



GLADSTONE TAYLOR/PHOTOGRAPHER

Minister of Culture, Gender, Entertainment and Sports, Olivia Grange (right) examines the details of a project developed by Dunoon Technical High School students on display at the International Women's Day 2018 Symposium, held at the National Indoor Sports Centre in Kingston.

The sales office – Part 2

HYACINTH TUGMAN
Contributor

IN THIS week's lesson, we will look at documents used in the sales office. Be sure to familiarise yourselves with these documents.

CATALOGUE AND PRICE LISTS

Products and services offered by an organisation are listed in a catalogue or inventory, with each item having its own reference number. Both the catalogue and the price lists are used by the sales staff and the customers.

The price list is usually listed in the catalogue or as a separate price list. The price list should indicate the basic price and any tax. So as to ensure that the list is accurate, it should be updated regularly.

LETTER OF ENQUIRY

A potential customer sends a letter to a supplier, making queries about the price of goods, availability of goods, cost of delivery and terms of sale.

QUOTATION

Quotations are sent in reply to a letter of enquiry, and tell the customer how much the goods or services will cost, and the terms on which payment may be made. Some organisations offer discounts to customers who buy in large quantity. Trade discounts are offered to people in the same trade, who will need to mark up the goods (add more to the price at which they bought them) before passing them on to their own customers.

ORDER

If the customer feels that the quotation is reasonable, he sends his order into the sales office, where details are checked and availability of goods confirmed.

INVOICE

This document gives details of goods sent to the customer and is sometimes sent along with goods. It states:

■ Quantity of goods supplied, description, unit price, total amount owed, any discount offered.

CREDIT NOTE

If the goods sent to a customer are not those required, or if the goods were overcharged, then the customer is entitled to credit. A credit note is then issued showing the details.

DEBIT NOTE

Where the customer is undercharged, either in error or because of price change, then a debit note must be sent.

DELIVERY NOTE

This

accompanies the goods. It gives the name and address of the recipient, the quantity and the description of the goods. On arrival, goods must be checked and signed by the recipient, acknowledging receipt of goods.

For the job in the sales office to be executed expeditiously and accurately, the following pieces of equipment are most important:

EQUIPMENT

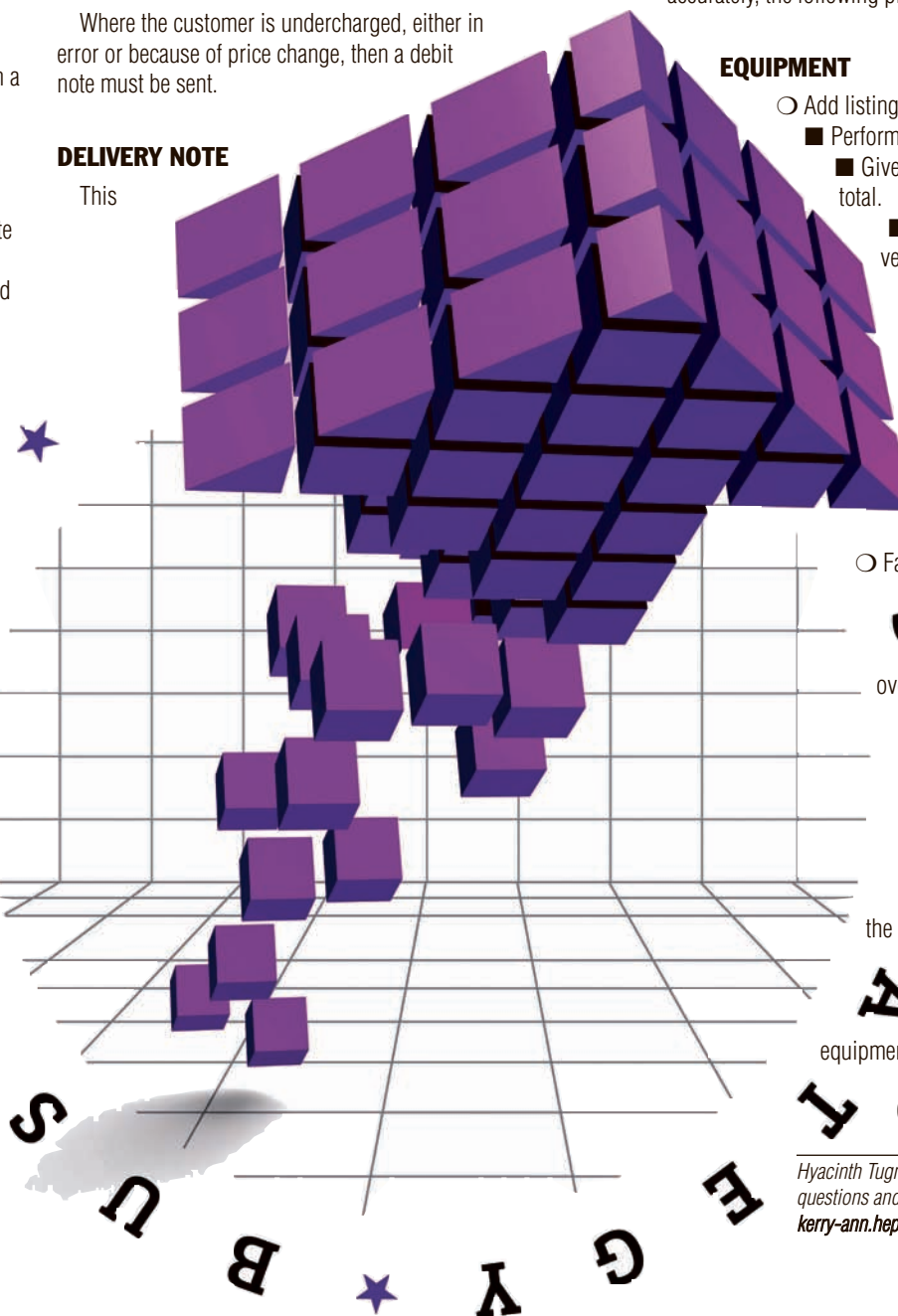
- Add listing machine
 - Performs accurate calculations.
 - Gives a printed record of the figures and the total.
 - Useful for cross-checking and verifying figures.
- Computer
 - Used for storing data.
 - Used for processing data.
 - Makes payroll calculations.
 - Keeps check of stock.
 - Generates statements.
 - Send documents as email/fax.

- Facsimile (Fax)
 - Used for transmitting documents.
 - May be used internally or overseas.
 - It is a hard copy, used as supporting evidence and can be filed.
- Photocopier
 - Produces copies of original documents and has the capacity to copy a number of pages in a few seconds.

Can you think any other equipment in this department?

God bless you.

Hyacinth Tugman is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com



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Roles of government – Part 2

YVONNE HARVEY
Contributor

IT IS so good to be with you all again. I trust that you are okay. Those of you who are doing the SBA component should be almost finished working on it. At the same time, you should be endeavouring to complete the syllabus and do some ongoing revision. This week, we will continue to look at the role of government by looking at Government's role in taxation.

THE ROLE OF TAXES

A tax is a compulsory payment levied on individuals and businesses by the government. It forms a major part of government revenue. Taxation is the process of paying taxes to the government.

The role or purposes of taxation includes:

- Government revenue to provide utilities, public and merit goods and to pay MPs, civil servants and other government workers.
- Taxes are also used to influence the consumption of goods or services considered by government to be harmful, e.g., cigarettes and alcohol.
- Governments use taxation to lessen the inequality of incomes and wealth between the rich and the poor, e.g., through progressive taxation.
- Taxes may be used to lessen imports (import duties – indirect tax) and thereby reduce balance of payments deficits.
- Used for the protection of infant industries.

FORMS OF TAXES

A tax may take one of three forms:

PROPORTIONAL

Every taxpayer pays the same proportion or percentage of his income in tax, e.g., in Jamaica, 25% is paid on income after the tax-free income is taken out.

PROGRESSIVE

A taxpayer with a higher income not only pays a larger amount of taxes, but also a larger proportion or percentage of his income in tax.

REGRESSIVE

This represents a smaller proportion of a wealthier person's income than the poorer person's income. All indirect taxes (taxes on goods and services) are by their nature regressive.

TYPES OF TAXES

Taxes are either direct or indirect.

Direct taxes are taxes on income. They are called direct since they are levied directly on the individual citizen or company. These taxes are either proportional or progressive. Examples are:

INCOME TAX

This is by far the most important source of revenue to most governments and is usually collected by the PAYE system, which is a convenient way to pay the tax.

CORPORATION TAX

This is similar to income tax but is levied on the profits of companies rather than individuals.

DEATH DUTIES

This is placed on money, land, house, etc., left by a dead person. It is paid by the person who has inherited such.

CAPITAL TRANSFER TAX

The recipient of capital goods such as land or property has to pay a tax on the value of the goods transferred.

CAPITAL GAINS TAX

This is paid on the increased value of assets sold, if the assets are sold for more than they were obtained for.

UNEMPLOYMENT LEVY

This is a form of social security contribution, e.g., in T&T.

RATES AND PROPERTY TAXES

These are paid on the unimproved value of the property.

STAMP DUTY

This is payable on cheques, receipts, contracts, on sale of house and land, etc.

EDUCATION TAX

Note - NIS and NHT are not taxes, they are contributions.

ADVANTAGES OF DIRECT TAXES

1. They are easy to collect, since they are levied directly on the person who is to pay.
2. They are easy to administer since they are collected mostly by the PAYE system.
3. The rate charged can be varied to suit the circumstance of the taxpayer, e.g., progressive tax.

DISADVANTAGES OF DIRECT TAXES

1. Expensive to collect and administer.
2. There are sometimes disputes regarding amounts to be paid.
3. Sometimes people forget to put aside amounts to be paid, hence the PAYE system.

Indirect taxes are taxes on goods and services. These taxes are only paid when people buy the goods and services that are taxed. They are called indirect because the average taxpayer pays them indirectly. The tax is paid to the seller or importer, who passes it on to the consumer in the form of higher prices; the tax collected is then passed on to the government. These taxes are regressive since the person with the smaller income pays a larger proportion of his income in tax than the higher-income earner. These are specific or ad valorem (tied to the value of the good). Some examples are:

PURCHASE TAX

Usually paid by the manufacturer when he sells goods to the retailer, e.g., GCT.

IMPORT DUTIES/TARRIFS

Paid on imported goods and services to reduce these imports.

EXCISE DUTIES

Similar to import duties but levied on certain home-produced goods in order to reduce their production and consumption, e.g., alcohol and cigarettes.

VALUE ADDED TAX

Levied on goods at each stage of production.

STAMP DUTY

This is sometimes seen as an indirect tax if paid when goods or services are purchased.

ADVANTAGES OF INDIRECT TAXES

1. Easy and cheap to collect.
2. Difficult to evade since it is paid with the purchase of goods and services.
3. Foreigners and tourists pay these also.
4. Usually no argument on the amount to be paid.

DISADVANTAGES OF INDIRECT TAXES

1. They tend to be regressive, i.e., rich and poor pay the same percentage.
2. They tend to increase the cost of living and may discourage trade.
3. Governments are uncertain how much tax will be collected, as it varies with the demand for the goods and services.

Our analysis of the role of Government is not yet complete. In the next lesson, we will continue to dig deeper into the topic. Do have yourselves a wonderful week.

Yvonne Harvey is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

Sole trader and its adjustment

ROXANNE WRIGHT
Contributor

WELCOME BACK. This week's presentation is a worked example. Follow the principles applies with a view to grasp them. Pay keen attention to the application of each principle.

QUESTION

Sarah Rattary and Valerie James are in partnership providing accounting services. They share profits and losses in the ration 3:2, respectively.

The following trial balance was extracted from the books of the partnership on December 31, 2016.

Sarah Rattary and Valerie James
Trial Balance as at December 31, 2016

	Dr.	Cr.
	\$	\$
Fee (income) [>1]		250600
Rent	52000	
Salaries	37200	
Sundry expenses	68800	
Bad debts	3200	
Provision for doubtful debts Jan. 1, 2016		660
Bank	180	
Office equipment	56000	
Provision for depreciation for office equipment		28000
Debtors	36600	
Creditors		1800
Capital accounts January 1, 2016		
Sarah Rattary		40000
Valerie James		20000
Current accounts January 1, 2016		
Sarah Rattary		11200
Valerie James		7440
Drawings		
Sarah Rattary	57440	
Valerie James	48280	
	359700	359700

- Additional information:
1. Rent paid in advance on December 31, 2016, amounted to \$4,000.
 2. Stall salaries totalling \$1,580 owed at December 31, 2016.

3. Office equipment depreciated at 50% per annum using the diminishing (reducing) balance method.
4. The provision for doubtful debts is to be adjusted to 5% of debtors.
5. Valarie James is entitled to a partnership salary of \$12,000 for the year.

You are required to prepare the:

- a. Profit & loss and appropriation account of Sarah Rattary and Valerie James for the year ended December 31, 2016.
- b. Partnership balance sheet as at December 31, 2016.

REASONING

- Fee income is the income from selling the accounting services.
- Diminishing-balance method should be applied on book value.
- Partners salary is not the expense of the firm but has to be deducted in the appropriation account when profits are being distributed.

WORKINGS

- Rent - Prepaid rent = Year end rent
\$52,000 - \$4,000 = \$48,000
- Salaries + Accrued = Accrued at year end
\$37,200 + \$1,580 = \$38,780
- Current year provisions: \$36,600 x 5% = \$1,830
Increase \$1,830 - 660 = \$1,170
- Pro for depreciation - office equipment = \$56,000-28,000 = \$28,000 x 50% = \$14,000
- Accumulated depreciation to be shown in the balance sheet - Office equipment = previous + current years depreciation: = \$28,000+ 14,000 = \$42,000

SOLUTION

a. Sarah Rattary and Valerie James
Profit & Loss and Appropriation Account as at
December 31, 2016

	Dr.	Cr.
	\$	\$
Fees (income)		250600
Less Expenses:		
Rent [w1]	48000	
Salaries [w2]	38780	
Sundry expenses	68800	
Bad debts	3200	
Prov. for Doubtful Debts [w3]	1170	
Pro. for depreciation – office equipment[w4]	14000	
Net Profit		173950

Less Salary... Valerie James		12000
Balance of profit to be shared:		64650
Share of Profit		
Sarah Rattary (3/5 x \$54650)	38790	
Valerie James (2/5 x \$54650)	25860	64550

b. Sarah Rattary and Valerie James
Balance Sheet as at December 31, 2016

	\$	\$	\$
Fixed Assets:			
Office equipment		56000	
Less Pro. for depreciation [w5]		42000	14000
Current Assets:			
Debtors	36600		
Less Pro for doubtful debts	1830	34770	
Prepaid rent		4000	
Bank		180	
		38950	
Less Current Liabilities:			
Creditors	1800		
Accrued salaries	1580	3380	
Working Capital			35570
			49570
Financed by:	Sarah Rattary	Valerie James	
	\$	\$	\$
Capital Account			
Current Account			
Balance January 1, 2013	11200	7440	60000
Partnership Salary		12000	
Share of Profits	38790	49990	45300
Less Drawings	57440	48280	10430
Balance December 31, 2016	(7450)	(2980)	49570

This is where we will end for this week. Join us next week as we continue to complete the syllabus. Grasp the concepts and retain them; you will need them as you progress to excellence.

See you next week.

Roxanne Wright teaches at Immaculate Academy. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

Practice questions

FRANCINE TAYLOR-CAMPBELL
Contributor

IN PREPARATION for the external examinations, we will include some past-paper questions for review.

1. Carbon dioxide is a greenhouse gas. Scientists think that an increase in greenhouse gases will result in global warming.

Describe two consequences of global warming.

Chlorofluorocarbons, CFCs, are also greenhouse gases.

(i) Name one other greenhouse gas found in the atmosphere.

(ii) State the origin of this greenhouse gas, named in part (i).

(iii) Describe how the presence of CFCs in the upper atmosphere increases the amount of ultra-violet (UV) light reaching the Earth's surface.

ANSWERS

Global warming refers to an increase in the surface temperatures of the Earth as a result of human activities. This can influence changes in climate leading to cases of extreme weather conditions, including heatwaves, hurricanes (storms and tsunamis), sea level rise, and flooding. These extreme weather scenarios can also affect living organisms whose habitat can be affected and destroyed. Another consequence of global warming is its effect on food production in areas affected by famines and floods, which can both lead to food shortage.

(i) Other greenhouse gases found in the atmosphere are water vapour, carbon dioxide and methane.

(ii) Carbon dioxide has increased in the atmosphere due to increased combustion of fossil fuels.

(iii) The ozone layer forms a protective blanket to prevent harmful UV radiation from entering the Earth's atmosphere. Chlorofluorocarbons are unreactive in the lower atmosphere, but in the upper atmosphere

(stratosphere), they react with ozone gas (from ozone layer) and break it down. When this layer is broken down by reacting with CFCs, more harmful UV radiation is allowed to enter the Earth's atmosphere, leading to increased temperatures as well as skin damage and cancers.

2. Choose from the following gases to answer the questions below.

ammonia
argon
carbon monoxide
chlorine
hydrogen
nitrogen
nitrogen dioxide
oxygen

Each gas can be used once, more than once or not at all.

Name a gas which:

- (a) is made during the incomplete combustion of octane?
- (b) dissolves in water to make an alkaline solution?
- (c) is monatomic?
- (d) is a reducing agent in a blast furnace?
- (e) is an unreactive gas?
- (f) is formed from the reaction of metals and acids?
- (g) is coloured and formed from the decomposition of some nitrates?

ANSWERS

(a) Carbon monoxide is produced from the incomplete combustion of octane.

(b) Ammonia is an alkaline gas and will dissolve in water to form an alkaline solution.

(c) Argon is

monatomic – this means the gas is made up of single atoms of argon. Note: A diatomic gas is made up of two atoms of the element combined, e.g., Cl_2 , H_2 and N_2 .

(d) Carbon monoxide is the reducing agent in the blast furnace. Coke (carbon) is burnt to produce carbon monoxide, which reduces the iron oxide to form iron.

(e) Nitrogen is an unreactive gas. High temperatures are required to break its bonds for it to react. For example, during lightning, nitrogen and oxygen combine to form nitrogen monoxide (NO).

(f) When metals react with acids, a salt is produced and hydrogen gas is liberated.

(g) Nitrogen dioxide is a yellow-brown gas which is liberated when some nitrates are heated. Eg., $2\text{Pb}(\text{NO}_3)_2 (\text{s}) \rightarrow 2\text{PbO} (\text{s}) + 4\text{NO}_2 (\text{g}) + \text{O}_2 (\text{g})$

Note: Oxygen is also produced but it is colourless.

3. A student was given two test tubes, one containing aqueous ammonia; the other aqueous copper(II) sulfate.

(a) A few drops of litmus solution were added to aqueous ammonia.

What colour is litmus solution in aqueous ammonia?

(b) What colour is aqueous copper(II) sulfate?

(c) What observations were made when:

(i) A few drops of aqueous ammonia were added to aqueous copper(II) sulfate?

(ii) Excess aqueous ammonia was added to the solution from (i)?

(d) When aqueous iron(II) ions are warmed with aqueous hydrogen peroxide, iron(III) ions are formed.

(i) Construct an

ionic equation for the oxidation of iron(II) ions to iron(III) ions.

(ii) Describe a chemical test that can be used to confirm that iron(II) ions have been oxidized to form iron(III) ions.

(e) Aqueous hydrogen peroxide was added to acidified aqueous potassium manganate(VII).

The purple solution turned colourless.

Aqueous hydrogen peroxide was added to acidified aqueous potassium iodide. The colourless solution turned brown.

What deductions can you make about hydrogen peroxide from these two observations? Explain your answer.

ANSWERS

(a) Ammonia is an alkaline gas which will change litmus solution to blue.

(b) Aqueous copper (II) sulphate will form a blue solution.

(c) When a few drops of aqueous ammonia are added to aqueous copper sulphate, a gelatinous blue precipitate is formed, which does not dissolve (is insoluble) when excess aqueous ammonia is added. The ionic equation for the reaction is: $\text{Cu}^{2+} (\text{aq}) + 2 \text{OH}^- (\text{aq}) \rightarrow \text{Cu}(\text{OH})_2 (\text{s})$ blue ppt.

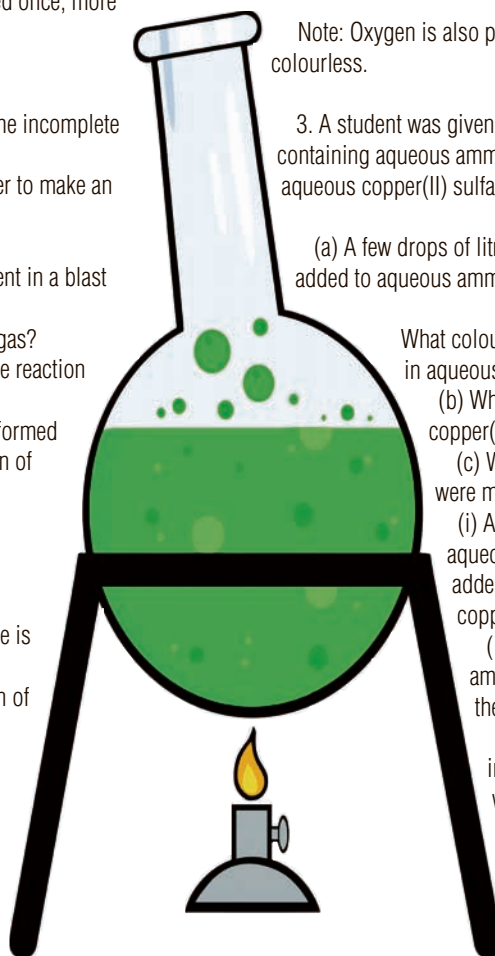
(d) $\text{Fe}^{2+} (\text{aq}) + \text{H}_2\text{O}_2 (\text{aq}) + 2 \text{H}^+ (\text{aq}) \rightarrow \text{Fe}^{3+} (\text{aq}) + 2 \text{H}_2\text{O} (\text{l})$. To confirm that iron (II) has been oxidized to iron (III) ions, add a few drops of aqueous sodium hydroxide solution and a red-brown precipitate of iron (III) hydroxide will be formed.

The ionic equation is: $\text{Fe}^{2+} (\text{aq}) + 3 \text{OH}^- (\text{aq}) \rightarrow \text{Fe}(\text{OH})_3 (\text{s})$ red-brown ppt.

(e) Potassium manganate (VII) is a strong oxidizing agent that will change from purple to colourless when reduced. This suggests that the aqueous hydrogen peroxide was the reducing agent. Aqueous potassium iodide (KI) is a known reducing agent which changes from colourless to brown when it is oxidized. This suggests that the hydrogen peroxide was acting as an oxidizing agent in this case.

These two observations indicate that aqueous hydrogen peroxide can behave both as an oxidizing agent and a reducing agent.

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Human activities on natural resources

MONACIA WILLIAMS
Contributor

"When we heal the earth, we heal ourselves."

– David Orr

HOW ARE you all this week? I hope that everything has been going well for you and that you are keeping up with your work. Remember that you need to keep up with your labs; don't allow them to pile up before you start writing them up. If you do that, you are going to run into problems. You will almost always forget vital bits of information that will be needed to do a good job.

This week, we continue our study of human activities on the environment by looking at how these activities impact the earth's natural resources. What are these resources, you ask? They include resources used to provide us with energy, minerals, forests and resources obtained from the seas and oceans.

ENERGY

Most of the energy used by the growing number of humans to support their lifestyles comes from fossil fuels. Fossil fuels (oil, coal, natural gas) were formed from the remains of organisms many, many years ago. These, because of their origin, fall in the category of non-renewable resources; therefore, once they become depleted they cannot be readily replenished. The dependence on fossil fuels has given abundant riches to those countries which are fortunate enough to have these resources and are managing them well. Other countries have been seeking alternative sources of energy due to the high cost of oil on their sometimes-fragile economies.

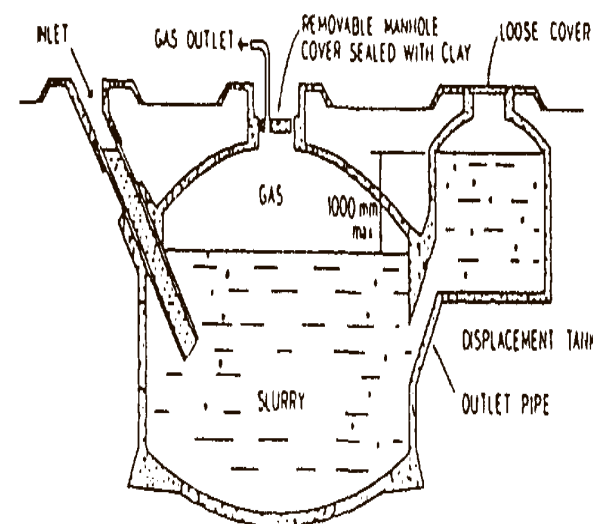
ALTERNATIVE SOURCES OF ENERGY

■ **Plants** – Three types of fuel can be generated from plants: solid, liquid and gas. Wood, charcoal and waste form the solid, alcohol and vegetable oil form the liquid, and biogas forms the gas.

■ **Solid** – Wood from trees is a direct form of fuel; also, the wood can be used to form charcoal. Charcoal is formed by heating wood in specially built kilns. The wood is left to burn in these kilns without air being present. The use of wood as fuel, although reducing dependence on

fossil fuels, creates its own problems in that it can lead to deforestation as well as contribute to pollution of the air.

■ **Liquid** – Ethanol, which is produced from either corn or sugar cane, is the liquid. The fuel produced is known as gasohol. This has the advantage of reducing consumption of oil, hence



reducing the amount of money spent on fuel, especially in developing countries without oil reserves. However, this, too, has its disadvantages in that it reduces the amount of land available for food crops and is only valuable if there is a plentiful supply of the raw material. In Europe, a plant, rape seed, is used to produce biodiesel. Both types of fuel also have the advantage of producing fewer pollutants when they are burnt.

■ **Gas** – Small fermenters, called biodigesters, are used to digest large molecules from plant and animal waste under anaerobic conditions. This type of fuel has the advantage of being cheap and removing human waste. This means that it can reduce the rate at which landfills are filled (waste go into the digester) as well as reduce the need for fossil fuel. The gas produced is a mixture of methane and carbon dioxide and it can be used for cooking, heating and refrigeration.

Other alternative forms of energy include:

■ **Solar** – This is a free and renewable source of energy that is being used on a wider basis. Unfortunately, however, the cost of the panels and the batteries needed are expensive. The most common use for solar energy in the Caribbean is to provide energy for water heaters. In Barbados, most homes are provided with solar water heaters. In Jamaica, the same is being done for houses on the newer housing estates. Some householders have taken the use to another level and have invested in batteries which are used to store the energy captured by the solar panels, and have thus lessened their dependence on oil-generated electricity.

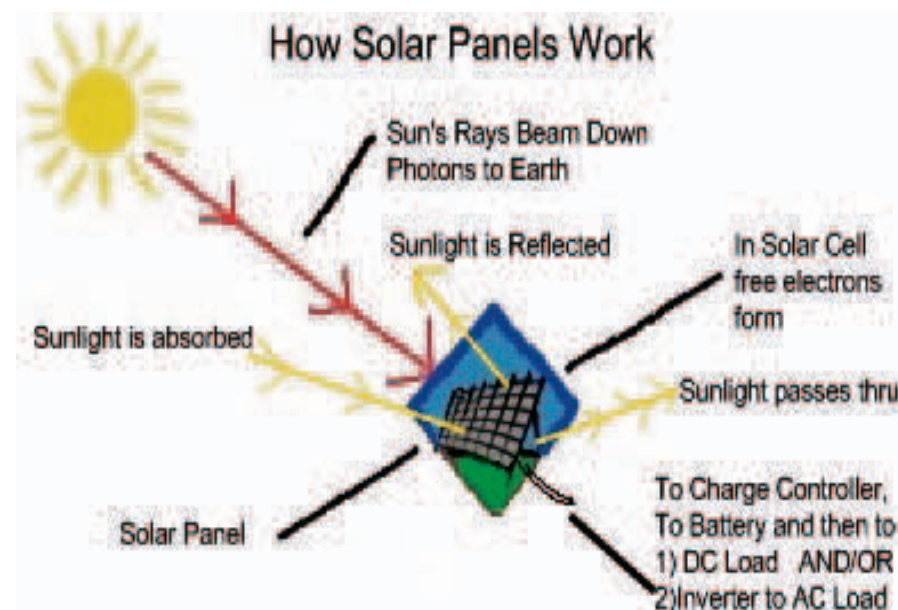
■ **Wind** – This is also free and renewable. In Jamaica, there are two wind farms which harness wind power to drive turbines to provide electricity. This electricity is used to supplement oil-generated electricity. Some private individuals have also combined wind power with solar power to reduce their usage of oil-generated electricity.

■ **Mineral resources** – These, like fossil fuels, are also non-renewable.

Minerals such as iron, copper, zinc, bauxite and gold are being extracted from the earth and are being used up. Since they are non-renewable, they cannot be replaced. The mining of these resources has caused damage to the landscape of some Caribbean countries, e.g., Jamaica, where bauxite, marl and gypsum are mined. These industries also bring with them pollutants such as dust and smoke.

Next week we will continue our study. See you then!

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Characteristics of sugar cane cultivation in the Caribbean

FOCUS QUESTIONS:

1. What are the characteristics of Sugar Cane cultivation in the Caribbean?
2. Where are some areas in the Caribbean which exhibits characteristics of sugar cane cultivation?

DEVELOPMENT HISTORY

Sugar cane cultivation came to the Caribbean as a cash crop in the late sixteenth to seventeenth century when life styles in Europe changed at the start of the Sugar Revolution.

Example: The entire Caribbean is proof of this. Especially the countries of the Lesser Antilles and Jamaica with Frome, Money musk and Bernard Lodge plantations.

TYPE OF FARMING

Generally, sugar cane cultivation takes place on a commercial basis; usually by means of monoculture (the planting of one cash crop) on large acreage of land. This means that sugar cane cultivation is extensive (cultivation on large areas of land) and intensive where high levels of input (capital in terms of machinery, fertilisers etc.)

Example: All of the English speaking Caribbean.

ACREAGE

The sugar plantations which are owned and operated by the large corporations are usually large in size usually hundreds of hectares or acres. However, most of the sugar cane farmers are approximately an hectare in size due to the fragmentation of historic plantations.

Example: Plantations in Jamaica tends to be quite large generally ranging from ten hectares to several hundred hectares. This is so as Jamaica is the largest of the English speaking Caribbean. In the islands of the Lesser Antilles due to the small size of the islands, the size of the land holdings is normally about 1 hectare due to fragmentation.

FRAMING PRACTICES

Generally, the practice modern day on sugar cane plantations is that of monoculture; where only sugar cane is cultivated. However, on some plantations farmers have sought to plant other crops alongside minimising the effect of pest and diseases. Slash

and burning is still a common practice in the Caribbean.

Mulching (the application of trash and other vegetative matter to the soil) is also used.

Example: The entire Caribbean Region.

LABOUR

Unless highly mechanised which most of the farms in the Caribbean in the greatest scheme of things are not, sugar cane cultivation is highly labour intensive. Most of the labour used on these farms is seasonal and paid at the minimum wage level. However, full time workers are also employed such as managers, clerical workers and those directly involved in the processing of sugar. Most of the labourers (those paid at the minimum wage) live on site or near to the plantation.

Example: The entire Caribbean Region.

TECHNOLOGY

Sugar cane cultivation in the Caribbean is rudimentary (simple) juxtaposed (compared) to that wheat farming and other forms of commercial arable farming. In terms of technology very simple (rudimentary) materials such as machetes, ploughs and other hand tools For plantations with a bit more capital at their disposal some machines such as harvesters are used in the cultivation of sugar cane.

As it relates to techniques for sugar cultivation as said before monoculture is the flavour of the day. However, fragmentation in various Caribbean countries have led to the sugarcane being planted alongside other crops (mixed cultivation). To combat the smut disease which usually affect sugar cane crops new hybrids or varieties of sugar cane have been developed by means of tissue culture. Ratooning still occurs and so too slash and burn although this practice is gradually being phased out.

Generally sugar manufacturing plants are being forced to cut costs and as such are actively seeking ways to decrease electricity costs. Thus a common practice on some farms is to use sugar cane to produce bioethanol to minimise electricity costs. In some cases, the use of wind power by the use of wind turnines or the use of fast flowing rivers to harvest Hydroelectric Power (HEP) is an alternative to the national power grids.

Example: Usually the plantations which use significant amounts of technology and products of research are the plantations owned by the large Corporations with large outlays of Capital.

MARKETS

Sugar and other products made from sugar cane are sold locally and exported to overseas metropolitan countries such as the United States, Canada and countries of the European Union.

Example: The entire Caribbean region.

CASE STUDY JAMAICA

Prior to the deregulation of the industry in 1994, the Sugar Industry Authority exercised a monopoly role in the marketing of sugar and molasses in both the domestic and export markets. Since 1994 the marketing function has largely been assigned under an agency agreement to Jamaica Cane Products Sales Limited (JCPS), a private company which is jointly owned by sugar manufacturers and cane farmers. As marketing agent of the SIA, JCPS undertakes the commercial functions associated with the marketing of sugar destined for export to the preferential quota markets in the European Union and the United States of America. Although manufacturers are free to sell privately that portion of sugar not required to fill the preferential quotas, JCPS undertakes the marketing of locally produced sugar and molasses in the domestic market and distributes the total revenues of the industry to sugar manufacturers and cane farmers.

Loan programmes for the planting, replanting and acquisition of equipment are administered by JCPS and the Agricultural Credit Bank.

Under the deregulation programme, the importation of refined sugar was liberalised.

Sugar which is used as raw material is duty-free, while that which is an end product attracts a duty. The sole right to import raw sugar was retained by the SIA as a means of ensuring an adequate supply to the local market and prices are kept within reasonable limits.

Source: Sugar Industry Authority of Jamaica, April 2000

Using Resources

MAUREEN CAMPBELL
Contributor

"Human resources are like natural resources; they're often buried deep. You have to go looking for them; they're not just lying around on the surface. You have to create the circumstances where they show themselves."
— Ken Robinson

OBJECTIVES

- Explain and use correctly concepts and terms associated with human and physical resources.
- Describe the structure and characteristics of a population.

A RESOURCE may be defined as a source or supply from which benefit is produced. It may be further seen as persons, assets, materials, or capital which can be used to accomplish a goal. Generally, resources are materials, money, services, staff, or other assets that are transformed to produce assistance and, in the process, may be consumed or can become unavailable.

The benefits of utilising resources include:

- Increased wealth for a country.
- Meeting needs or wants of members of the society.
- Proper functioning of a system that is necessary to fulfil citizens' needs and wants.
- Enhancing individuals' well-being which, ultimately, will help the society.

TYPES OF RESOURCES

There are two types of resources: human resource and physical/natural resources.

NATURAL RESOURCE

Anything obtained from the environment to satisfy human needs and wants.

HUMAN RESOURCES

Human beings, through the labour they provide and their other attributes, especially in organisations they are a part of, are also



Students of Gaynstead High School, St Andrew, seen leaving early as some teachers stayed away from the classroom.

NORMAN GRINDLEY/CHIEF PHOTO EDITOR

considered to be resources.

The term 'human resources' may, therefore, be defined as the skills, energies, talents, abilities and knowledge that are used for the production of goods or the rendering of services. Human resources are seen as individuals who make up the workforce of an organisation, business sector or an economy in general.

Resources may be classified as renewable or non-renewable.

RENEWABLE RESOURCES

Any natural resource (such as wood or solar energy) that can be replenished naturally with the passage of time.

■ Renewable resources are ones that can be replenished naturally. Some of these resources, such as wind, are continuously available and their quantity is not noticeably affected by human consumption. Resources from a human-use perspective are classified as renewable only so long as the rate of replenishment/recovery exceeds that of the rate of consumption.

NON-RENEWABLE RESOURCES

Those that are consumed much faster than

nature can create them.

■ Non-renewable resources are resources that form extremely slowly and those that do not naturally form in the environment. Minerals are the most common resource included in this category. By the human perspective, resources are non-renewable when their rate of consumption exceeds the rate of replenishment/recovery

Complete the following by stating whether each item is renewable or non-renewable.

1. Trees
2. Sunlight
3. Gold
4. Bauxite
5. Beaches
6. Forests
7. Animals
8. Nuclear
9. Diamonds
10. Marine Life

DEMOGRAPHY/POPULATION STUDIES

Population may be defined as the total number of persons inhabiting a country, city, or any district or area. It is, therefore, the body of inhabitants of a place.

CHARACTERISTICS/COMPOSITION OF A POPULATION

The composition of a population is the make-up or distribution within a group of people of specified individual attributes, such as sex/gender, age, religion, marital status, education, occupation, and ethnicity.

■ **Size:** Is there overpopulation, underpopulation, or is there an optimum population? Every human population has a size which is referred to as the total population in a country.

■ **Sex ratio:** Every population has a male-to-female ratio and people in different age groups. Age and sex are two attributes that largely influence an individual's role in society. Age structural dynamics include fertility, mortality, as well as related changes in family planning and social arrangements.

■ **Ethnic composition:** Every country needs to know the composition of the people living in it, as it must meet the needs of each group. There must also be encouraged integration and tolerance.

■ **Religious composition:** Different religious faiths are practised or followed in the Caribbean. We enjoy freedom of religious beliefs and observances. The most common religion in the Caribbean is Christianity, with several religious faiths such as Seventh-day Adventists, Anglicans, Baptists, Roman Catholics, and the list goes on.

■ **Occupational distribution:** We practise job specialisation, as we are engaged in a variety of occupations. We possess different skills, talents and abilities which are used to produce goods and services. There are professionals, fishermen, farmers, mechanics, and the list goes on.

■ **Dependency ratio:** This is the term used to describe the ratio of the number of dependents to the number of economically active people.

ACTIVITIES

■ State TWO reasons each why we need to know the age ratio, sex ratio and dependency ratio in a country.

WHERE DO WE OBTAIN DEMOGRAPHIC INFORMATION?

Information on a population is usually collected in a population census, which is an official count of a country's population. In most

CONTINUED ON PAGE 24

Reviving the British Caribbean sugar industry

DEBBION HYMAN
Contributor

OBJECTIVES

At the end of the lesson, students should be able to:

1. Discuss three problems plaguing the British Caribbean sugar industry by the 1850s.
2. Assess three measures introduced to revive the British Caribbean sugar industry by the 1850s.

THE AILING BRITISH CARIBBEAN INDUSTRY IN THE 19TH CENTURY

The British Caribbean planters faced several problems that led to them being unable to produce sugar competitively. Sugar in these territories was produced inefficiently. These inefficiencies were influenced by the following:

- a) The high costs of production.
- b) Absenteeism.
- c) Lack of mechanisation.
- d) Poor sugar soils (in the mountainous Windwards).
- e) Inadequate, large, arable lands.

The decline in sugar production in the Windwards and Jamaica began prior to 1850. The reasons for this included:

1. SUGAR DUTIES EQUALISATION ACT (1846)

Duties on all sugar being imported into Britain was equalised over a four-year period. Prior to this, foreign (non-British) territories had to pay a high duty percentage on sugar being sent to Britain. This new act, however, would gradually reduce the duty, making their sugar even cheaper. The result was that British Caribbean planters could not successfully compete against these cheap producers.



2. COMPETITION FROM CHEAP SUGAR PRODUCERS

Cuba, Brazil, Louisiana and Mauritius were places that were able to produce sugar at a cheaper cost. They were considered as low-cost producers. They had several advantages that allowed them to produce at a cheap cost. They had the following advantages:

- a) Large areas of flat, arable land.
- b) They had undergone mechanisation. They introduced steam engines, vacuum pans, centrifuges in large centralised factories.
- c) Slave labour – Such as in the case of Cuba and Brazil that had slaves up to the late 19th century. This efficiency resulted in Cuba, for example, substantially increasing its sugar production. For example, Cuba, in 1859-1860, produced 348,157 tonnes of sugar, while the entire British Caribbean produced 198,600. For the period 1894-1895, Cuba produced 1,054,

214 tonnes of sugar, while the entire British Caribbean produced 260, 211 tonnes.

3. COMPETITION FROM BEET SUGAR

Europe was able to produce its own type of sugar (beet) at a cheap cost. The introduction of beet sugar made Europe less dependent on British Caribbean sugar.

MEASURES TAKEN TO REVIVE THE BRITISH CARIBBEAN SUGAR INDUSTRY

Even with the mounting problems faced by British Caribbean planters, they still attempted to save the sugar industry. Some of these measures included:

- Amalgamation – There was the merger of several estates to reduce production costs. This was primarily utilised in Trinidad and British Guiana.

- Wage reductions – To reduce their overall costs, planters reduced the pay of workers. This practice was utilised in smaller territories where land was unavailable to blacks.

- Loans – From 1848 onwards, the British parliament provided planters with loans to mechanise and assist with immigration schemes. Generally, islands such as Barbados, Trinidad and British Guiana made the most of this, but Jamaica did not readily take up the offer.

- New markets – With added competition from cheaper foreign sugar producers and beet producer, British Caribbean planters had to find new markets to sell their sugar. These markets included the USA and Canada.

Debbion Hyman is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

Short story writing

MELISSA MCKENZIE
Contributor

WELCOME, STUDENTS. I am certain that our focus thus far on short story writing has proven useful. This lesson will be no different. We will conclude our focus on story writing in this lesson by exploring a sample story.

Sentence Prompt: *Debra clutched her bag in her hand. As she walked down the road she knew she was making the right choice.* Write a story which ends with these sentences.

Opening: *Debra stared at herself in the mirror and blinked back the tears that sprung to her eyes at the horror that was being reflected. How had it gotten so bad? Why had she allowed it to get so bad? Her left eye was swollen shut and was a ghastly purplish-blue colour. Her ribs throbbed in pain and as she lifted her hand, the pain that lanced through her arm caused her to gasp. Was it broken? So many times her mother had warned her. So many times she had made excuses and forgiven him. Debra had no excuses now, just this unrelenting pain and betrayal that the man who had sworn to protect and love her would cause such agony. No more. No more. The time had come for her to leave.*

Now that Debra has made up her mind to leave, what happens next? Here are some things you must consider as you develop those events:

- The husband's whereabouts and how the possibility of his return impacts her actions/feelings.
- The reasons behind this latest act of abuse.
- Is there a moment when she believes her husband has returned? How does she react to this possibility?
- The setting and its impact on her state of mind. Are there things in her room or in the house that trigger particular emotions or engage internal conflict?
- Does she contact anybody? Who? Her mother?
- What causes her to gain the strength to leave?



Quran Grant (left), commercial analyst, Pepsi-Cola Jamaica, makes a presentation to Romario Jackson of St Jago High School, who won the boys' Class 3 discus event, with a throw of 50.30 metres. Looking on is Zackery Dillion of Calabar High School, who finished second with a throw of 47.56 metres, at the Digicel Grand Prix Athletic Championship, staged recently at the National Stadium.

It is by engaging these aspects of the story that you will be able to develop an interesting plot. Remember, you are telling a story. The story is taking place in a specific location and characters are involved. Use your words to elaborate on the setting, thoughts and actions of the characters.

Read the sample story below.

DEBRA'S DECISION

Debra stared at herself in the mirror and blinked back the tears that sprung to her eyes at the horror that was being reflected. How had it gotten so bad? Why had she allowed it to get so bad? Her left eye was swollen shut and was a ghastly purplish-blue colour. Her ribs throbbed in pain and, as she lifted her arm, the pain that lanced through it caused her to gasp. Was it broken? So many times her mother had warned her. So many times Debra had made excuses and forgiven him. Debra had no excuses now, just this unrelenting pain and betrayal that the man who had sworn to protect and love her would cause such agony. No more. The time had come for her to leave.

Her husband had stormed out several minutes ago. She didn't know where he had gone, but she did know she had to move quickly. She took calming breaths. She needed to call her mother. She dreaded the call, the unspoken "I told you so", but if she were going to leave, she needed somewhere to run to. She grabbed her cellular

phone from off her bed and dialled her mother's number with trembling fingers. She licked her lips nervously as she waited for her mother to answer the call.

"Hello ..." Her mother's voice pulled her from her thoughts.

"Debra? Is that you honey?"

"Mommy," Debra stuttered. "I He ... he did it again and it was horrible. All because I failed to finish dinner on time. I want out now!" Her mother gasped in shock.

"Debra, you have to leave now." Her mother quickly enquired about his whereabouts and, secure in the fact that he was not there, she was even more decisive.

"Pack only the essential things and leave now. Don't think about it. Just move quickly. I will pick you up at Maxwell's Plaza." Her mother hung up the phone. Debra hadn't heard the unspoken words of judgement.

She rushed to the closet for her weekend bag. She moved as quickly as she could to pack a few items of clothes – a pair of shoes, toiletries and money. There was nothing else she needed but to get out. A vehicle screeched to a halt outside and she froze, feeling cold sweat cloak her. He had returned. Desolation gripped her. But, after several minutes, she did not hear the usual creaking of the front gate or the front door opening. She only heard the neighbour's dog barking and a woman shouting, "Get down, Rex!" It was only her neighbour coming from work. Her knees weakened in relief.

Without looking back, she rushed from the bedroom, through the living room and hurried to the front door. Then, without taking another look at what had been familiar for so many years, she opened the door.

On the outside, she put on her sunglasses and paused to allow the sun's golden warmth to infuse her being. A delicate breeze caressed her skin, chasing away the chill of fear. The trees in the yard seemed to dance in celebration. She locked the door and looked up and down the street. No sign of her husband.

Debra clutched her bag in her hand. As she walked down the road she knew she was making the right choice.

As you read the story, you should have noticed the following:

■ The events in the story took place in one location – at the protagonist's home, primarily in her bedroom.

■ There was one main character, but the mother functioned as a minor character. The husband was the antagonist.

■ The actions, feelings and thoughts of the main character were related. They served to evoke sympathy in the reader and heighten tension.

■ The events in the story were limited to a decision Debra had to make. You are urged to follow this simple style, as you only have 45 minutes in the exam to come up with a story that packs a powerful punch.

■ Conflict was present in the story. Debra versus her husband was the most striking conflict.

■ There was tension/suspense. Did you, like Debra, feel as if her husband had returned?

■ Dialogue was included but relevant and not merely used as a filler.

Remember, story writing is a skill you improve on with practice. Do not be disheartened. You can do it.

Take care and we will continue the lessons in this series.

VOCABULARY TOP-UP

- Oblivious – unaware of
- Ostentatious – extravagant, showy
- Obtrude – to push oneself or one's opinions on others in an unwelcome way

Melissa McKenzie is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

'Birdshooting Season' – Cont'd

BERYL CLARKE
Contributor

ACROSS OUR world and visibly in our little corner of it, there have been many changes as it pertains to gender issues. Since Olive Senior wrote *Birdshooting Season*, Caribbean women have made strides, but you will agree that our society is still largely represented in the poem. Last week, I drew your attention to the word 'contentless' as it was applied to the very busy women who did not rest during the night prior to the bird hunt. Have you thought of any reason why these women would be unhappy? Come now, young women, share your answer with your study mates. I can't hear you, so I'll just have to speculate that perhaps you believe that their discontent is with the men who are "puffing up their chests", "bigging" up themselves, declaring their prowess and drinking rum while the women are working. Is it that these women are already tired from their day's tasks and now cannot even get time to relax, moreover to sleep? Could they be displeased because they do not agree with the men's sport of birdshooting? Are they disappointed in the way their men are acting? Young men, I would love to hear your take on this point.

We cannot fail to consider the issue of gender when we discuss this poem. This is because the speaker presents each gender separately and with different attitudes. The men see themselves as the brave ones going off with their guns to hunt food. The women take a back seat to the guns and serve the men by preparing the food that they take with them, but the women take no joy in their role. One would have expected that a group of women who have gathered to cook on this specific occasion would be laughing and joking, perhaps even poking fun at one another about how their men would fare the next day. Therefore, the question arises as to whether the writer wants us to see the women as playing their role as supporting cast members,

not because they want to, but because their partners insist or expect them to do this. The children of both sexes observe and take opposing positions on what is happening, as we see in the last stanza.

In the end, those who look on as the hunters go off, sometime before daybreak, are 'shivering'. We can agree that this was because of the cold, but

there is the possibility that the boys also shiver with excitement, while the females, adults and girls alike are nervous and worried about the birds. If this is so, then we have their muted sensitivity in opposition to the men's machismo.

As promised, here a few questions for you to work on.

1. Is there evidence in the poem that the speaker's father may not usually be aggressive?
2. Identify the figures of speech in stanzas one and two.
3. Why do the men leave in the dark?
4. What do you think the hunters' packs contain?
5. Do you think the girls see birdshooting as a sport?
6. Does the writer present a patriarchal society?
7. What idea do you get from the little boys longing to become bird hunters when they grow up?
8. Why do the little girls whisper their instruction or hope for the birds?
9. Can you think of any reason why each word in the last line begins with a capital letter?

Birdshooting is a short poem of only 17 lines. In it, we can identify a number of topics or concerns which relate to our society. There is, of course, the practice of seasonal bird shooting and the unspoken but acknowledged effect on nature; the gender roles and how females are affected by being confined to prescribed roles; and the impact that is made on children by adult actions.

The poet's style of expression is easy, moving in the pattern or rhythm of our natural speech. The diction is carefully chosen to create the desired effect. Please pay attention to the use of the word 'marriage' in line 2. It is not only unusual, unexpected, but also deliberate. The poem is rooted in our culture as is apparent with the preparation of "*chocalata, cerassie, wrap pone and tie-leaf*". Naturally, there is no set or rigid rhyme scheme.

Do continue to enjoy this poem. God bless!

Beryl Clarke is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com



Control structures

NATALEE A. JOHNSON
Contributor

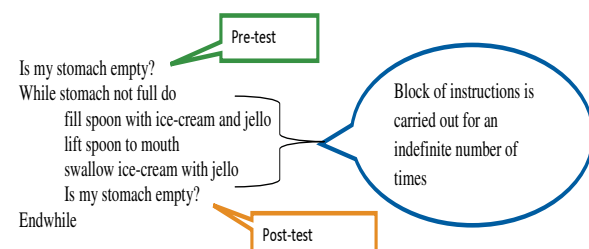
GOOD DAY, students. This is lesson 23 in our series of lessons. In this week's lesson, we will continue to look at control structures and flow charts.

THE 'WHILE LOOP'

The 'while loop' structure is shown below:
While **Variable** not equal to **Control_Variable** Do
Block Statement(s)
Endwhile

The 'while loop' is an example of an indefinite loop; it facilitates the repetition of a block of instructions until a certain condition is met. No one knows exactly how many times the block statements (instructions) will be carried out. Using the same example of having a bowl of ice cream with jello, no one can tell how many scoops you would take that will fill your stomach. It depends on the size of your stomach and the size of the spoon. The algorithm would look something like this:

EXAMPLE 1



The while loop structure can have a pretest and post-test to help with the execution of the loop, while in some instances the while loop will continue to execute until the condition is met (considered to be bounded).

Please note, you use the WHILE LOOP when you do not know exactly how many times a block of statements will be carried out. In this case, there will be some terminating condition.

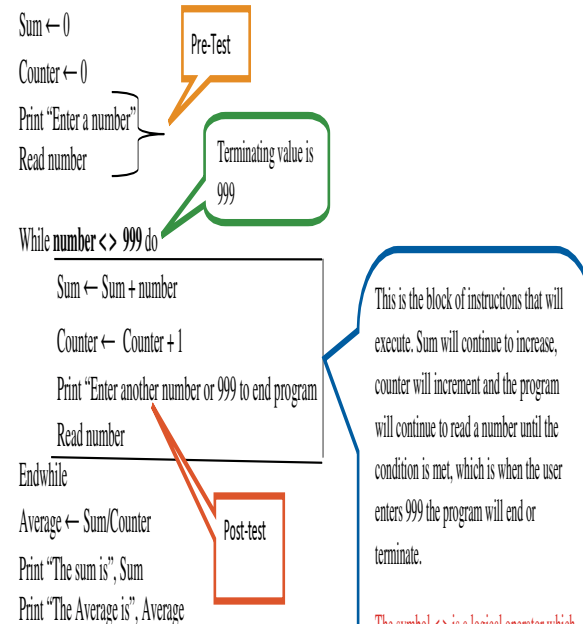
EXAMPLE 2

Write a pseudocode algorithm to read a set of integer numbers terminated by 999. The pseudocode should find the sum and average of the numbers. The algorithm should also output the sum and average of the numbers.

PSEUDOCODE VERSION

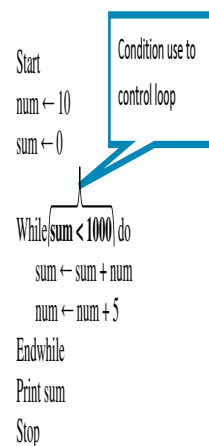
Algorithm Sum_and_Average

This program will read a set of integer numbers and calculate the sum and average of the numbers, and output the sum and average of the numbers.

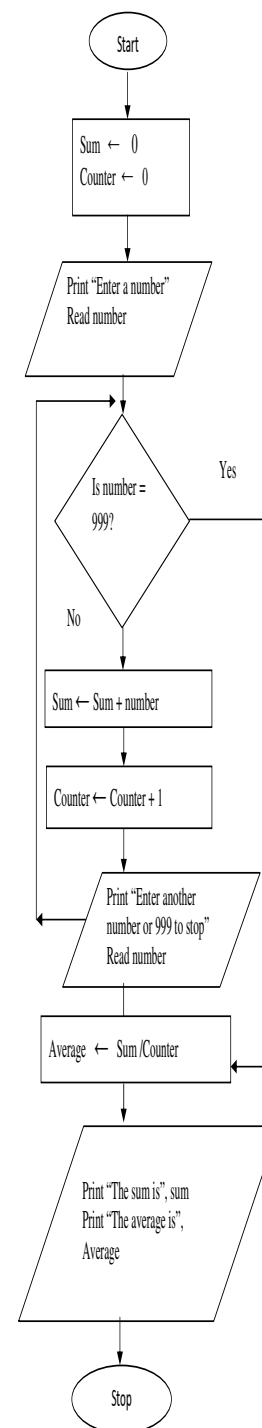


EXAMPLE 2

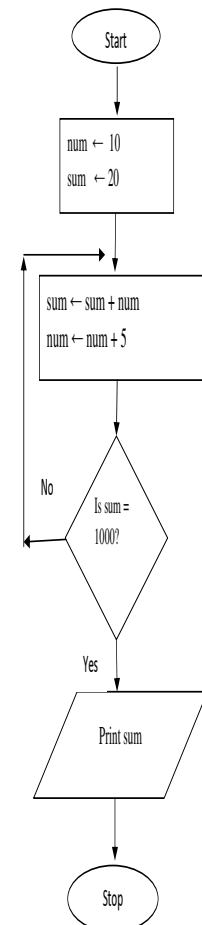
An example of a bounded while loop.
This while loop will continue to execute as long as the sum is less than a 1000. In this case, no pretest or post-test is necessary.



Flowchart version for first example



Flowchart version for example 2



We have come to the end of this lesson. See you next week, when we will continue to look at control structures and continue to look at flow charts. Remember, if you fail to prepare, you prepare to fail.

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CLEMENT RADCLIFFE
Contributor

DURING THIS period, you are expected, of course, to continue to do multiple examples of the various concepts on your own. Past papers are available in the bookshops and you should endeavour to make use of these, along with the examples you will find in your textbooks, etc. Please always verify that your solutions are correct and keep them for last-minute review prior to the examinations.

This week, we will begin the review of vectors.

SPECIFIC OBJECTIVES

- 1. Definition of vector quantities
- 2. Determination of vector from a Cartesian diagram
- 3. Application of arithmetic operations to vectors
- 4. Definition and application of position vector
- 5. Determination of magnitude of a vector

DEFINITION

A vector quantity is one which identifies both the magnitude (size) and direction, for example, velocity (kilometres per hour due east) or force (Newtons due north)
Alternatively, a mass of 20 kilograms is a SCALAR quantity, as no direction is given.

- Vector quantities are usually represented in the following forms:
- AB : a line segment,
 - a : E.g., 10 km. due north.
 - Column vector AB: $\begin{pmatrix} x \\ y \end{pmatrix}$

This lesson will essentially review vectors presented in the format of column vectors.
The vector $\begin{pmatrix} AB \\ x \\ y \end{pmatrix}$ if x and y are, respectively, the x and y components of the line segment AB on the Cartesian diagram.

Please note that the x component of the line segment AB is the difference of the x coordinates of the points A and B. The y component is found similarly. These are $(x_2 - x_1)$ and $(y_2 - y_1)$, respectively.

EXAMPLE

Express the vectors MN and AB in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

Vector MN = $\begin{pmatrix} 2 \\ 2 \end{pmatrix}$

Vector AB = $\begin{pmatrix} 4 \\ 3 \end{pmatrix}$

Please express CD in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

Vectors

If your answer is 4 then you are correct.
3

POINTS TO NOTE

- (a) Avoid making the common error of interchanging x and y values.
(b) If the coordinates of A (x_1, y_1) and B (x_2, y_2) are given then :
 $AB = \begin{pmatrix} x_2 - x_1 \\ y_2 - y_1 \end{pmatrix}$

That is, $x = (x_2 - x_1)$ and $y = (y_2 - y_1)$. Please note well that the coordinates of B is subtracted from the coordinates of A. It, therefore, follows that $BA = \begin{pmatrix} x_1 - x_2 \\ y_1 - y_2 \end{pmatrix}$

You may illustrate this on your own, using the Cartesian diagram as follows:
From the diagram, A has coordinates (2 , 4) and B(6 , 7)
 $AB = \begin{pmatrix} 6 - 2 \\ 7 - 4 \end{pmatrix} = \begin{pmatrix} 4 \\ 3 \end{pmatrix}$

- (c) A vector AB represented by $\begin{pmatrix} x_1 \\ y_1 \end{pmatrix}$ may be placed anywhere in the Cartesian Diagram as long as the x and y components are satisfied. The vector AB in the various positions would all be equal vectors with the same length and are in the same direction and represented by $\begin{pmatrix} x \\ y \end{pmatrix}$

In this regard, $CD = AB = \begin{pmatrix} 4 \\ 3 \end{pmatrix}$

Please attempt the following example:

EXAMPLE

Express these in the form $\begin{pmatrix} p \\ q \end{pmatrix}$

Answers
 $b = \begin{pmatrix} 5 \\ 4 \end{pmatrix}$ $c = \begin{pmatrix} 3 \\ 1 \end{pmatrix}$

EXAMPLE

Given the Cartesian diagram with points A, B, C, & D indicated, construct the following vectors from the respective points.

$a = \begin{pmatrix} 3 \\ 2 \end{pmatrix}$ $b = \begin{pmatrix} 4 \\ 5 \end{pmatrix}$ $c = \begin{pmatrix} 2 \\ 4 \end{pmatrix}$ $d = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$

HOMEWORK

Please attempt the following for homework.
1. Given the following diagram below which shows vectors b and c.

Express in the form $\begin{pmatrix} p \\ q \end{pmatrix}$

(i) b (ii) c. (iii) Plot on the graph (a) $x = \begin{pmatrix} 1 \\ 3 \end{pmatrix}$ (b) $y = \begin{pmatrix} 3 \\ 4 \end{pmatrix}$

2. Given the points M (4 , - 2) and N (1 , 5) which are placed on the Cartesian diagram, determine the vector MN in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

3. Given the points P (3 , - 5) and Q (6 , 2) which are placed on the Cartesian diagram, determine the vector QP in the form $\begin{pmatrix} x \\ y \end{pmatrix}$

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Multiple choice

TRUDI MORRISON REID
Contributor

LAST WEEK, we looked at an actual listening comprehension passage and some multiple-choice questions from Section A. This week, we will look at some more questions from the multiple-choice paper.

The instructions for the multiple choice should look something like this:

READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This test consists of 45 items divided into two sections, A and B.
2. Section A, based on a communication extract, consists of 7 questions. The extract, which is NOT included in the question booklet, will be read to you twice, but you will be allowed two minutes to look at the questions before the extract is read to you.
3. Section B consists of 38 questions. Answer each question based on the information given.
4. In addition to the test booklet, you should have an answer sheet.
5. Each item in this test has four suggested

answers lettered (A), (B), (C), (D). Read each item you are about to answer and decide which choice is best.

6. On your answer sheet, find the number which corresponds to your item and shade the space having the same letter as the answer you have chosen.

7. If you want to change your answer, erase it completely before you fill in your new choice.

8. When you are told to begin, turn the page and work as quickly and as carefully as you can. If you cannot answer an item, go on to the next one. You may return to this item later.



SECTION B Items 8-11

Instructions: Read the following scenario carefully and then answer items 8-11.

UNCLE JERRY'S TEES FUNDRAISING THAT'S FUN RAISING

Why do some school fundraisers and other fundraising projects fail to reach their goals? In many cases, it comes down to the products.

We've all been there. In a position where we feel obligated to buy a fundraising product because it's for a good cause even though, in reality, we will never use or enjoy that product. However, when you offer products that have 5 broad-based appeal, that buyers are actually enthusiastic to purchase. Your chances of success skyrocket. At Uncle Jerry's Tees Fundraising, we are proud to carry fundraiser products that people will be happy to buy, not only because they will be contributing to a good cause, but because they actually like what they are getting.

Retrieved and adapted from
<http://www.unclejerrysteetees.com>.

8. Which of the following expresses the meaning of 'broad-based appeal' in line 5?
- (A) It uses rhetorical language.
 - (B) Intensive demand.
 - (C) Far-reaching popularity.
 - (D) Widespread attractiveness
10. Which of the following factors is NOT true about the extract?
- (A) Popular request.
 - (B) It is a primary source of data.
 - (C) The writer seems to be knowledgeable about fundraisers.
9. The purpose of Uncle Jerry's Tees Fundraising message is to:

- (A) Entertain the online reader.
- (B) Supply information on products that people will buy.
- (C) Convince readers to buy his products.
- (D) Persuade readers to go into fundraising.

11. Which of the following literary devices is used in the title of the extract.
- (A) Pun
 - (B) Metaphor
 - (C) Assonance
 - (D) Oxymoron

Items 12-15

Instructions: Select the most appropriate answer for items 12-15.

12. In the communication process, to encode:
- (A) Speak to large groups of people.
 - (B) Block a pathway between the sender and receiver.
 - (C) Translate ideas into codes.
 - (D) Interpret a code.
14. Feedback can come in the form of? means to?
- (A) Verbal and non-verbal responses.
 - (B) Verbal communications only.
 - (C) Non-verbal communication only.
 - (D) Environmental noise.
13. An example of physiological noise is:
- (A) Humming air-conditioner unit.
 - (B) A speaker using complex terms .
 - (C) A lawnmower.
 - (D) A listener planning his weekend in his mind.
15. The ability to communicate effectively:
- (A) Depends on not using technology to send messages.
 - (B) Is a natural talent that cannot be learned.
 - (C) Depends on the education level of those around you.

Next week we will look at some more multiple-choice items. Keep studying!

Trudi Morrison Reid teaches at The Queen's School. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

Integration movement

GOAL

For students to assess the ways in which the integration movement affects development in the region.

OBJECTIVE

Explain the ways in which the evolution of the integration movement in the Caribbean has influenced development in the region.

WHAT IS REGIONAL INTEGRATION?

The idea of integration suggests unity and teamwork. The nature of the Caribbean, as a complex, diverse area which is divided by languages and traditions, makes it highly impossible for the region to work together as one. Integration means to bring or come into equal membership.

The English-speaking Caribbean has long toyed with the idea of its territories working together as a unit. This has resulted in experiments of various forms of associations such as the West Indies Federation, CARIFTA and CARICOM. The Organisation of Eastern Caribbean States (OECS) is another attempt made at integration with CARICOM. It was not until 1994 that the Caribbean experienced integration through the Association of Caribbean States (ACS).

WHY WAS IT NECESSARY TO INTEGRATE?

- Caribbean countries faced similar political, economic and social issues.
- The islands within the region share similar histories, culture and people.
- The resources on the islands were limited.
- Due to the size of some islands, it was difficult for them to make their presence felt on the world stage.
- The issues faced by the Caribbean countries required common solutions, hence, integration was necessary.

INTEGRATION BEFORE THE 1990S: WEST INDIES FEDERATION, CARIFTA, CARICOM AND OECS

In 1965, three Caribbean nations – Antigua, Barbados and Guyana – initiated the Caribbean trade integration process by signing the Treaty of Dickenson Bay, which established the Caribbean Free Trade Association (CARIFTA). Three years later, with the Treaty of St John's CARIFTA was widened to include eight more members (Trinidad and Tobago, Dominica, Grenada, St Kitts and Nevis, Anguilla, St Lucia, St Vincent, Jamaica and Montserrat) (Nogueira, 1997).

THE WEST INDIES FEDERATION (1958-1962)

In an attempt to bring British colonies in a political union, all

countries except Belize, Guyana, Bahamas and the Virgin Islands were federated. Mohammed (2015) explains that federation is a union of self-governing territories which are states or nations in their own rights. The overarching authority for all the states is centralized in the federal government. The federation was established by the British Caribbean Federation Act of 1956 with the aim of establishing a political union among its members. The federal government was headed by an executive governor general, appointed by Britain, and included: a prime minister, elected from among and by the members of the House of Representatives; a cabinet, comprising the prime minister and 10 other elected members chosen by him.

A Council of State was presided over by the governor general. The council included the prime minister and members of the cabinet as well as three senators and three civil servants. The senators and civil servants were chosen by the governor general. (The Council of State was the principal policy/decision-making body at the start of the federation. In 1960, Britain agreed to abolish this council and allow the cabinet to take over the powers of the council).

Federation came to a halt because of Jamaica and Trinidad's bickering over their own interests. Although the attempt at unifying the British colonies came to an end with a referendum in 1961, there were still organisations integrating various aspects of Caribbean life. These institutions included The University of the West Indies (UWI), the regional shipping service and the Caribbean Meteorological Service.

CARIBBEAN FREE TRADE ASSOCIATION (CARIFTA)

CARIFTA encourages and ensures fair competition among its member states, and rules are implemented for all members to follow to protect smaller enterprises. It is also responsible for increasing trade through buying and selling more goods among the member states. Countries which are members of CARIFTA enjoy a variety of goods and services that are available on the global scale through liberalizing trade. Trade liberalization refers to the removing of tariffs and quotas on goods produced and traded within the region. In addition to providing free trade, the agreements ensure that the benefits of free trade are equitably distributed. There is also the promotion of industrial development in the least developed countries.

CARIBBEAN COMMUNITY (CARICOM)

CARICOM is a grouping of 20 countries: 15 member states and five associate members. CARICOM came into being on July 4, 1973 with the signing of the Treaty of Chaguaramas by Prime

Ministers Errol Barrow for Barbados, Forbes Burnham for Guyana, Michael Manley for Jamaica, and Eric Williams for Trinidad and Tobago. The treaty was later revised in 2002 to allow for the eventual establishment of a single market and a single economy. CARICOM's main purposes are to promote economic integration and cooperation among its members, to ensure that the benefits of integration are equitably shared, and to coordinate foreign policy.

CARICOM is the oldest surviving integration movement in the developing world. Its achievements along the way are many. Great strides have been made, particularly through functional cooperation in education, health, culture, and security. Its single market functions, and it is a respected voice in international affairs because of a coordinated foreign policy.

ORGANISATION OF EASTERN CARIBBEAN STATES (OECS)

The OECS as an organisation harmonises, integrates, protects human and legal rights, and promotes good governance among independent and non-independent countries in the Eastern Caribbean. The Treaty of Basseterre in 1981 formalized the economic cooperation among the following islands: Antigua and Barbuda, Dominica, Grenada, Montserrat, St Kitts and Nevis, St Lucia, and St Vincent and the Grenadines. The OECS is recognised as a subregional group of CARICOM, pooling resources to rationalise developmental projects.

THE PROCESS OF INTEGRATION DURING THE 1990S: THE ACS

ASSOCIATION OF CARIBBEAN STATES (ACS)

Having realised the shortcomings of CARICOM, a vigorous debate ensued surrounding inserting the Caribbean economies into the global economy. The Association of Caribbean States was established in 1994 among 25 nations of the Caribbean region. The idea behind the ACS is to widen CARICOM to include all countries located in the geographic area designated as the Caribbean Basin. The ACS is expected to enhance mutual corporation in economic and trade-related areas such as transportation, tourism, agricultural production, sustainable use of natural resources and cooperation to triumph over natural disasters. The ACS would have a market of about 200 million people, with an estimated combined gross national product of US\$500 billion, and a trade volume of about US\$180 billion per year (Nogueira, 1997).

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countries it is carried out every 10 years.

The census yields information about:

- The size of the population.
- Persons of working age.
- Persons employed or unemployed.
- Age and gender.
- Educational attainment of individuals.
- Marital status.
- Religion.
- Ethnicity.
- Migration.

THE POPULATION PYRAMID

A population pyramid illustrates the age and sex structure of a country's population. The population is distributed along the horizontal axis, with males shown on the left and females on the right. The male and female populations are broken down into five-year age groups represented as horizontal bars along the vertical axis, with the youngest age groups at the bottom and the oldest at the top. The shape of the population pyramid gradually evolves over time based on fertility, mortality, and international migration trends.

ACTIVITY

Find the meaning of the following concepts and terms associated with human and physical resources.

a. Concepts related to human resources: population, birth rate, death rate, natural increase, life expectancy, infant mortality rate, fertility rate, migration, immigration, emigration, net migration, brain drain, urbanization, depopulation, population density, population distribution, dependency ratio, employment, unemployment, underemployment, unemployable, labour force, sustainable development, population census and human resource.

b. Concepts related to physical resources: development, environment, conservation, energy, renewable resource, natural resource, non-renewable resource, infrastructure, food security, pollution, conservation, global warming, green house effect.

c. State THREE characteristics of a population pyramid.

d. Suggest THREE observation that can be made from the statistics shown on/in a population pyramid.

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Mitchell Watson, marketing manager, Pepsi-Cola Jamaica, joins in a group photo with girls' under-17 discus champions (from right) Cedricka Williams of Holmwood Technical High School, who placed first with a throw of 40.62 metres; Raphae Guthrie of Excelsior High School, who placed second with a throw of 36.14 metres; and Johnicia Davis of Hydel High School, who placed third with a throw of 32.99 metres at the Digicel Grand Prix Athletic Championship, staged recently at the National Stadium.