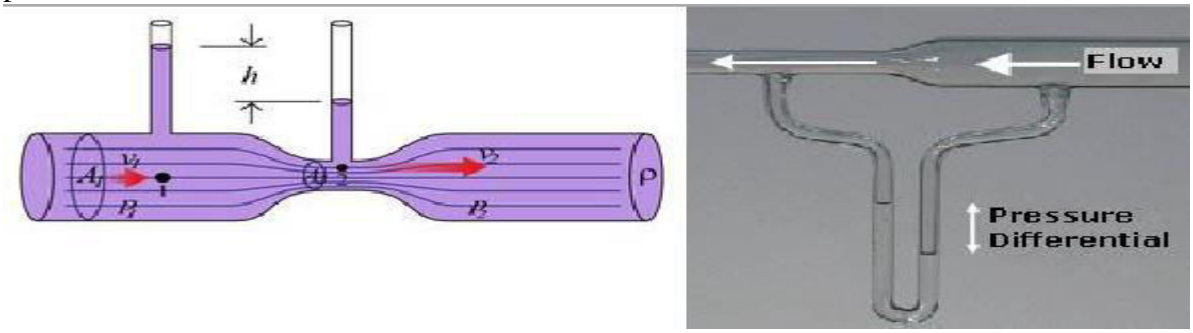
- APPLICATION



Venturi meter

Venturi tube, an instrument for measuring the drop in pressure that takes place as the velocity of a fluid increases. It consists of a glass tube with an inward-sloping area in the middle, and manometers, devices for measuring pressure, at three places: the entrance, the point of constriction, and the exit. The Venturi meter provided a consistent means of demonstrating Bernoulli's principle.

A flow of air through a venturi meter, showing the columns connected in a U-shape (a manometer)and partially filled with water. The meter is "read" as a differential pressure head in cm or inches of water

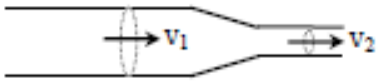


ACTIVITY

1. A liquid with a low viscosity
   A. flows slowly.
   B. flows quickly.
   C. does not move.
   D. has a definite shape. (1 mark)

2. If the temperature of a gas is constant and pressure is decreased, the volume will
   A. increase.
   B. decrease.
   C. remain the same.
   D. change randomly. (1 mark)

3. (1 mark)

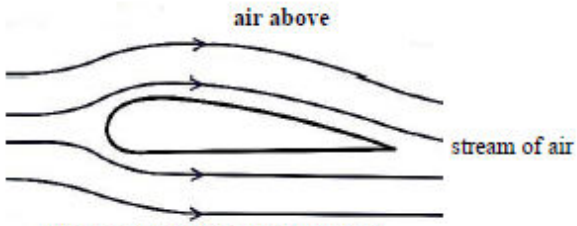


Section of a Venturi tube

Which of the following is **true** about velocity of fluid in the Venturi tube?

A. $v_1 = 0$
B. $v_1 < v_2$
C. $v_1 > v_2$
D. $v_1 = v_2$

4.



Cross section of an aircraft's wing

Which of the following correctly describes the pressure and speed of **air above** the aircraft's wing?

	Pressure	Speed
A.	low	slow
B.	low	fast
C.	high	slow
D.	high	fast

(1 mark)

5. Using Bernoulli's effect, explain how an airplane wing works. (2 marks)

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Yaca:

Tagede

YEAR 12 NA VOSA VAKA VITI

WORKSHEET 6

(15 na maka)

Strand	Volavola kei na bulibuli
Sub Strand	Na vola ivola ni vakaraitaki nanuma
Content Learning Outcome	Tuvana matau na vosa ena loma ni veiyatuvosa me volai rawa kina na ivola

Na Vola iVola (15 na maka)

Na vola ivola e sala ni noda veitaratara se vakasavuitukutuku. E sala makawa sara ka se vakayagataki tikoga nikua .E dina ni sa vakayagataki na talevoni veikauyaki , e levu se vakayagataka tikoga na ivola me sala ni nona vakau itukutuku vua e dua tale.

E rua na mataqali ivola e vulici ena Vosa vaka Viti

i. Vola vakaveiwekani (informal) – volavola vua e dua drau veikilai vinaka se veiwekani voleka
ii. Vola vakacakacaka (formal) – volavola vua e dua o sega ni kila, vakaitutu cecere, drau sega ni veiwekani.

Vola vakacakacaka - Veika bibi mo kila :

- Vola na nomu ituvatuva
- Tiko na kena inaki
- Volai na nona itikotiko o koya e volavola /kei koya talega ena laki ciqoma na ivola
- Volai na tikinisiga
- Veikidavaki ena Ia saka se I' saka
- Sega na vakavakadigo ena volai ni tikotiko (address)
- Tekivu ena laini na parakaravu taucoko ka vakalalai e dua na laini ni oti e dua na parakaravu.
- Me vakaiwasewase na parakaravu me rawa ni kilai na ikau, lewena kei na itinitini. E rau leleka na ikau (matai) kei na itinitini ni parakaravu ka rabailevu na lewena (rawa ni 2 -3 na parakaravu).
- Kakua ni vakabula vei koya o volavola tiko kina baleta ni o drau sega ni veiwekani.
- Tinia na nomu volavola e na nomu vakayagataka na "Nomuni Tamata Vakarorogo se Nomuni Tokani"

Taro: Vola ni Kudru: E sa rogovaki tiko yani ni na laki dabe e dua na volau ni keli kopa ena nomudou veikau e Korolevu , Vauvau, Labasa. Na kabani ni Korea oqo ena vakayagataka e 70 na pasede na veikau ena nomudou koro me rawa ni cicivaka kina na nona bisinisi. E sa vakadonui talega me ra na cakacaka kina na itabagone ni nomudou koro. Me vaka ni o iliuliu ni tabagone, e mosita tu na yalomu na vakacaca levu o ni sa na vakarau lako curuma ena veivakatorocaketaki oqo. Ni oti nomu vakaraitaka na nomu vakatutu ena bose vakoro, sa kerei iko kina na iliuliu ni vanua mo vola e dua na ivola ni kudru vua na Daireketa ni iYaubula , Kato ni Meli 80 , Suva ka vakaraitaka vua e tolu na sala o ni saqata kina na veivakatorocaketaki oqo.
Me yacamu o Sikeli Tuiviti se o Salasenini Tuiviti

T	Y	L	W	T	VV	KL: 15