LESSON NOTES

School: Ba Sangam College	**Year/Level: 11**	**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.

Subject-verb agreement

Basic Rule
 A singular subject takes a singular verb. e.g. Peter is going to town
 A plural subject takes a plural verb. e.g. The boys are going to town

Rules:
1. or, either/or, or neither/nor
Two singular subjects connected by the above require a singular verb.
The verb in or, either /or, or neither/nor sentence agrees with the noun or pronoun closest to it.

Examples:

- My sister or my brother is arriving by plane today.
- Neither Timothy nor Pravesh is available.
- Either Tina or Lesy is helping today with birthday decorations.
- Neither the boys nor the girl agrees to the decision made by the school.
- Neither the girl nor the boys agree to the decision made by the school.

2. A plural verb is used with two or more subjects when they are connected by and.

Eg A car and a bike are my means of transportation.

3. Some subjects always take a singular verb even though the meaning may seem plural. These subjects always take singular verbs: each, someone, either, anyone, neither, nobody, one, somebody, no one, anybody, everyone, everybody

Eg. Someone in the game was hurt.   Neither of the men is working.

4. Sometimes the subject is separated from the verb by such words, together with, as along with, as well as, besides, not, etc. These words and phrases are not part of the subject and the subject is not affected by these phrases.

Eg> The teacher, along with the Manager, is expected shortly. ♣ The teachers, together with the Manager, are expected shortly.

5. Use a singular verb with distances, periods of time, sums of money, etc., when considered as a unit.

Eg. Ten kilometers <u>is</u> too far to walk. Five years <u>is</u> the maximum sentence for that offence. Twenty dollars <u>is</u> a high price to pay.

6. With words that indicate portions—e.g. a lot, a majority, some, all. If the noun after of is singular, use a singular verb. If it is plural, use a plural verb

Eg. A lot of the <u>cake</u> <u>has</u> disappeared. A lot of the <u>cakes have</u> disappeared. All of the <u>cake is</u> gone. All of the <u>cakes are</u> gone.

7. With collective nouns such as, group, jury, family, audience, population, the verb might be singular or plural, depending on the writer's intent.

Eg. All of my family <u>has</u> arrived OR <u>have</u> arrived. ♣ Most of the jury <u>is</u> here OR <u>are</u> here.

8. If one of the words each, every, or no comes before the subject, the verb is singular.

Eg. No smoking or drinking alcohol <u>is</u> allowed. ♣ Every man and woman <u>is</u> required to sign in the attendance.

Activity Questions

Choose the correct form of the verb that agrees with the subject   **(15 marks)**

1. Annie and her brothers (is /are) at school. _____

2. Either my mother or my father (is /are) coming to the meeting. _____

3. George and Tamara (doesn't /don't) want to see that movie. _____

4. The man with all the birds (live /lives) on my street. _____

5. The movie, including all the previews, (take /takes) about two hours to watch. _____

6. The players, as well as the captain, (want /wants) to win. _____

7. Every one of those books (is /are) fiction. _____

8. Nobody (knows /know) the trouble I've seen. _____

9. The committee (debates /debate) these questions carefully. _____

10. There (was /were) fifteen candies in that bag. _____

11. The committee members (lead /leads) very different lives in private. _____

12. The Prime Minister, together with his wife, (greets /greet) the press cordially. _____

13. Either answer (is /are) accepted. _____

14. Eight dollars (is /are) the price of a movie these days. _____

15. Benito (doesn't /don't) know the answer. _____

WORKSHEET 6

BA SANGAM COLLEGE   **YEAR 11**

SUBJECT: MATHEMATICS   **NAME OF STUDENT:** _____

STRAND	*RELATIONS*
SUB-STRAND	Functions
Content Learning Outcome	➢ *Explore and evaluate Functions*

A function **relates** inputs to outputs.

  ➢ A function takes elements from a set (the **domain**) and relates them to elements in a set of all the actual values y called the **range.**

  ➢ A function is a **special** type of relation where:
  ✓ **every element** in the domain is included, and
  ✓ any input produces **only one output** (not this **or** that)

  ➢ An input and its matching output are together called an **ordered pair.**

  ➢ So a function can also be seen as a **set of ordered pairs.**

INVERSE OF A FUNCTION: The relation formed when the independent variable is exchanged with the dependent variable in a given relation. *(This inverse may NOT be a function.)*

INVERSE FUNCTION: If the above mentioned inverse of a function is itself a function, it is then called an *inverse function.*
Solving for an inverse relation algebraically is a three step process:

1. Set the function = *y*

2. interchange the *x* and *y* variables

3. Make y the subject

EXAMPLE:

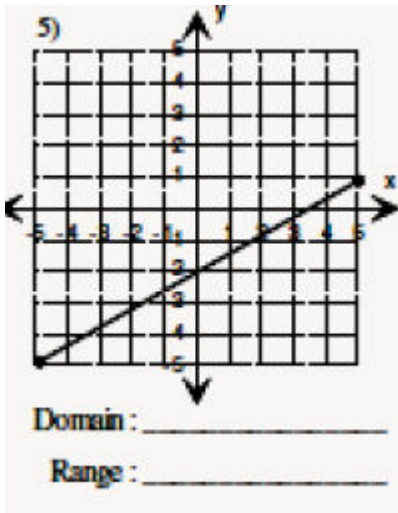Find the inverse of $y = x + 6$

  ➢ Interchange x and y variables
   $x = y + 6$
  ➢ Make y the subject of the formula
    $y = x - 6$

ACTIVITY:

1. List the domain and range of the given function. (2 marks)

Domain : _____

Range : _____

2. Find the inverse of $y = 2x + 3$ (2 marks)

3. Find the inverse of $y = -4x - 6$ (2 marks)

4. Find the inverse of $2y = 3x + 2$ (2 marks)

5. Is y = 2x -4 a function .Why ? (2 marks)

6. Is y = x – 5 is a function .Why ? (2 marks)

THE END

WORKSHEET 6

School**: Ba Sangam College**   Year: **11**
Subject: Chemistry   Name:

Strand	3 - Reactions
Sub strand	3.2 – Types of Reactions
Content Learning Outcome	Analyze the different types of chemical reactions from experimental set up and chemical equations.

COMBUSTION

It is the chemical term for the burning of substances in oxygen to form compounds called oxides. Though oxygen does not burn, it is used as it supports combustion.

Metals will burn completely in oxygen to form metallic oxides. The oxides are ionic compounds and are basic in nature.

Eg. Magnesium + Oxygen $\rightarrow$ Magnesium oxide $2Mg(s) + O_2 (g) \rightarrow 2MgO(s)$

Non-metals burn completely in oxygen to form non-metal oxides. These oxides are molecular substances and are acidic in nature; most are gases at room temperature.

Eg. Carbon + Oxygen $\rightarrow$ Carbon dioxide $C(s) + O_2 (g) \rightarrow CO_2 (g)$

SYNTHESIS

Naturally occurring elements combine chemically to form a compound. When two non-metals combine, a covalent substance is formed. However, metals combine with a non-metal to form ionic compounds.

Example 1 Combination of two non-metals.

$C(s) + S(s) \rightarrow CS_2$, Carbon disulphide

Example 2 Combination of a metal and a non-metal

$Fe(s) + S(s) \rightarrow FeS (s)$ Iron sulphide

Example 3 Formation of oxides

All combustion of elements is synthesis reaction.

DECOMPOSITION

Some carbonates and nitrates are decomposed by heat. Carbonates are decomposed to form carbon dioxide and the oxide of the metal.

The set up below shows the laboratory preparation of carbon dioxide by the decomposition of marble chips, CaCO3.
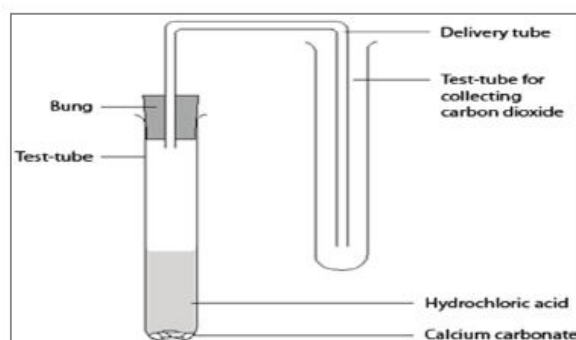
The presence of the carbon dioxide formed can be tested by passing it through lime water.

E.g. Calcium carbonates $\rightarrow$ Calcium oxide + Carbon dioxide
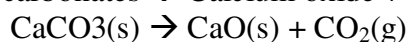
$CaCO3(s) \rightarrow CaO(s) + CO_2(g)$

For each reaction below:

I. Write a balanced equation.

II. Classify the type of reaction and give a reason for your choice.

1. Burning of sulphur
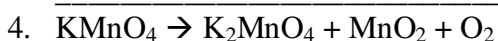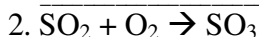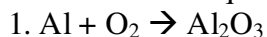
   _____

2. Burning of magnesium

   _____
   _____

3. Formation of ammonia from nitrogen gas and hydrogen gas

   _____
   _____

4. Complete combustion of methane, CH_4 (g) to form carbon dioxide and water.

   A. Balance the equations given below:

   1. $Al + O_2 \rightarrow Al_2O_3$

   _____

   2. $SO_2 + O_2 \rightarrow SO_3$

   _____

   4. $KMnO_4 \rightarrow K_2MnO_4 + MnO_2 + O_2$

   _____
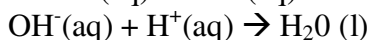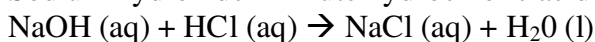
NEUTRALISATION (acid-base reaction)

In a neutralisation reaction, acids react with bases to form salt and water.

Example

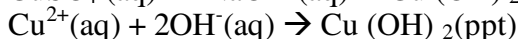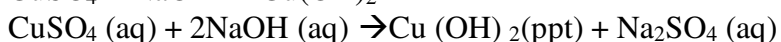Sodium hydroxide + Dilute hydrochloric acid $\rightarrow$ Sodium chloride + Water

$NaOH$ (aq) + HCl (aq) $\rightarrow$ $NaCl$ (aq) + H_2O (l)

OH^-(aq) + H^+(aq) $\rightarrow$ H_2O (l)

Carbonates react with dilute acids to form salt, water and carbon dioxide.

$CaCO_3 + 2HCl \rightarrow CaCl_2 + CO_2 + H_2O$

PRECIPITATION

It is the formation of an insoluble salt from the mixture of two different clear solutions. The insoluble salt formed is the precipitate (ppt).

Example

$CuSO_4 + NaOH \rightarrow Cu(OH)_2$

$CuSO_4$ (aq) + $2NaOH$ (aq) $\rightarrow Cu(OH)_2$(ppt) + Na_2SO_4 (aq)

Cu^{2+}(aq) + $2OH^-$(aq) $\rightarrow$ $Cu(OH)_2$(ppt)

Exercise

A. For each reaction below:

I. Write a balanced equation.

II. Classify the type of reaction and give a reason for your choice.

1. Precipitation of silver chloride by reacting barium chloride with silver nitrate.

   _____

2. Formation of solid barium sulphate by reacting barium chloride with dilute sulphuric acid.

   _____

3. Release of carbon dioxide by reacting sodium carbonate with dilute sulphuric acid.

   _____

4. Copper metal formed as zinc granules is placed into a test tube containing copper sulphate solution.

   B. Balance the equations given below:
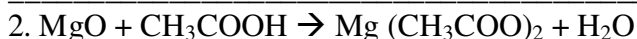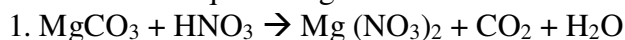
   1. $MgCO_3 + HNO_3 \rightarrow Mg(NO_3)_2 + CO_2 + H_2O$

   _____

   2. $MgO + CH_3COOH \rightarrow Mg(CH_3COO)_2 + H_2O$

   _____

   3. $NH_4OH + Al_2(SO_4)_3 \rightarrow Al(OH)_3$(ppt) + $(NH_4)_2SO_4$

LESSON NOTES

SCHOOL: BA SANGAM COLLEGE   **YEAR: 11   Name:_____**

SUBJECT: GEOGRAPHY

Strand	Physical Geography
Sub Strand	Vegetation
Content Learning Outcome	Investigate the existence of the types of vegetation, their distribution and challenges associated with it and discuss its importance and interrelationship with human beings and ecology.

LESSON NOTES

TYPES OF VEGETATION

- Indigenous or native and Exotic vegetation

FACTORS AFFECTING THEIR DISTRIBUTION

Climate - Rainfall is an important factor in determining the vegetation.

Relief- high areas have sparse and short vegetation due to cold temperatures and thin soil. Areas of low elevation have relatively warmer climates and are characterized by taller forest trees.

Soil Fertility - Thicker fertile soil has denser vegetation than infertile soil.

TYPES OF LAND USE

Tropical rainforest	Temperate Deciduous Forest	Coniferous Forest	Tundra vegetation	Grassland
-trees are mainly hardwoods and have an evergreen appearance. -the tallest trees;different species	Deciduous trees shed their leaves during the winter season. - forests contain few species	-The trees are evergreen. - The trees are softwoods. The needle like leaves are small to reduce transpiration. - Few animals are found because of lack of food.	- Plants are very slow and low growing - Low organic productivity -The dominant plants are lichens, mosses, grass, - Most have small leaves to limit transpiration and short roots.	- trees are xerophytic (drought resistant) - Roots are long and extend to tap any underground water -Desert vegetation - Plants are xerophytic.

ACTIVITY

A.RESOURCE INTERPRETATION
Use the resource given below and your knowledge to answer the question that follows:

Source: http://www.paagombudsman.com
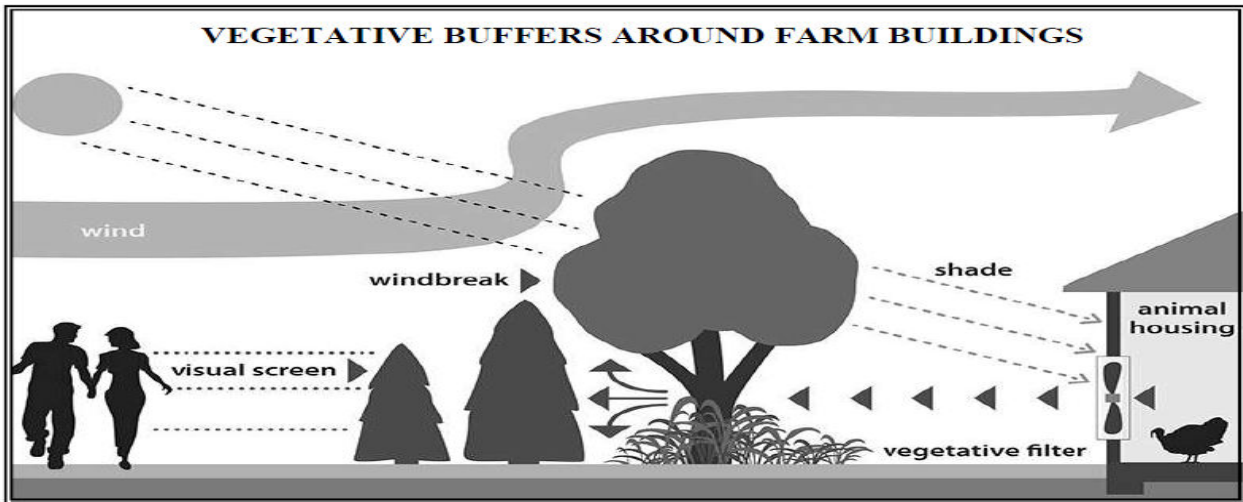
1.Describe **two** roles played by vegetation in the diagram above.

_____
_____ **(2 marks)**

2. Explain **one** reason why environmentalists would strongly be against forest clearance and burning,
_____
_____ **(2 marks)**

B. SHORT ANSWER QUESTIONS
1. Differentiate between indigenous vegetation and exotic vegetation.
   _____
   _____ ___**(2 marks)**
2. What are the factors that influence the growth and distribution of vegetation?
   _____
   _____ **(2 marks)**
3.   How do humans influence vegetation?
   _____
   _____
   _____**(2 marks)**
4.   Describe the adaptive features of tropical rainforest.
   _____
   _____**(2 marks)**
5.   How does elevation influence vegetation?
   _____
   _____ _____**(2 marks)**

WORKSHEET 6

School: **Ba Sangam College**   Year/level: **11**

Subject: **Biology**   Name:

Strand	Structure and Life Processes
Sub Strand	Structure and function in animals
Content Learning Outcome	Explore and study the different organ systems and account for their functional adaptive features

Lesson Notes   **The Human Digestive System (feeding system)**

Figure 5.1 The Human Digestive system

Source: hsc.csu.edu.au
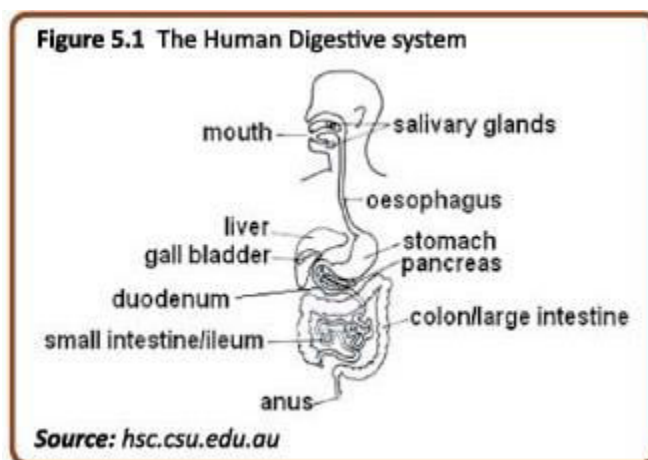
➢ **Digestion –** is the process of breaking down food into smaller particles for easy absorption.
➢ Five main activities involved in the process of digestion.
   1. Ingestion – process by which food is taken into the mouth
   2. Digestion – this involves two types:
      ✓ Mechanical/physical digestion: the breakdown of large food particles in the mouth by the teeth.
      ✓ Chemical digestion: the breakdown of larger molecules into smaller molecules by enzymes

   3. Absorption – the taking in of digested food material at the ileum

   4. Assimilation – the use of absorbed materials by cells.

   5. Egestion – removal of undigested food through the anus.

EXERCISE

1. What is digestion?

_____

_____

(1 mark)

2. Name the two types of digestion.

   _____

   _____   (2 marks)

3. Why is digestion important?

_____

_____

(1mark)

4. Differentiate between mechanical and chemical digestion.

_____

_____

_____

_____

(2 marks)

The End

WORKSHEET NO: 6

LESSON NOTES:

Preparation of Timber:

The preparation of rough, undressed timber accurately is important to get a good finished job. It is useful to first understand that every piece of timber has six faces: two sides, two edges and two ends and all of these have to be prepared before the piece becomes a suitable project member.

Step 1   Face Side

Select the face side and plane it perfectly flat. Test for flatness with winding sticks and straight-edge. Test lengthwise, crosswise and diagonally. Mark with a face side mark pointing to the edge which has been selected as the face edge.

Face Side Mark
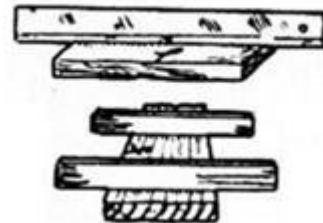
Step 2 Face Edge

Plane the face edge perfectly straight and square to the face side. Test for straightness with the straight-edge, and for square-ness to the face side with the try-square. Mark this edge with a face edge mark pointing to the face side.

Face Edge Mark
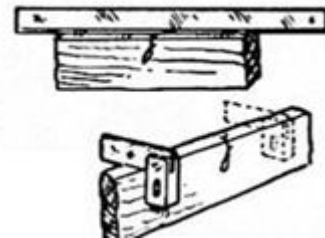
Step 3 Gauges to Required Width

Gauge to the required width on the both sides, using the marking gauge from the face edge. Plane down to the gauge lines. Test for straightness and square-ness.
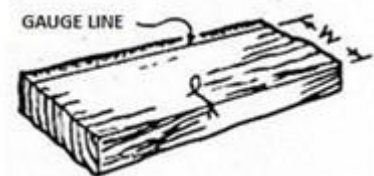
Step 4 Gauges to Required Thickness

Gauge to the required thickness on both edges, using the marking gauge.

Plane down to the gauge lines. Test for straightness.
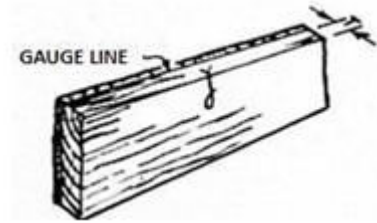
Step 5   Shoot End

Square, cut and shoot (plane) one end. Test for square-ness to face side and face edge.
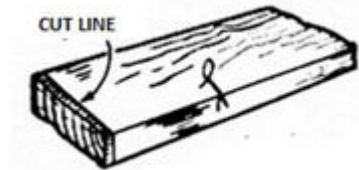
Step 6   Cut to Size

Measure the required length from the prepared end on the face side and transfer the mark to the face edges. Cut and shoot off waste using a tenon saw or cross-cut saw.
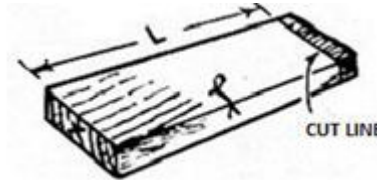
STUDENTS ACTIVITY:

1. Give a reason why we need to prepare timber.
    _____
    _____

2. Draw the face side mark and the face edge mark.

3. List down the six steps of preparing timber.
    _____
    _____
    _____
    _____
    _____
    _____
    _____

LESSON NOTES

School: Ba Sangam College   **Year: 11**   **Name: _____**

Subject: Economics

Strand 3	Macroeconomics
Sub Strand 3.1	National Income
Content Learning Outcome EC11.3.11	Examine the components of National Income

National Income

National income is made up of individual incomes earned in the economy, that is, income in the form of dollars that is earned by owners of factors of production, namely:

1. Owners of land earn rent
2. Owners of labour earn wages and salaries
3. Owners of capital earn interest
4. Owners of entrepreneurship earn profits

Gross Domestic Product and National Income

When a good or a service is bought the money handed over as its purchase price is split up among the owners of factors of production. It should therefore be possible to value national output (GDP) in terms of the income received.

This is why Gross Domestic Product and National Income are terms which are frequently used interchangeably unless the context is strictly statistical.

NOMINAL VERSUS REAL GDP

1.Nominal GDP measures the value of output of all final goods and services at current prices.

$$\text{NOMINAL GDP} = \frac{\text{Real GDP} \times \text{Price Index}}{\text{Base Year Index}}$$

2. Real GDP is a measure of output of final goods and services using the prices that prevail in some base year. <u>It is Nominal GDP adjusted for inflation</u>. It measures the value of all final goods and services produced by an economy in one year measured in constant prices.

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{CPI}} \quad x \quad \frac{\text{Base Year CPI}}{1}$$

Note

CPI represents Consumer Price Index which is defined as a standard market basket of goods and services purchased by a typical urban family. **(In Fiji, CPI = 100)**

Activity

1. Nominal GDP measures the value of output of all final goods
   A. only at base year prices.   B. only at current year prices.
   C. and services at current prices.   D. and services at constant prices.

(1 mark)

2. Differentiate between Nominal GDP and Real GDP

_____
_____
_____
_____
_____
_____ **(2 marks)**

3.The following table shows the Gross Domestic Product (GDP) data for Robinson Crusoe economy. Use the data to answer questions (i) and (ii).

Year	Price Index	GDP at Current Price ($m)	GDP at Constant Price($m)
2014	100	700	700
2015	276	1._____	1100
2016	300	3465	2._____

Base Year Index = 100

(i) Complete the table given by calculating the GDP at Current Price for year 2015 and GDP at Constant Price for year 2016.

1. GDP at Current Price ($m) **(Hint: GDP at Current Price Also known as Nominal GDP)**

_____
_____
_____
_____
_____

2. GDP at Constant Price ($m) **(Hint: Also known as Real GDP)**

_____
_____
_____
_____
_____

(2 marks)

THE END

3055 BA SANGAM COLLEGE

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Name - _____

Year - _____

HOME ECONOMICS

WORK SHEET 6

Strand	Clothing & Textiles
Sub- strand	Fibres & Fabrics
Content Learning Outcome	Explore the characteristics of special fibres, woven and knitted fabrics.

Study of Fibres, Fabrics Blends and Finishes and Decorations.

Terms:

a. **Fibre** Fibres are small hair like structure that either grows naturally on animals or plants.
b. **Yarn**: Yarn is a long, continuous thread made from twisted or spun fibres.
c. **Fabric** A thin, pliable, sheet like material made from woven, knitted or knotted yarns, or felted or bonded textile fibres.

Special Fibres

Fibres	Sources	Properties	Uses
Metallic Fibres Includes manufactured fibres composed of metal, metal-coated plastic.	Metallic fibres are produced in various ways including solid-state manufacturing and melt-state manufacturing, since metals can be cut, deformed and melt-procesed.	➤ Lightweight ➤ High Strength ➤ Durable ➤ Versatile ➤ Shiny, adds decoration to garments ➤ Magnetic	➤ upholstery fabric and textiles such as lame and brocade. ➤ Party and evening wear to club clothing
Elastomeric possess extremely high elongations at break and that recover fully from high elongations up to their breaking point.	are produced with natural and synthetic polymers.	➤ more elastic and durable than rubber ➤ quite weak. ➤ Dry-cleanable ➤ Hydrophobic	Use for texturized yarns and knitted structures and are used in waistbands, sock tops, foundation garments, and exercise wear.
MICRO-FIBERS Micro denier fiber-	made from polyester, nylon,	➤ Very Drape able yet not flimsy;	➤ Used to make mats, knits,

ultrafine fibers that are less than 1 denier in size.	rayon, acetate or a combination of those fibers.	➢ Soft with luxurious hand; ➢ Washable. Dry cleanable; ➢ Shrink- resistant	and weaves for apparel, upholstery. ➢ Athletic wear, such as cycling jerseys.

Worksheet 6

1. Describe the 3 special fibres and state 2 uses of each.   **(6 marks)**

   a. _____

   _____

   b. _____

   _____

   c. _____

   _____

2. Define the following terms: **(3 marks)**

   a. Yarns -

   _____

   _____

   b. Fabric-

   _____

   _____

   c. Fibre -

   _____

   _____

LESSON NOTES

School: **Ba Sangam College**   Year: **1101**   Name:_____
Subject: **Accounting**

Strand	4- Accounting Reports
Sub Strand	Final Accounts
Content Learning Outcome	Prepare Fully classified Statement of Financial Performance and Position from Trial Balance

Lesson Objectives: Students should be able to
- Explain the purpose of various accounting reports
- Prepare fully classified Financial Statements from Trial Balance

<div align="center">

Topic: Final Accounts
</div>

Accounting Reports and its purpose:
Financial reports are prepared by the accountants on the basis to help the end users in decision making.

Features of a good Accounting Report
Accounting report has several distinctive features.

1. **Clear heading** –accounting reports must have a clear heading showing the name of the business, the title of the report, date and the time period relevant to information in the report.
2. **Timeliness**- accounting information should be made available early enough to allow decisions to be made without undue delay.
3. **Accuracy** – accounting reports must be as accurate as possible to enable correct decisions to be made.
4. **Simplicity**- reports must be simple enough to be understood by the intended users.
5. **Consistency** - accounting reports from one accounting period to next should be prepared on a consistent basis so that the results of one accounting period can be compared with the next.
6. **Clear presentation**- accounting information should be clearly presented in order to be understood.

Compliance with law and accounting standard
Accounting reports must be prepared in accordance with Fiji accounting standards.

Limitations of Traditional Reports
1. Does not consider non-financial information.
2. Reports are based on historical data reported in the financial statement.
3. Pictorial analysis is not commonly practiced under traditional approach.

Preparation of Final Accounts
Final Accounts mainly comprises of Statement of Financial Performance and Statement of Financial Position. Traditionally these statements were known as Revenue Statement and

Balance Sheet. In reality, firms are mostly using Vertical/ modern/ statement forms to present their Financial Reports.

Trading Account (Component of Statement of Financial Performance)
- Simply shows the gross profit or loss derived by the business on purchases and sales of goods and services.

1. Net Purchases = Total Purchases – Purchase returns (returns outwards)
2. Net Sales = Total Sales - Sales returns (return inwards)
3. Goods available for Sale = Opening stock + Net Purchases + Buying expenses
4. Cost of Goods Sold = Goods available for Sale – Closing stock
5. Gross profit = Net Sales > Cost of Goods sold (appears on debit side of trading account)
6. Gross Loss = Net sales< Cost of Goods sold (appears on the credit side of trading account)

Statement of Financial Performance (Revenue Statement)

-is a summary statement of expenses and revenues to calculate net profit or loss.

Example: Samu owns and operates a store in Sigatoka. The unadjusted trial balance for the year ended 31st March 2013 is given below:

Trial Balance of SM Enterprise as at 31st March 2013.

Ledger Accounts			The following Adjustments are required at the balance date:
Stock at 1/04/12	11160		
Net purchases	45000		
Wages	17100		1. Wages due but not paid $160.
Utility Expense	6530		2. Insurance unexpired $180.
Building at cost	97200		3. Commission due but not received $60.
Plant	20000		4. Interest received in advance $40.
Cash at bank	12502		5. Depreciate plant at 10% per annum on straight line basis.
Accounts Receivables	5080		6. Create Provision for doubtful debts to 5% of the accounts receivables.
Office expenses	4950		7. Stock at 31/03/13 $3500.
Drawings	8000		
Insurance	1200		
Sales		97100	Prepare fully classified statement of Financial Position for the period ending 31/3/13.
Interest Received		380	
Provision for depreciation on Plant		4000	
Accounts Payable		5680	
Commission Received		1180	
Capital - Samu		120382	
Total	**228722**	**228722**	

Solution
Balance Day Adjustment

1.	Wages	160		**3**	Interest	40	
	Wages Due		160		Interest received in advance		40
2.	Prepaid Insurance	180		**4**	Depreciation on Plant	2000	
	Insurance		180		Provision for depreciation on plant		2000
3.	Commission Due	60		**6**	Doubtful debts	254	
	Commission		60		Provision for doubtful debts		254

SM Enterprise
Statement of Financial Position 31st March, 2013

	$	$	$
Current Assets			
Inventories		3500	
Cash		12502	
Accounts Receivables(5080 – 254)		4826	
Insurance Prepaid		180	
Commission Due		60	21068
Add Non-Current Assets			
Add Fixed Assets/ Property, Plant and Equipment			
Building		97200	
Plant (20000 – 6000)	20000		
Less Provision for Depreciation. on Plant	6000	14000	111200
Total Assets			**132268**
Less Liabilities			

Sangam Education Board – Online Resources

Current Liabilities			
Wages Due		160	
Interest Rec. In Advance		40	
Accounts Payable		5680	5880
Net Assets			**126388**
Proprietorship			
Capital		120382	
Add Net profit /Less Net Loss		14006	
		134388	
Less Drawings		8000	
Closing Proprietorship			**126388**

Activity Question

Now try to go through the examples on Financial Statements and complete the activity given below

1. **Given below is the trial balance of Shreya Builders for the year ending 30th June 2013.**

	$	$
Purchases	79400	
Sales		90000
Accounts Receivables	52000	
Accounts Payables		68000
Furniture	70000	
Dividends Received		6700
Bad debts	1700	
Provision for doubtful debts		2000
Interest on Mortgage	5600	
Accumulated Depreciation on Furniture		7600
Inventory 1st July 2012	23000	
Accumulated Depreciation on Delivery Vehicles		8000
Insurance	2400	
Commission Received		30000
Investment in government bonds	65000	
Mortgage		72000
Goodwill	50000	
Loan		40000
Building	56000	
Capital		263800
Cash at Bank	94000	
Advertising	10000	
Drawings		18000
Delivery Vehicles	48000	
Customs duty	13000	
	$588100	**$588100**

Additional Information:

1. Wages due $600
2. The business had bad debts of $600
3. Provision for doubtful debt was provided at 10% per annum.
4. Insurance premium is $200 per month. The insurance had been paid for a year till 31st August 2013.

5. The depreciation was allowed on Furniture at 10% per annum and on Delivery Vehicles at 5% per annum, using the straight-line method.

6. Commission of $300 was not received till the balance day.
7. The Closing Stock for the year was $58 500

8. The Net profit for the year is $37 060

   Required:
   1. Prepare the General Journal balance day adjustment for (1-6)
   2. Prepare a fully classified Statement of Financial Position of Shreya Builders as at 30th June 2013.

General Journal

		$	$			$	$
1.				**5**			
2.							
				6			
3.							
4.				**7**			

(7 MARKS)

Shreya Builders
Statement of Financial Position as at 30th June 2013.

	$	$	$
Current Assets			
Add Non-Current Assets			
Add Investments			
Add Intangible Assets			
Add Fixed Assets			
Total Assets			
Less Liabilities			
Current Liabilities			
Non-Current Liabilities			
Net Assets			
Proprietorship			

(10 MARKS)

Sangam Education Board – Online Resources

3055 BA SANGAM COLLEGE

PH: 6674003/9264117   E-mail: basangam@connect.com.fj

LESSON NOTES

School: Ba Sangam College   **Year/ Name:** 11_____
Subject: Agricultural Science   week 6

Strand	As 11.3 Agronomy
Sub Strand	As 11.3.1 Physical Properties Of Soil
Content Learning Outcome	Demonstrate the assessment methods used in determining the physical properties of the soil.

LESSON 1: WHAT IS SOIL STRUCTURE?

Lesson Outcome: At the end of this lesson the student will define soil structure and describe how soil structure develops.

Notes

Soil structure refers to the arrangement of the soil separates, sand, silt and clay, into units called soil aggregates.
Natural aggregates are called **peds** whereas clod is an artificially formed **soil mass**.
Soil structure is created through pedogenic (soil forming) processes over long periods of time, and involves two steps:

Step 1:
1. A clump of soil particles stick loosely together to form soil aggregates. These aggregates are influenced by:
- clumps of soil
- tillage

Step 2:
2. Weak aggregates are cemented to make them distinct and strong. Cementing agents include:
- clay
- organic matter
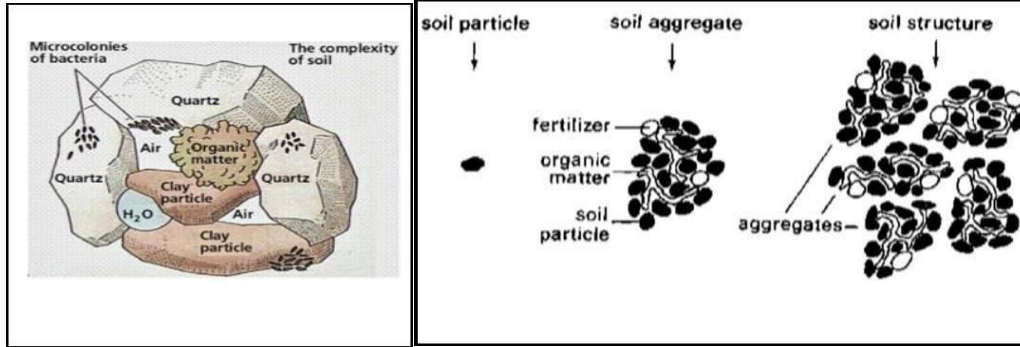
Activity Worksheet 6

1. Differentiate between a soil particle and a soil aggregate.

   _____

   _____

   (2 marks)

2. Discuss how soil structure develops.

   _____

   _____

   (2 marks)

3. Name two cementing agents?

   _____

   _____   **(2 marks)**

4. State the importance of having pore spaces in between soil structures?

   _____

   _____

   (2 marks)

5. Define the term Fragment?

   _____

   _____

   (2 marks)

6. Name two factors which influences soil aggregate

   _____

   _____

   (2 marks)

School: Ba Sangam College   **Year/Level: 11**   Name: _____

Subject: Technical Drawing   **Week 6**   Year: _____

Strand	Geometrical Drawing
Sub Strand	Isometric Drawing
Content Learning Outcome	Define isometric drawing, Identify the receeding axis, Contruct isometric cube Construct isometric drawing

Isometric projection is a method for visually representing three-dimensional objects in two dimensions in technical and engineering drawings. It is an axonometric projection in which the three coordinate axes appear equally foreshortened and the angle between any two of them is 120 degrees.

Projected image

(A) Orthographic views of a cube.

(B) Cube rotated 45° clockwise about axis.

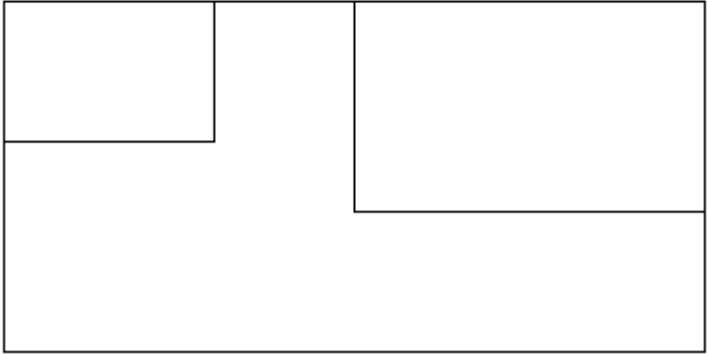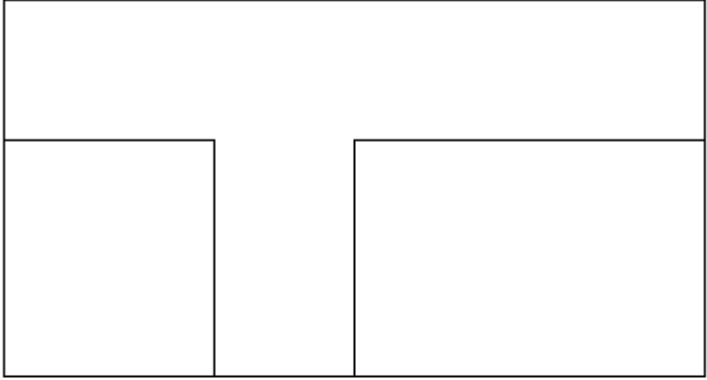(C) Axis rotated forward 35°16' (35.27°).
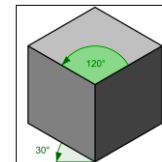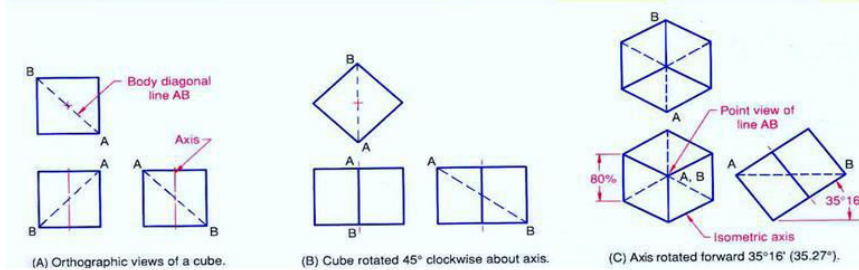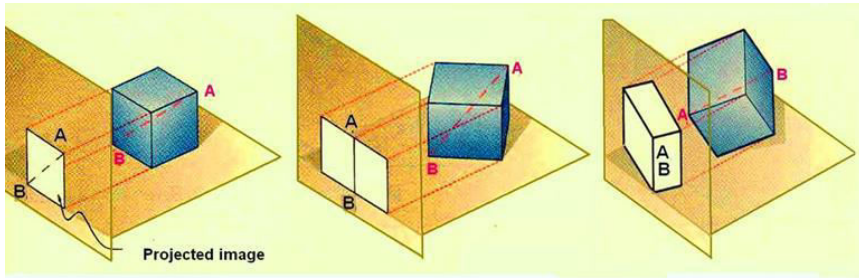
Activity   (20 marks)

Draw an isometric drawing of the shape given below to a scale of 1:1

Choose a reasonable starting point.

Reference
Year 11 text book

WORKSHEET 6

School: Ba Sangam College   **Year / Level: 11**
Subject: Computer Studies   **Name of Student**: _____

Strand	2 – Application Packages
Sub strand	2.1 Using Application Software
Content Learning Outcome	Identify and analyze software

4.1 Language Translators

❖ Are programs that convert programs written in high level programming language into machine language

❖ Since the CPU can process only 0"s and 1"s everything task that we perform on the computer must be converted into machine language (0"s and 1"s). Some examples of language translators are *compilers*, *interpreters* and *assemblers*.

Application Software

❖ Is created to perform either *specific* or *general* task which is not related to the computer system itself.

❖ Application software can be bought off-the-shelf.

❖ **There are two broad categories of application software:**

Special-purpose programs

❖ are designed to perform specific tasks for example inventory, payroll, accounting, point of sales, virtual reality, artificial intelligence and games. This software is in most cases customized to suit a particular business need.

General- purpose programs

❖ Are designed to be used by many people to do the most common kinds of tasks such as typing, preparing budgets, presentations and small databases. This is why they are also known as **basic application.** Word processors, spreadsheets, database management system and presentation graphics are general-purpose applications.

Common features of application software

Feature	Description
Tabs	Presents tools/buttons available for selection from the ribbon.
Shortcut keys	Special-purpose keys for frequently used commands.
Ribbon	Presents graphic objects/buttons for commands
Help	Presents explanations of various commands.
Dialog Box	Used to specify additional command options.
Insertion Point	Shows where data can be entered.
Scroll Bars	Used to display additional information.
Quick Access	Tools that are frequently used can be set here. Eg Save, undo, print and print preview.
Groups	Provide categorized tools options under specific headings.

	Feature	Description
Editing Features	Word wrap	Automatically moves the word to the next line once the current line is full. To begin a new paragraph or leave a blank line, you press the Enter key.
	Spelling and Grammar	Incorrectly spelled words are identified and alternative spelling suggested. Also, grammar checkers can be run that will identify poor wording, excessive long sentences, and Incorrect grammar.
	Thesaurus	Enables you to quickly find the right word or an alternative word with similar meaning.
	Find and Replace	You can quickly locate any character, word, or phrase in your document using the search or find commands.
	Merge	Mail merge or form letter features allows you to merge different names and addresses.
	Reference	Tables contents, footnotes, end notes, indexes, page numbers, bulleted lists etc.
	Clipboard	Cut, delete, copy, undo, redo and paste options.

	Paragraph	Numbering, bullet points, indentation, alignment, line/character spacing and borders & shading allows better organization of the contents in a document.
Formatting Features	Font	Type, color, size, bold, italics, underline and change case allow enhancing the appearance of the contents of the document.
	Styles	Allow contents to be organized according the heading, sub headings and captions.
	Tables	Text documents often include both text and numbers, this type of information can be displayed as a table in row-and-column format.
	Hypertext Link	Can be created to cross-reference information within the current document and between other files including WWW.
	Illustrations/Graphics	Objects such as lines and shapes can be inserted and modified.
	Internet Publishing	Many word processors are including features that allow you to create and edit documents to be displayed on the web.

WYSIWYG: stands for **"*What You See Is What You Get*"**.

❖ This means that the image on the screen display looks the same as the final printed document. The WYSIWYG feature allows the user to preview the document 's appearance before it is printed out.

ACTIVITY

1. **Differentiate** between **application software** and **language translators**.   (2 marks)

_____

_____

_____

_____

2. **List** and **describe** the two categories of application software with **two examples** of each.   (4 marks)

_____

_____

_____

_____

3. **List** and **describe** any **two common features of application software**.   (2 marks)

_____

_____

_____

_____

4. **List** and **describe** any **two editing features of application software**.   (2 marks)

_____

_____

_____

_____

5. **List** and **describe** any **two formatting features of application software**.   (2 marks)

_____

_____

6. Explain the concept of **"WYSIWYG.**   (2 marks)

_____

_____

Worksheet 6

School: **Ba Sangam College**   Year/Level: **11**
Subject: **Physics**   Name of student**:_____**

Strand	2-Energy
Sub-strand	2.1 – Work Done
Content Learning Outcome	Objective: ➢ Calculate the work done in (Joules) by a constant force using the formula Work =Force x Distance. ➢ Calculate the power delivered by the force.

WORK DONE
WORK DONE BY A CONSTANT FORCE
➢ Work is the amount of energy transferred from one object to another.
➢ It is defined as the force applied through a distance. Work done on an object by a constant force is given by:

Work done = Force $\times$ distance moved in the direction of force

W = F $\times$ d

➢ The S.I unit of work is in Joules (J)
➢ Force, F is in Newton (N) and distance moved, d is in meters (m)

Example 1
Alena pushes a block with a force of 5N, and the block moves 2m in the direction of her push. Calculate the amount of work done by Alena.
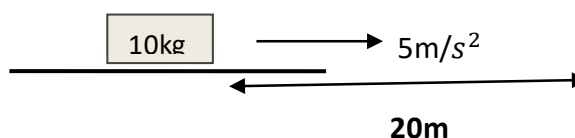
5N ⟶ [block]
⟵————2.0m————⟶
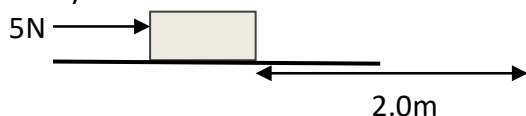
W = F.d = (5).(2) = 10J
This means that Alena has transferred 10 J of her chemical energy to the block. The chair gains 10J of energy and moves. Thus work done by Alena is 10J.

Example 2
A 10kg object experiences a horizontal force which causes it to accelerate at $5m/s^2$, moving it a distance of 20m, horizontally.

How much work is done by the force?

[10kg] ⟶ $5m/s^2$
⟵————————————⟶
20m

Note:
➢ From Newton's Second Law, the magnitude of the force(netforce) on the object is found to be F= ma = (10)(5) = 50N.
➢ It acts over a distance of 20m, in the same direction as the displacement of the object implying that the total work done by the force is given by:
W = F . d = 50.20 = 1000J

Example 3
Maca lifts up a 10 kg suitcase to a height of 60cm. How much work is done by Maca.
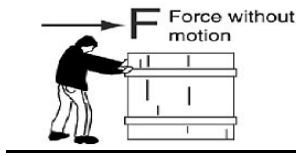
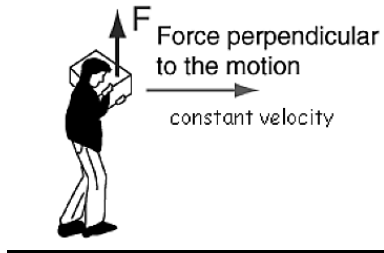[figure of person lifting, F up, 0.6m]
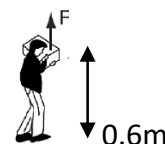
W = F.d = (100)(0.6) = 60J
Since the weight of the 10kg suitcase, F_g = mg = (10)(10) = 100N, Maca applies a minimum upward force of 100N to lift the suitcase over a distance of 0.6m.

When A Force Does No work
• When there is no motion in the direction of the force then no work done by that force.

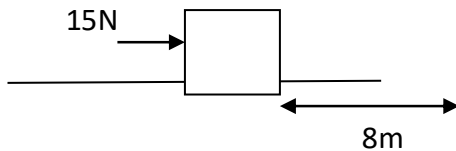- A force perpendicular to the direction of motion does no work.

POWER
Is the rate of doing work. It is the amount of energy transferred to an object every one second. It is given by the formula:

$$\text{Power} = \frac{Work\ Done}{Time\ taken} \text{ or } P = \frac{W}{t}$$

➢ The unit of power is J/s, however we use watts,W
➢ 1 J/s = 1W

Example
Find the power of a man who pushes a box 8m with a force of 15N in 6s.

15N

8m

$$P = \frac{W}{t} = \frac{F.d}{t} = \frac{15.8}{6} = \frac{120}{6} = 20W$$

This means that the man delivers an energy of 20J every one second.

ACTIVITY   (12 marks)
1. The work done in moving a block across a rough surface or the heat energy gained by the block can both be measured in

A. Watts   B. Newtons
C. degrees   D. Joules
                                        (1 mark)

2. Find the work done:
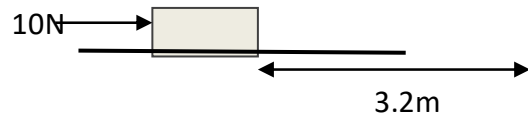a) A block is pushed by a force of 30N over a distance of 2m.

(2 marks)
b) Shivneel pushes the wheel barrow with a force of 100N over a horizontal distance of 5500mm.

(2 marks)
c) Alanieta applies a force of 1×10^3 N upward to hold a suitcase at a height of 5m.

(1 mark)
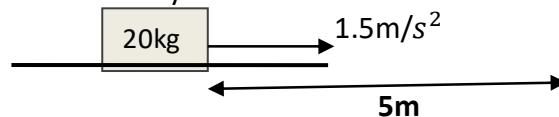3. Ridhi pushes a box with a constant force of 10N over a distance of 3.2m for 4seconds.

10N

3.2m

Calculate:
   a) work done on the box

(2 marks)
   b) power delivered to the box in 4s.

(2 marks)
4. A 20kg object experiences a horizontal force which causes it to accelerate at 1.5m/s^2, moving it a distance of 5m, horizontally.

20kg   1.5m/s^2

5m

   a) How much work is done by the force?

(2 marks)
   b) Calculate the power delivered to the object in 5s.

YEAR 11 NA VOSA VAKA VITI

WORKSHEET 6

Yacamu:

Tagede:

(20 na maka)

Strand	Vakarorogo kei na cavuti ni vosa
Sub Strand	Na Lawa ni Vosa - Na vosa veiganiti - Vosa vakaLotu
Content Learning Outcome	Vakayagataka na veivosa vovou me rawa ni vakavotuya na kena ibalebale

Vosa Vakalotu

Itautau ni vosa – Bibi, veivakauqeti,veisureti ka veivakayaloqaqataki

Kena inaki

- Veivakasalataki
- Veivunauci
- Veisureti

Kena idewadewa/iVurevure

Ivolatabu

Vola ni sere ni lotu

Vola ni vunau

Vola ni dusidusi vakalotu

iVakaraitaki

"Na vosa ni Kalou e bula ka gata na iseleiwau mai na iseleiwau batirua. Kevaka eda na vakawalena na nona vosa na vakawaleni keda na itaukei ni vosa. E da kila taucoko tu ni taukei ni vosa o Jiova na Kalou ….o....o koya e bulia na vuravura ka buli kedaru talega

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Vosa vakavanua

Kena inaki
- Vakatau ki na soqo vakavanua e vakayacori tiko
- Veivakamenemenei vei ira na qaravi tiko

- **Kena idewadewa**
- Sega ni volai
- E vosataki ga mai vei ira vatonaka tiko na iyau

Kena itautau
- E dau tau bibi ka rakorako

Vakaraitaki

Au kaciva saka tiko na isevusevu vakaturaga cabo tiko mai na vanua vakaturaga o Lalagavesi vua na kena iTaukei. Sevusevu ni bula, ni kalougata , vakadeitaka tiko madaga noda veiwekani ka ra kalougata tiko noda kawa ….mana….e i…dina.

Vurevure ni Tukutuku: *Lakovi, Tamata. A & Thomas. L. 2011*

Inaki – kacivi na sevusevu vakaturaga

Dewadewa – vosataki/ tabaki – Vurevure : *Lakovi*

Tautau ni vosa – Vakarokoroko – isevusevu vakaturaga

Cakacaka Lavaki

Vosa Vakalotu

Same: 23: 1-2   A noqu ivakatawa ko Jiova ena sega na ka me yali vei au. Sa vakadavori au ena vanua veico drokadroka ka tuberi au ena bati ni uciwai sa drodro malua.

Vurevure: Volatabu

i.   Vola e rua inaki ni tukutuku e cake. (2 na maka)

_____

_____

ii.   Vakamacalataka na usutu ni tukutuku e koto kina. (2 na maka)

_____

_____

iii.   Vakamacalataka na itautau ni vosa   (2 na maka)

_____
_____

    iv.   Na cava na kena idewadewa na vosa vakaLotu e toqai koto e cake?   (1 na maka)

_____
_____

    v. Vola e dua tale na ivurevure ni vosa vakalotu o kila? (1 na maka)

_____

Vosa vakavanua

> Ni sa tiko saka na turaga kei kemuni na lewenivanua.Au duri saka nikua meu talaucaka na vakavinavinaka levu vakaturaga ena nomuni yalo rawarawa me baleta na soqo vakavanua sa vakayacori rawa. Ni kalougata saka tiko …..ka me vakalougatataki kemuni na Kalou mai lagi…… au vura saka (rogo na vakacobocobo)

i. Vola e rua na inaki ni tukutuku. (2 na maka)

_____
_____

ii. Na vakavinavinaka ni cava e vakayacori tiko? Vakamacalataka (2 na maka)

_____
_____

iii. Vakamacala ena itautau ni vosa ? (2 na maka)

_____
_____

iv. E vakadewataki vakacava na vosa veiganiti oqo? (1 na maka)

_____
_____

v. Na cava na vuna e dau vakayacori kina na vakacobocobo ena vosa vakavanua (1 na maka)

_____
_____

B. Vola e **va** na kedrau duidui na vosa vakalotu kei na vosa vakavanua (4 na maka)

i.

_____

ii.

_____

iii.

_____

iv.

_____