

FURTHER EDUCATION AND TRAINING TEACHER'S GUIDE & SCOPE - 2020		
MARCH TEST		
GRADE	10	
SUBJECT	Mathematical Literacy	
PAPER	One Paper	
DURATION OF THE PAPER	1½ hour	
TOTAL MARKS	75 Marks	
EXPECTED WORK COVERAGE/TOPICS		
NB: This scope must be used in conjunction with the 2020 ATP		
Topic: Numbers and calculations with numbers		Date Completed
Sections:		
• Number formats and conventions,		17.01.2020
• Operations on numbers and calculator skills,		
• Rounding,		24.01.2020
• Ratios,		
• Proportions,		30.01.2020
• Rates,		04.02.2020
• Percentages.		11.02.2020
Topic: Patterns, relationships and representations		
Sections:		
• Making sense of graphs that tell a story,		13.02.2020
• Patterns and relationships,		20.02.2020
• Representations of relationships in tables,		
• Equations		25.02.2020
• Graphs		
Topic: Measurement		
Sections:		
• Conversions,		
• Time		03.03.2020
Topic: Finance		
Sections:		
• Financial Documents,		05.03.2020

SEPTEMBER TEST		
SUBJECT	Mathematical Literacy	
PAPER	One Paper	
DURATION OF THE PAPER	1½ hour	
TOTAL MARKS	75 Marks	
EXPECTED WORK COVERAGE/TOPICS		
Topic: Finance		Date Completed
Sections:		
• Income,		09.07.2020
• Expenditure,		
• Profit/loss,		
• Income and expenditure statements		
• Budgets		
Topic: Measurement		
Sections:		
• Calculating perimeter,		23.07.2020
• Area		
• Volume		
Topic: Maps, plans and other representations of the physical world		
Sections:		
• Plans (instructions/assembly diagrams),		30.07.2020
• Plans (floor, elevation and design plans),		06.08.2020
• Models.		
Topic: Finance		
Sections:		
• Interest,		14.08.2020
• Banking,		24.08.2020
• Loans and Investments (banking),		
• Taxation (VAT)		31.08.2020

NOTE TO EDUCATORS: TERM 4 TOPIC: DATA HANDLING MUST BE COMPLETED AND TESTED IN THE NOVEMBER EXAMINATION, TOGETHER WITH ALL TOPICS FROM TERM 1 TO 3.

Topic : Finance	23.04.2020
• Interest	
• Banking	
• Inflation	
Topic: Measurement	11.05.2020
• Measuring length and distance	
• Measuring mass (weight)	
• Measuring volume (measuring spoons and cups; jugs, bottles and/or canisters; buckets and wheelbarrows) without a formula.	
• Measuring temperature.	
Topic: Maps, plans and other representation of the physical world	25.05.2020
• Scales	
• Maps	
SEPTEMBER TEST	
SUBJECT	Mathematical Literacy
PAPER	One Paper
DURATION OF THE PAPER	2 hours
TOTAL MARKS	100 Marks
EXPECTED WORK COVERAGE.TOPICS	
Topic: Measurement (calculating with formulae)	Date Completed
• Perimeter (including surface area)	27.07.2020
• Area	
• Volume (rectangles; triangles and circles)	
Topic: Maps, plans and other representation of the physical world	03.08.2020
• Plans	
• Plans (instructions/ assembly diagrams)	
• Models	
Topic: Finance	11.08.2020
• Taxation	
Topic: Probability	25.08.2020
• Expression and Prediction of Probability	
• Predictions	
• Representation for determining possible outcomes	
NB: Term 4	
Term 4 will include exchange rates, Data handling, and all content covered in the curriculum from previous terms	
23.10.2020	

SEATIDES COMBINED SCHOOL

Y. BRIJLALL

CONTENT TO WORK THROUGH DURING THE MARCH/APRIL HOLIDAYS

Learners are advised that they need to be engaged in constructive work during the extended, unplanned holiday due to the health crisis being faced internationally. As a result of the extended closure of schools, curriculum coverage may be impeded and it is advised that you work through the stipulated activities that follow and engage in research in preparation of Term 2 so as to ensure we are on track and use our time productively. The activities to be engaged with are compulsory and must be attempted before the new term commences in order to ensure a successful term.

GRADE 10 – INFORMATION TECHNOLOGY

ALGORITHMS AND TRACE TABLES

Factors are whole numbers that are multiplied together to produce another number.

E.g. $A \times B = C$ => this would mean that **A** and **B** are factors of **C**

A factor is an integer which can be a divisor of an integer (is divisible by an integer) and leaves no remainder.

E.g. the factors of 16 are 1, 2, 4, 8 and 16 as these numbers can be divided by 16 with no remainder. The factors of 55 are 1, 5, 11 and 55. The factors of 27 are 1, 3, 9 and 27.

Develop algorithms to accomplish the following tasks:

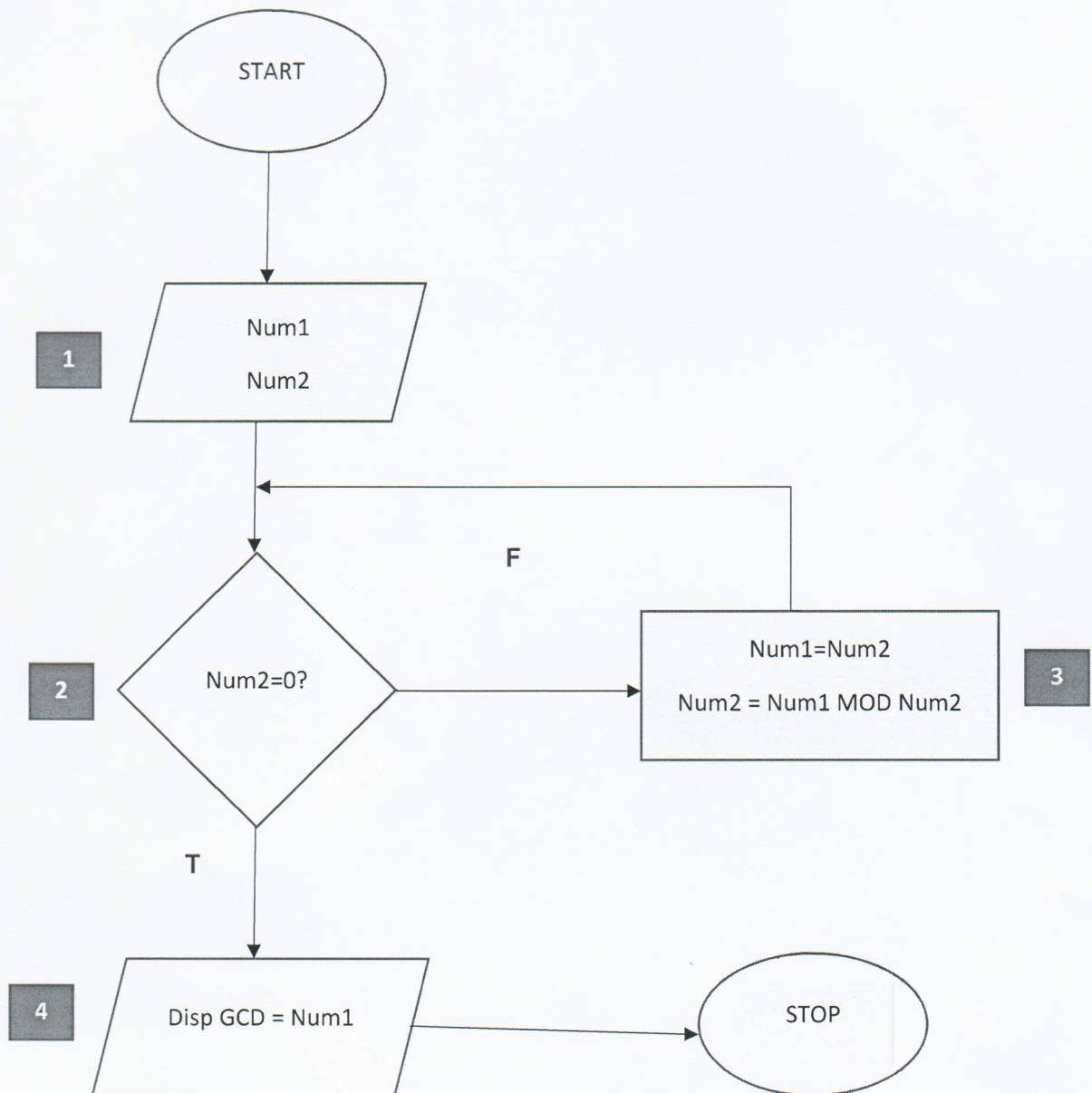
1. Determine the factors of 21 and display them.
2. Determine the factors of 36 and count how many factors there are. Display the factors and the number of factors there are.
3. Find and count the number of factors for an integer entered by the user. Draw a trace table using the test value 101 to display the factors and the final number of factors found.
4. A prime number is a number that has only two factors, 1 and itself. Determine if a number entered is prime or not. (*Clue: This algorithm is in a past practical paper*)
5. A factorial is the product of an integer and all the integers below it. Mathematically this means a **factorial** is the operation of multiplying any natural number with all the natural numbers that are smaller than it, giving us the mathematical definition **n!**

E.g. Factorial of 4 (4!) is as follows: $4! = 1 \times 2 \times 3 \times 4 = 24$

Design a flowchart to calculate and display the factorial of a number input by a user.

6. In mathematics, the **greatest common divisor (GCD)** of two or more integers, which are not all zero, is the largest positive integer that divides each of the integers, it is also commonly referred to as the **higher common factor (HCF)**. For example, the **GCD** of 8 and 12 is 4. Using the flowchart below, draw a trace table with the following headings to find the GCD if the numbers entered for Num1 and Num2 are 54 and 24 respectively.

Step	Num1	Num2	Num2=0?	GCD



7. The **lowest common multiple (LCM)** of two numbers is the **smallest** whole number which is a **multiple** of both.

Multiples of 3:

0, 3, 6, 9, 12, 15, 18, 21, 24...

Multiples of 4:

0, 4, 8, 12, 16, 20, 24, 28 ...

The LCM of 3 and 4 is 12.

If you know the GCD of these two numbers the following formula can assist in finding the LCM:

$$LCM(Num1, Num2) = \frac{Num1 * Num2}{GCD(Num1, Num2)}$$

This means that the LCM for Num1 and Num2 is given by the product of Num1 and Num2 divided by the GCD of Num1 and Num2. Using this information, design a flowchart to find the LCM of any two numbers entered by a user and draw a trace table using test data 64 and 8 for Num1 and Num2 respectively. (*Hint: Modify the flowchart provided in the previous question to ensure the product of Num1 and Num2 is available prior to changes being made to them.*)

THEORY CONTENT

Read the following sections and do all the activities (these will be checked in the new term):

Systems Technology: Software

Systems Technology: Hardware

Social Implications: Ergonomics and Health Issues

Social Implications: Green Computing

PAT

The Practical Assessment Task (PAT) has been made available, ensure that you have read through the topic and conduct some research during the course of the holiday. Sample PATS will be made available to you on the Group chat or via e-mail to ensure that all learners have them and we will be in contact from time to time should you need any clarity or assistance.

AFRIKAANS – GRADE 10

HOLIDAY WORK

1. Afrikaans is Maklik: P134 - Redous Pikkewyne (Questions 1-4)
2. Afrikaans is Maklik: P97 – Die Klein Meerminnetjie (Questions 1 – 12)
P96 – Fantasie of nie? A/B
3. Afrikaans is Maklik: P89 – Met een been het sy die wereld aan haar voete. (Questions a-o)
4. Read short story from INK: Die Kreketkolf. Complete woordeskat & answer contextual.
5. Taal – Reedierende werk (RGN)
6. As jy a skool bou kan jy 'n trunk afbreek (Reverse of remedial work). Read/Vocab/Answer questions.

AFRIKAANS

GRADE 10 Geslag

1. ram - ooi
2. bul -
3. reu -
4. beer -
5. hings -
6. haan -
7. wolf -
8. beer -
9. leemannetjie -
10. alifantbul -
11. onderwyser -
12. sanger -
13. posmeester -
14. burgemeester -
15. bedelkar -
16. sondaar -
17. profeet -
18. prins -
19. towenaar -
20. digter -
21. eienaar -
22. danser -
23. vriend -
24. kelner -
25. koning -
26. held -
27. vors -
28. hertog -
29. keiser -

1. Trappe van Vergelyking

- a) trots - trotser - trotsste
- b) hoog
- c) moeg
- d) lekker
- e) vaag
- f) eg
- g) gaaf
- h) laf
- i) slim
- j) mooi
- k) goed
- l) kwaad
- m) naby
- n) kwaai

2. Intensiewe Vorm

- a) swart - pikswart
- b) kwaad -
- c) oud -
- d) bang -
- e) suur -
- f) jonk -
- g) klein -
- h) koud -
- i) ryk -
- j) swaar -
- k) goedkoop -
- l) skoon -
- m) dood -
- a) arm -
- p) vreemd -
- q) duur -
- r) lui -
- s) glad -
- t) modern -
- w) af -
- v) lekker -
- w) alleen -
- x) rooi -
- y) vaal -
- z) dronk -

3) Meer vaud

- a) moelikheid - moelikhede
 b) nooi -
 c) foto -
 d) pa -
 e) ouma -
 f) politikus -
 g) dialoog -
 h) probleem -
 i) blom -
 j) graaf -
 k) straf -
 l) dag -
 m) lam -
- n) plig -
 o) stadium -
 p) bos -
 q) glas -
 r) skip -
 s) stad -
 t) pad -
 u) spel -
 v) lyf -
 w) blad -
 x) lid -
 y) maag -

4) Verkleinwoorde

- a) ason - asempie
 b) foto -
 c) ma -
 d) dam -
 e) leeu -
 f) koel -
 g) piesang -
 h) muis -
 i) slang -
 j) kop -
 k) staal -
 l) hond -
 m) bal -
- n) tante -
 o) son -
 p) seun -
 q) bet -
 r) boek -
 s) padda -
 t) boom -
 u) piano -
 v) hek -
 w) hand -
 x) pad -
 y) dier -
 z) woning -

5) Vergelykings

- a) arm - so arm soos 'n kertmuis -
 b) bang -
 c) blind -
 d) don -
 e) drank -
 f) glad -
 g) groen -
 h) honger -
 i) koud -
 j) ou -
 k) rooi -
 l) siek -
 m) stil -
 n) suur -

FROM WORKBOOK

Indirekte Rede - bl 12 + 13

Verbinding - bl 16 + 17

Geslag van Vergelyking

Intensiewe Vorm

Meervoud

Vergelykings

Question 1

Write an essay of 300 to 350 words (1 ½ to 2 pages) on ONE of the following topics. Write the number of the topic you have chosen.

- 1.1 Wild at heart [50]
- 1.2 The world has become too competitive. People are focused on money and power and have forgotten the value of kindness. [50]
- 1.3 Those four words changed everything. [50]
- 1.4 Tonight the moon is full. [50]
- 1.5 Team sports teach invaluable lessons and all children should be encouraged to participate in them. [50]
- 1.6 Let me tell you my secret. [50]

1.7 The photograph reproduced below may evoke a feeling in you or stir your imagination or evoke another response. [50]

Write an essay in response to the photograph. Give your essay a title.
Note: There must be a clear link between your essay and the image.



[50]

SECTION B: TRANSACTIONAL TEXTS

Question 2

- ▶ Respond to TWO of the following topics.
- ▶ The content of each text should be between 180 and 200 words (20 to 25 lines).
- ▶ Use the correct format.
- ▶ Carefully consider the audience, register, tone and style when you plan.
- ▶ Content, planning and format count 60%.
- ▶ Language, style and editing count 40%.

2.1 Newspaper column

You have probably heard the word *phubbing* in conversation or come across it in written texts. It is a combination of the words *snubbing* and *phone* and means to disregard and ignore someone in a social setting by looking at your cellphone.
Write an article to be published in your school newspaper in which you express your views on phubbing. Give your column an eye-catching title and a by-line.

[25]

2.2 Friendly letter of congratulations

One of your close friends, whom you have known for years, has just got her Master's Degree in Psychology with distinction. She has also been offered a scholarship to complete a doctorate at Harvard University.
Write a letter of congratulations to your friend.

[25]

2.3 Agenda and minutes

You live in a neighbourhood that has suddenly had a spike in crime. A meeting will be held in the community hall to discuss this problem. As chairperson of the local neighbourhood watch group, you have been asked to convene the meeting.
Write the agenda and the minutes of the meeting.

[25]

2.4 Speech

Your Life Orientation teacher has asked you to prepare a speech for your fellow Grade 10 learners to encourage them to become involved in a community project which your school has initiated. The project involves assisting underprivileged young children with their homework in the afternoons. Your speech should not just provide information about the project; its aim is to inspire and motivate your peers to volunteer and participate.
Write your speech, which is entitled 'Help move South Africa forward!'

[25]

2.5 Review

You are a food critic and a new Italian restaurant has recently opened in your town. The editor of your local newspaper has asked you to visit it and write a review for publication.
Write the review and give it an appropriate headline and a by-line.

[25]

GRADE 10 (ENGLISH)

Question 1: Read for meaning and understanding

Read Text A and answer the questions that follow.

Text A**Street children - the challenge**

- 1 Street children are an everyday sight in South Africa. In many cities they appear at traffic lights and other **intersections**, begging for money. Sometimes young children are used by adults who are begging, in the hope that the sight of the vulnerable child will open the purse of the passer-by. Some seem so sleepy that one is left wondering whether they have been drugged to ensure that they remain **passively** with the adult they accompany. Whether they are with a parent or relative is also open to question. Are they simply taken by an adult to play on the **emotions** of the **prospective** donor?
- 2 We are not unique in this sorry situation. Unicef estimates that there are about 200-million children world-wide living on the streets. If they do not receive hand-outs, they resort to theft or intimidation. There is often the hint that if people parking a car do not oblige with a tip, the car may not be quite so pristine on their return. First world countries generally avoid this situation by putting in place a social security network for the vulnerable, but in many other countries this is not the case.
- 3 What can be done to improve the lot of these children? Where are their families? Welfare and charitable organisations provide some answers. Firstly, there are some guidelines about what to avoid. They advise against giving hand-outs at traffic intersections, because if children can make a good living by begging they will continue to do so, and will not turn to the welfare agencies for assistance. They will continue to sleep rough, often abusing alcohol and other drugs. They may also be incorporated into gangs, which can provide a substitute structure for a family. While the gangs can give a sense of security to these children they will, in the long run, pave the way to a life of crime.
- 4 And what alternatives do the welfare organisations supply? Shelters have evolved, often becoming care centres which serve a variety of needs. Social workers will try to locate the families of these children. This is often not a viable option, as the very reason that the children are on the streets, is that their families are dysfunctional or non-existent. Sometimes a teenager has become pregnant and has abandoned her child early on - a family has never existed. The shelter must therefore fulfill the role of a family. It must provide security, shelter, food and a caring adult.
- 5 Education is the next concern. Many of these children have had minimal schooling and before they are ready to face a school situation, volunteer teachers will help to prepare them by using bridging materials and providing appropriate mentoring. When they are ready for school, there will be help with homework and assistance with lessons which have

continued on the next page →

seemed beyond them. And of course education is not only about school. These children may need help with taking responsibility for their lives. Beds need to be made, school lunches prepared and assistance given with their own laundry and the communal tasks.

6 The glue that keeps this whole enterprise together is often the provision of sporting opportunities. If soccer or netball training can be arranged, the project is well on the way to success. Children see the chance of using their skills and excelling on the field. They enjoy the competition and can work off their energies in a constructive environment. The shelter may become a successful alternative to what is, of course, the first choice - return to the original family setting.

- 1.1 Refer to paragraph 1.
- 1.1.1 Identify the main idea in this paragraph.
- 1.1.2 Do you agree with the writer that the presence of a child with a beggar may 'open the purse' of the passer-by? Give a reason for your answer. (2)
- 1.1.3 Give synonyms for the words printed in bold. (4)
- 1.2 Refer to paragraph 2.
- 1.2.1 'Unicef' is an abbreviation that can be pronounced as a word. What do we call this type of abbreviation? (2)
- 1.2.2 What is the meaning of 'pristine'? **Note:** If you do not know the meaning, look at the context in order to work it out. (2)
- 1.3 Refer to paragraph 3.
- 1.3.1 What is the main idea in this paragraph? (3)
- 1.3.2 Identify one positive and one negative aspect of gang life. (2)
- 1.4 Refer to paragraph 4.
- 1.4.1 This paragraph opens with a question. What do we call this type of question? (1)
- 1.4.2 Explain the term 'viable option'. (2)
- 1.5 Refer to paragraph 5.
- 1.5.1 Is the term 'appropriate mentoring' a phrase or a clause? Give a reason for your answer. (2)
- 1.5.2 The writer suggests that 'education' is a broad term. Explain what this encompasses, referring to the text in your answer. (3)
- 1.6 Refer to paragraph 6. What does the writer mean by describing sport as the 'glue' that may hold the whole enterprise together? Do you agree? Give a reason for your opinion. (4)

Total Section A: 30

SECTION B: SUMMARY

Question 2: Summarise a text

Carefully read Text B below. It deals with the career of Hugh Masekela, a South African musician. Note: You are required to do the following:

- ▶ Using your own words, summarise what the writer of the article has to say in a coherent paragraph of 80 to 90 words.
- ▶ You are NOT required to provide a title for the article.
- ▶ Indicate your word count at the end of your summary.

Text B

Hugh Masekela - A South African great

Hugh Masekela grew up in Kwa-Guqa Township in the 1960s. There was no television and he did not hear much radio, but he became an avid fan of the local bands playing African songs, township jive, gospel songs and swing jazz. He started what was to become a huge record collection and was enrolled for piano lessons at the age of five. This was the beginning of a career as trumpeter, singer and composer. Initially he lived and worked in South Africa, but after the Sharpeville massacre in 1960, he went into exile in America.

There he was fortunate to meet Miriam Makeba, who promoted his music. He played on her albums and they were married for a short time. Although the marriage did not last long, the albums they produced together brought him to the attention of Harry Belafonte and Duke Ellington. He played with them in New York and then moved to Los Angeles where he recorded dozens of

albums, many with the giants of American jazz.

This promising opening to his career seemed, however, to run into a dead-end. For almost twenty years he battled to find work, and finally returned to Africa, to settle in Botswana. It was here that his career took off again when in the mid-1980s he joined Paul Simon, Miriam Makeba and others on the Graceland tour. Several albums followed, Jabulani being his most recent. It is based on wedding songs remembered from his childhood.

Commenting on the changes which have occurred in South Africa since his return, he says he sees progress but comments that there is demand for a lot more. He praises the contribution of Nelson Mandela, Oliver Tambo and Walter Sisulu, and dreams of another team like them who will put the needs of the people first.

Total Section B: 10

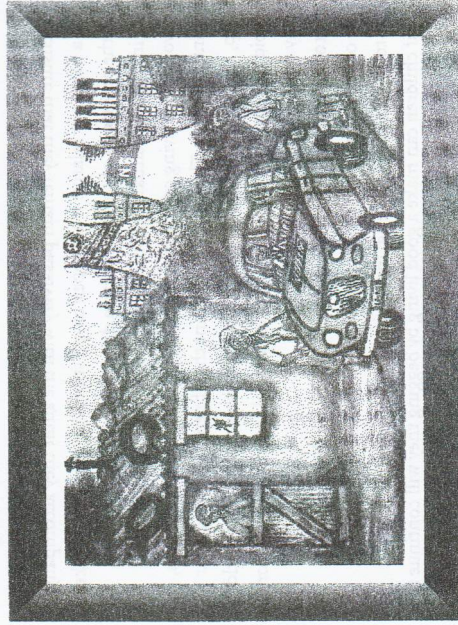
SECTION C: LANGUAGE IN CONTEXT

Question 3: Analyse advertising

Study Text C and Text D and answer the questions that follow each advertisement.

Text C

THE JANE LE ROUX SCHOOL OF ART AND CREATIVITY



STUDY
FULL-TIME
OR PART-TIME,
ON CAMPUS
OR AT HOME!

FOR FURTHER
DETAILS, PHONE
(011) 123 1212

- 3.1 What group of students is being targeted by this advertisement? Support your answer by referring to the advertisement. (2)
- 3.2 In your opinion, why might some students prefer to study 'part-time' or 'at home'? (2)
- 3.3 A typical work of art is used as part of the advertisement. What attraction does this sort of artwork have for the buyer? (2)

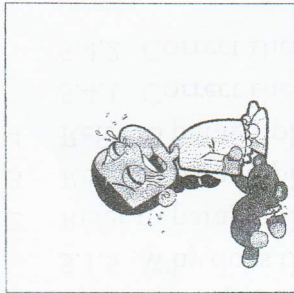
Text D



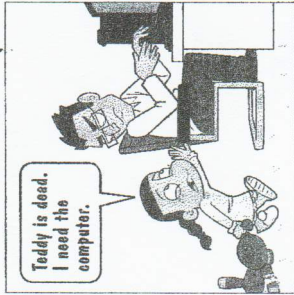
- 3.4 What attractions does the advertisement in Text D present to the viewer? (2)
- 3.5 Is the design of the advertisement successful? Refer to the advertisement to support your viewpoint. (2)
- [10]

Question 4: Understand other aspects of media
Study the cartoon (Text E) and answer the questions that follow.

Text E



Frame 1



Frame 2



Frame 3

- 4.1 Account for the different expressions the child has in the three frames of the cartoon. (3)
- 4.2 Why is the father looking angry in frame 2? (2)
- 4.3 Refer to frame 3. Explain how the child's body language expresses her attitude. (2)
- 4.4 Do you think the child's wish to turn to Facebook is credible? Give a reason for your answer. (3)
- [10]

Question 5: Use language correctly

Read Text F, which contains some deliberate errors, and answer the questions that follow.

Text F

- 1 Catching planes are often very stressful. If one is catching a plane to an international destination, you will need to be at the airport at International Departures two hours before departure. If, however, you are going to a local destination, you will need to be at Domestic Departures **only** one hour before take-off.
- 2 Once you have checked in, you are free to entertain yourself until you need to be at the departure gate. Drinking tea or coffee is a popular way of passing the time. **Many people will also buy magazines.**
- 3 When the time for boarding the flight approaches, you will make your way to the Boarding gates. Here your hand luggage is scanned to make sure that you do not have any prohibited articles. These might include more than 100 ml of liquid, a nail file or clippers. You yourself will also be X-rayed.
- 4 Then it's time to bored, relax, and enjoy the refreshments provided.

- 5.1 Refer to paragraph 1.
 - 5.1.1 Correct the error of concord in the first sentence. (1)
 - 5.1.2 Correct the error in the use of the pronoun in sentence 2. (1)
 - 5.1.3 Form a verb from the noun 'departure'. (1)
 - 5.1.4 What part of speech is the word 'only'? (1)
 - 5.1.5 Why does the word 'take-off' have a hyphen? (1)
- 5.2 Refer to paragraph 2. Write the sentence in bold in the passive voice. (2)
- 5.3 Refer to paragraph 3. Give a synonym for the word 'prohibited'. (1)
- 5.4 Refer to paragraph 4.
 - 5.4.1 Correct the spelling error in this sentence. (1)
 - 5.4.2 Correct the error in punctuation in this sentence. (1)

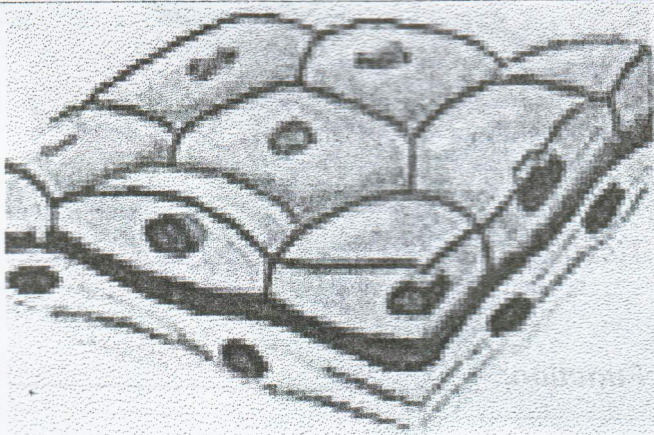
[10]

Total Section C: 30
Exam total: 70 marks

SEATIDES COMBINED SCHOOL

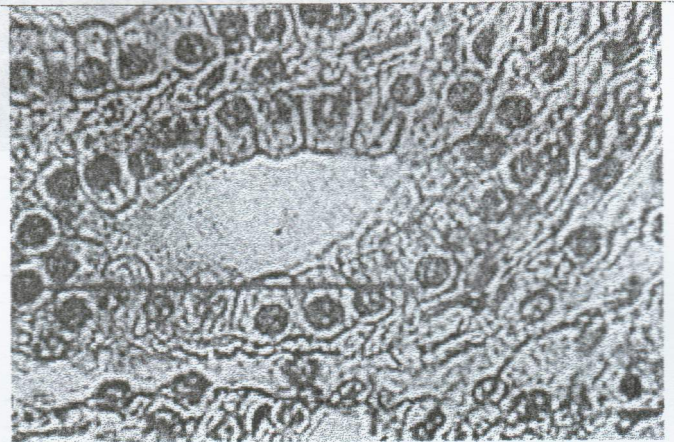
LIFE SCIENCES: GRADE 10 HOLIDAY SUPPORT PROGRAMME

PLANT AND ANIMAL TISSUES



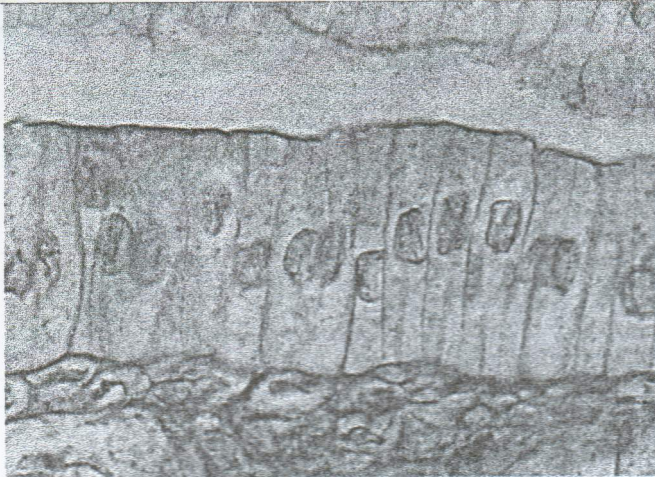
Tissue name: _____

Function: _____



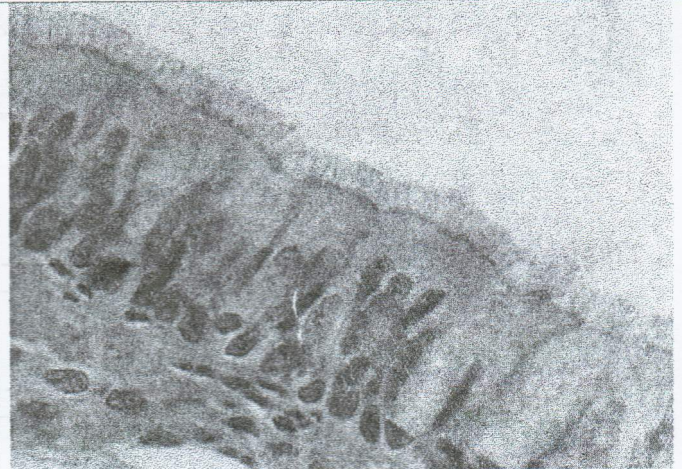
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Function: _____



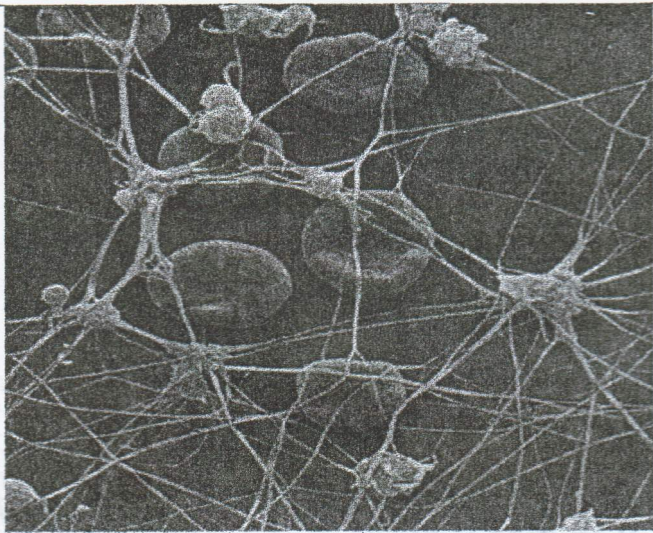
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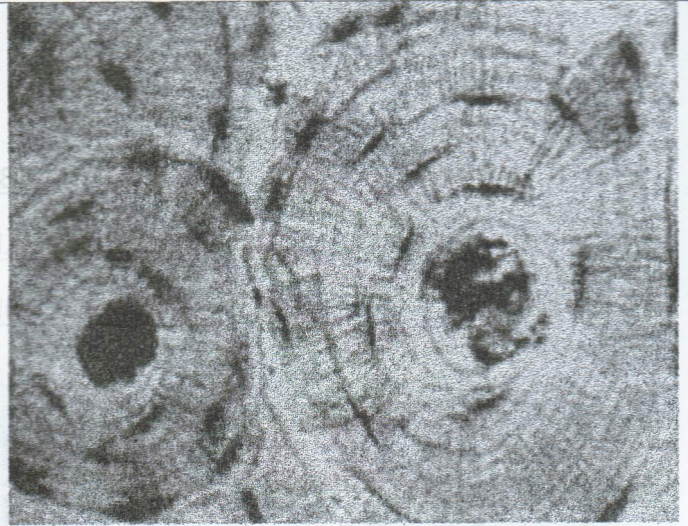
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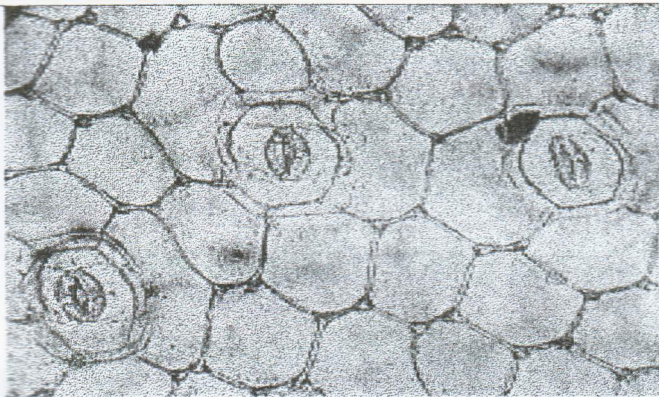
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Function: _____



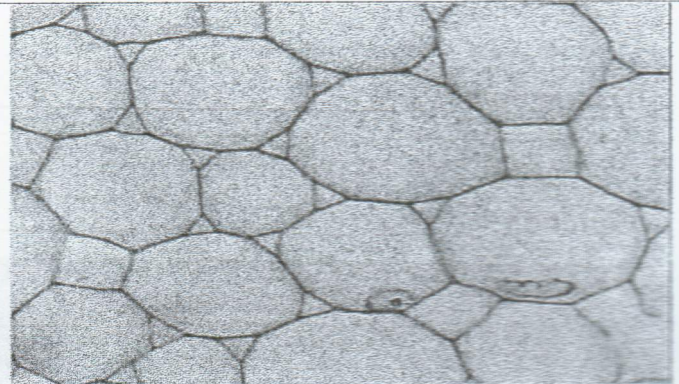
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Function: _____



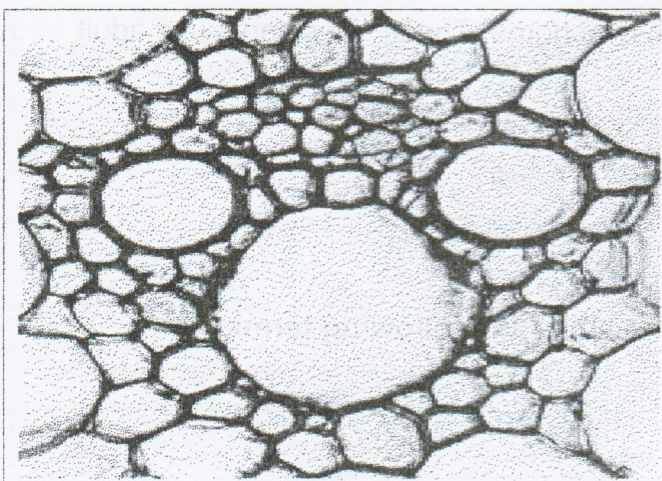
Tissue name: _____

Function: _____



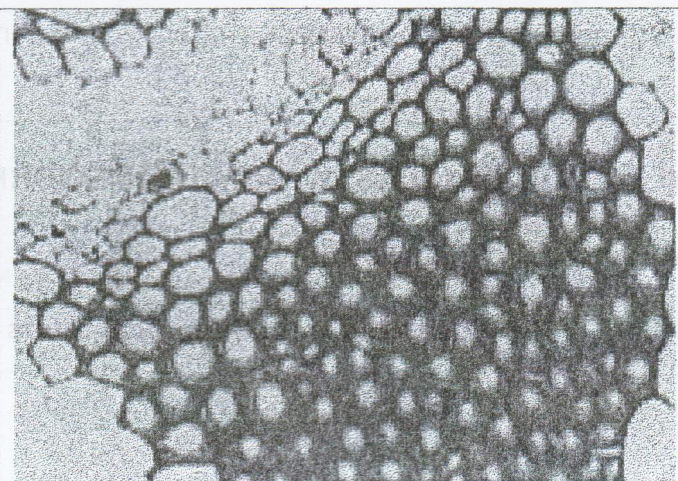
Tissue name: _____

Function: _____



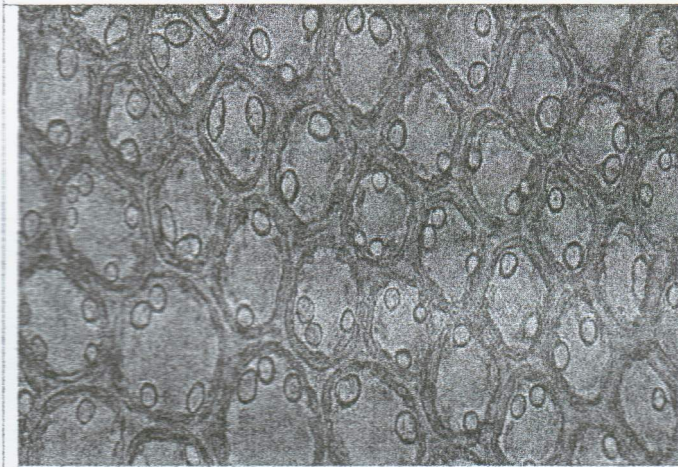
Tissue name: _____

Function: _____



Tissue name: _____

Function: _____



Tissue name: _____

Function: _____



Tissue name: _____

Function: _____

Extract: 1

Scientists discovered ways to derive embryonic *stem cells* from early mouse embryos nearly 30 years ago, in 1981. The detailed study of the biology of mouse *stem cells* led to the discovery, in 1998, of a method to derive *stem cells* from human embryos and grow the *cells* in the laboratory.

There are three types of stem cells: adult stem cells, embryonic stem cells, and induced stem cells. In stem cell transplants, stem cells replace cells damaged by chemotherapy or disease or serve as a way for the donor's immune system to fight some types of cancer

and blood-related diseases, such as leukaemia, lymphoma. These transplants use adult stem cells or umbilical cord blood.

D: ACTIVITIES (CLASSWORK / HOMEWORK)

Activity 1.1: Classwork

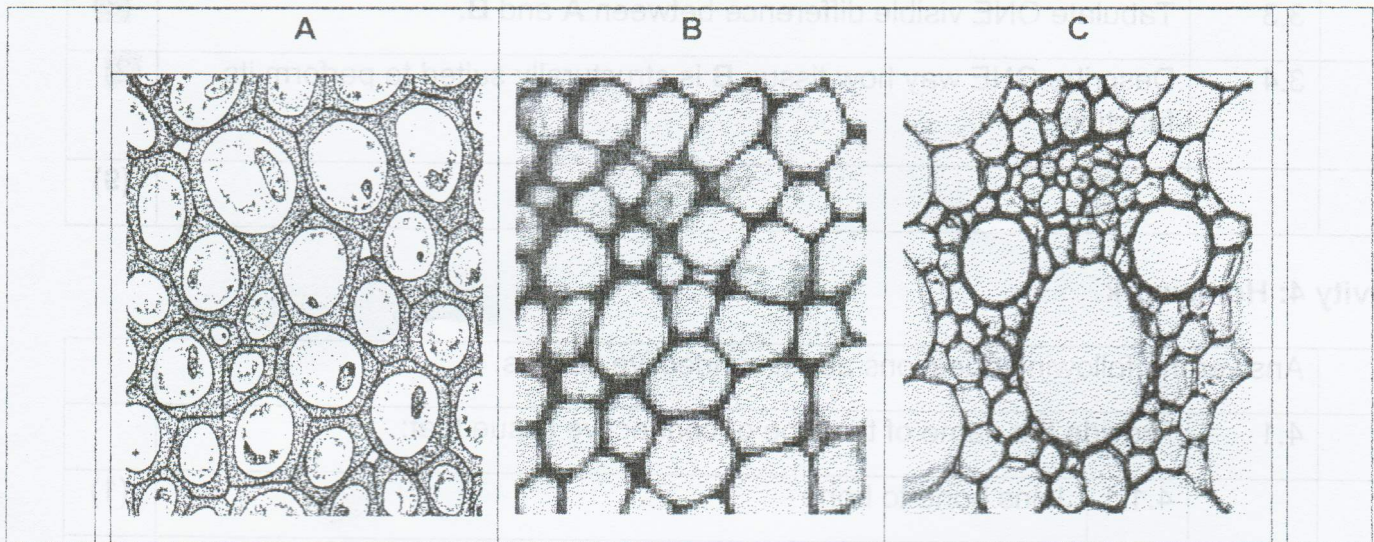
1.1	Provide the correct biological terms for each of the following terms		
1.1.1	The basic unit of life		(1)
1.1.2	A group of cells with the same structure that perform the same function		(1)
1.1.3	A plant tissue that consists of undifferentiated cells that are actively dividing		(1)
1.1.4	Tissues that contain non-dividing cells		(1)
			(4)

Activity 1.2: Homework

1.2.1	Complete the following flow chart on tissues. Write down the letters (a) to (f) and next to each letter the correct term.		
	<pre> graph TD PT[PLANT TISSUES] --> A["(a)"] PT --> P[Permanent] A --> Ap[Apical] A --> B["(b)"] P --> F["(f)"] P --> E["(e)"] P --> C[Collenchyma] P --> D["(d)"] P --> X[Xylem] P --> C2["(c)"] P --> Ep[Epidermis] </pre>		
			(6)
1.2.2	Tabulate the TWO differences between apical and lateral meristematic tissues.		(5)

Activity 2: Classwork

2. The diagrams below show various tissues



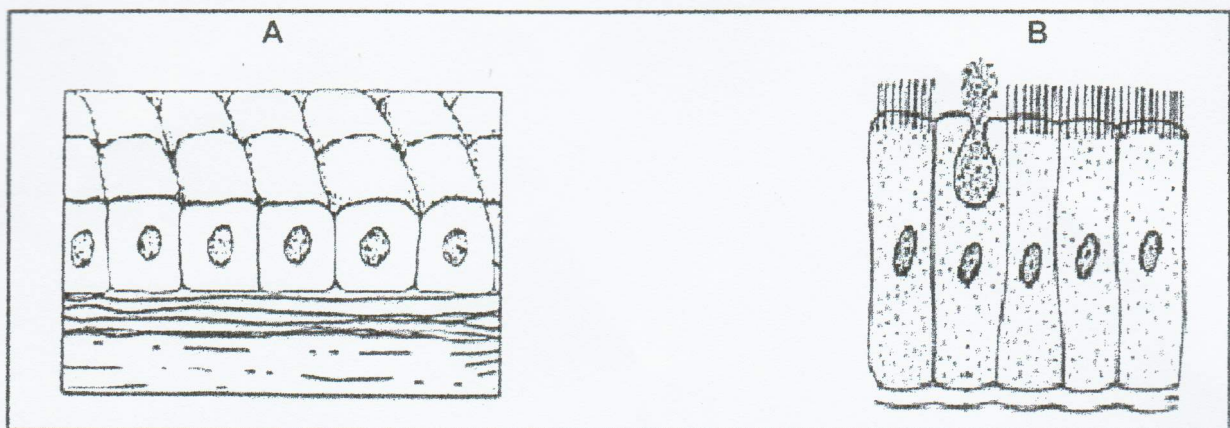
Draw the ffg. table in your notebook and complete the information required in the table below:

Tissue	Name	Location	Function
A			
B			
C			

(9)

Activity 3: Classwork

3. A student examined sections of animal tissue and observed the following:



3.1 Identify tissue:

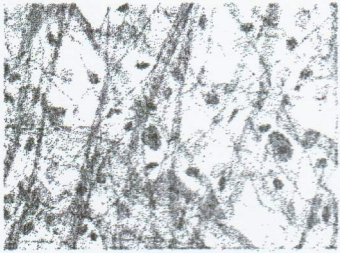
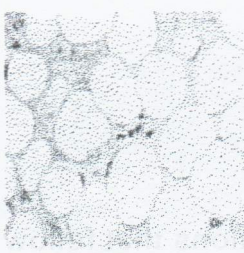
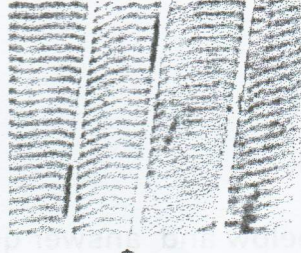


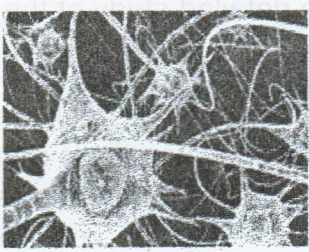
	3.1.1	A	(1)
	3.1.2	B	(1)
3.2	Why can A and B all be classified as tissues?		(2)
3.3	Tabulate ONE visible difference between A and B .		(3)
3.4	Describe ONE way how tissue B is structurally suited to perform its function		(2)
			(9)

Activity 4: Homework

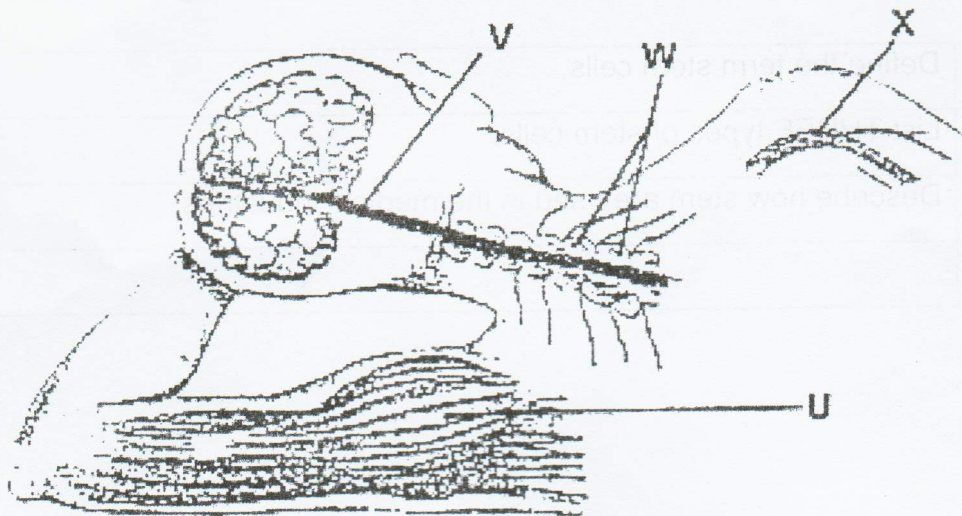
4.	Answer the following questions about connective tissues.		
4.1	Provide the name of the type of connective tissue that:		
	4.1.1	Joins bone to bone	(1)
	4.1.2	Forms continuous layer under the skin	(1)
	4.1.3	Reduces friction	(1)
	4.1.4	Transport digested food, gases and excretory wastes	(1)
4.2	Explain why:		
	4.2.1	Bone tissue is hard	(2)
	4.2.2	Loose connective tissue can stretch	(2)
	4.2.3	Fibrous connective tissue is strong	(2)
			(10)



Activity 5: Classwork

5.1	The electron micrographs /photos below that show different animal tissues	
<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;"> A</div> <div style="text-align: center;"> B</div> <div style="text-align: center;"> C</div> <div style="text-align: center;"> D</div> <div style="text-align: center;"> E</div> <div style="text-align: center;"> F</div> </div>		

The diagram below shows part of the structure of the human body.



5.1	Which tissue shown above (A to F) will surround the organ labelled U? Give the letter and the tissue name .	(2)
5.2	Give the letter of the tissue (A to F) which forms:	
5.2.1	the organ labelled U?	(1)
5.2.2	the cord labelled V?	(1)
5.3	Give the functional difference between tissue C and E	(2)

5.4	Explain what will happen if tissue F failed to function?	(2)
		(8)

Activity 6: Classwork

6. Read the extract below and answer questions that follow

Scientists discovered ways to derive embryonic *stem cells* from early mouse embryos nearly 30 years ago in 1981. The detailed study of the biology of mouse *stem cells* led to the discovery, in 1998, of a method to derive *stem cells* from human embryos and grow the *cells* in the laboratory.

There are three types of stem cells: adult stem cells, embryonic stem cells, and induced stem cells. In stem cell transplants, stem cells replace cells damaged by chemotherapy or disease or serve as a way for the donor's immune system to fight some types of cancer and blood-related diseases, such as leukaemia, lymphoma. These transplants use adult stem cells or umbilical cord blood.

6.1	Define the term stem cells.	(2)
6.2	List THREE types of stem cells.	(3)
6.3	Describe how stem are used in the medical industries.	(2)
		(7)

Subject: GRADE 10 MATHEMATICS

TOPIC 1: TRIGONOMETRY (REFER TO JIT
DOCUMENT)

TOPIC 2: FUNCTIONS AND GRAPHS

GRADE 10 PHYSICAL SCIENCE

TOPIC 1: MAGNETISM, ELECTRO STATICS,
ELECTRIC CIRCUITS

TOPIC 2: REACTIONS IN AQUEOUS SOLUTIONS

TOPIC 3: CHEMICAL BONDING

S.Gujraj

Grade 10/11- Geography Worksheet

Grade 12- Excel in Geography

Revision Activity- Activity 2.3 to Activity 2.11(Page 70-Page 77)

QUESTION 1: COMPOSITION AND STRUCTURE OF THE ATMOSPHERE

1. List the four layers of the atmosphere from Earth's surface up. (4)
- 2.1 In which layer is the ozone layer most concentrated? (1)
- 2.2 Explain the role of the ozone layer. (2)
3. You are a member of a Cancer Awareness campaign wanting to make the public aware of:
 - the causes of skin cancer and
 - what can be done to prevent skin cancer.
 Create a half-page information brochure that can be handed out at shopping centres. Your brochure should be:
 - eye-catching
 - quick and easy to read
 - thought-provoking.
 It must address both points that the Cancer Awareness Campaign is trying to address. (6) [13]

QUESTION 2: HEATING THE ATMOSPHERE

1. Study Figure 2.62. Use evidence from Figure 2.62 and your own understanding to explain why the full amount of insolation does not reach Earth's surface. (6)
- 2.1 Figure 2.62 mentions "greenhouse gasses". Explain what greenhouse gasses do. (1)
- 2.2 List three sources of greenhouse gasses that are illustrated in Figure 2.62. (3)
- 2.3 Predict what will happen to the temperature of the troposphere if more greenhouse gasses continue to be added to the atmosphere, as shown in Figure 2.62. Give a reason for your answer. (2)
3. Use Figure 2.63 to answer the following questions:
 - 3.1 Identify the two countries that produced the most carbon emissions in 2010. (2)
 - 3.2 Of the two countries mentioned in the previous question, which one is expected to produce the most carbon emissions in 2020? (1)
 - 3.3 From your previous two answers, what can you deduce about China? Explain your answer. (2) [17]

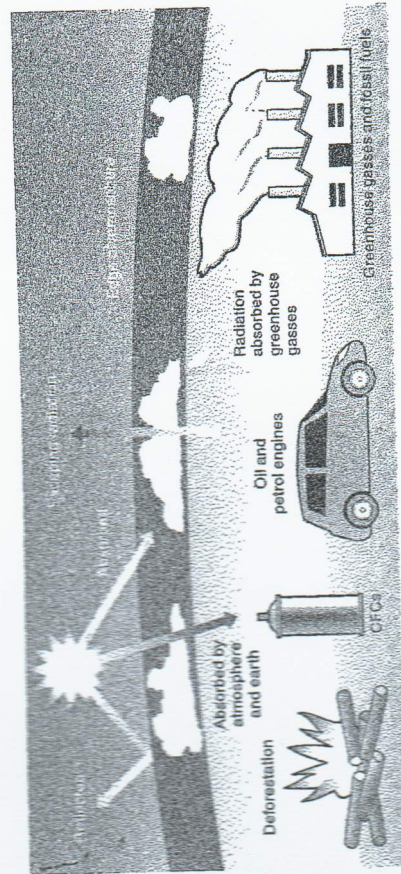


Figure 2.62 Heating the atmosphere.

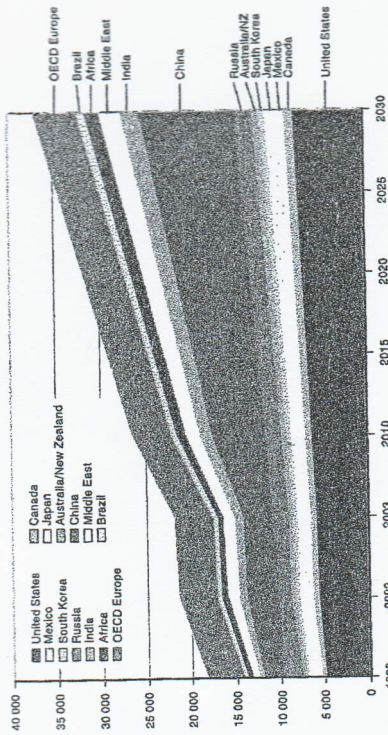


Figure 2.63 World carbon emissions by country.

QUESTION 3: FACTORS AFFECTING TEMPERATURE

- Use Figure 2.60 (the synoptic weather map for 17 March 2007) on page 119 to answer the following questions:
- 1.1.1 Give the air temperature for Maputo and Port Elizabeth. (2)
 - 1.2 Name and explain one reason for the difference in temperature noted in the previous question. (2)
 - 2.1 Compare the air temperature of Durban with the air temperature on the west coast. (2)
 - 2.2 Suggest the reason for this difference. (2) [8]

QUESTION 4: MOISTURE IN THE ATMOSPHERE

1. Calculate the relative humidity of a town if the water vapour content is 12 g/kg dry air and the water vapour capacity is 48 g/kg dry air. (Show all calculations.) (4)
2. Refer to Figure 2.60 (the synoptic weather map for 17 March 2007) on page 119. Gaborone (in Botswana) is experiencing a temperature of 36° C. If this hot air rises ...
 - 2.1 Predict what type of rainfall may develop. (1)
 - 2.2 Draw and label a sketch to illustrate the characteristics of this type of rainfall. (4)
 - 2.3 Draw the symbol that would be used on a synoptic weather map to illustrate this type of rain. (1)
3. Describe two methods used to show rainfall levels on a map. (2) [12]

Total: 50

3. Consequences of global warming

Most of Africa, apart from the equatorial rain forests, is affected by devastating droughts on a regular basis. How much worse will the droughts become if temperatures increase? Most African farmers are subsistence farmers who have no insurance or financial aid to fall back on when crops fail year after year. Read the case studies below to gain a deeper understanding of why less developed countries (or the Third World, as some call them), such as most African countries, will suffer as global warming increases.

Read the following case studies and then do Activity 13 to identify the main consequences of global warming.

Case study: Consequences of global warming

Climate change is with us now.

We see the impacts all around us. For the vast majority of people the impact of climate change means an increased risk of losing their homes and livelihoods, more disease, less security and sometimes death.

Children in the world's poorest communities are the most vulnerable. They are already seeing the impacts of climate change through malnutrition, disease, poverty, inequality and increasing risk of conflict – and ultimately an increase in child mortality rates.

All the essential effects we are seeing now are associated with a temperature increase since 1850 of less than 1 °C. Past actions and the likely trend of emissions of greenhouse gases over the next few years imply that another 1 or 2 °C will be hard to avoid, even with responsible action. It will be the young and the poor and developing countries, such as [in] Africa, that will suffer earliest and hardest.

Our children – particularly those in Africa and Asia – are already facing a future in which it appears likely that disasters will increase in number and become more intense, where economic growth will falter and incomes fall, where disease outbreaks will be more frequent, clean water and good sanitation harder to secure, and habitats and communities less stable. As a consequence, children may also have to cope with higher levels of conflict and other pressures which keep them out of school and force them into work too soon.

Many developing countries have poor infrastructure and lack the technologies that could help them cope with a changing climate, such as flood defences and early warning systems. They are thus more vulnerable to the impact of climate change and their children are the most vulnerable of all. (UNICEF *UK Climate Change Report 2008*)

Fact file: Global warming

Numerous studies have been done on the consequences of global warming. In a report released in 2007, the Intergovernmental Panel on Climate Change (IPCC) summarises climate model projections that indicate that in the 21st century, the surface temperature of the Earth is likely to rise by between 1.1 and 6.4 °C.

The impacts of future climate change will vary from region to region. Possible effects of global warming include:

- A rise in sea levels, leading to a threat of river and coastal flooding

- A change in the amount and pattern of precipitation
- More frequent extreme weather events (including heat waves, droughts, heavy rainfall leading to flooding)
- Likelihood of expansion of subtropical deserts
- Retreat of glaciers, permafrost and sea ice in the Arctic and elsewhere
- Acidification of the ocean
- Extinction of certain animal and plant species as a result of changes to average temperatures
- A threat to human food security (due to decreasing crop yields)

Studies show that those people who are the most vulnerable are at the greatest risk from the threat of climate change. The poor and elderly are likely to suffer the most and developing countries will be the worst affected.

ACTIVITY 13 EVALUATING THE CONSEQUENCES OF GLOBAL WARMING

Read the case study on page 94 and the fact file on page 95 before answering the following questions.

1. List five possible consequences of global warming.
2. Explain why poor countries, such as those in Africa, will be affected worst by global warming.
3. Complete a flow chart illustrating the causes and consequences of global warming.
4. The following quotation is also from the UNICEP article: "Climate change is a global issue. Addressing it is a shared responsibility. Yet it is increasingly apparent that the world's poorest countries and most vulnerable people will bear the brunt of climate change."
 - 4.1 What does this quotation tell you about the values of the wealthy industrialised countries? (Tip: our values are those things that are most important to us.)
 - 4.2 Addressing the climate change issue is a shared responsibility. Who needs to decide on how this will be done? Why?
 - 4.3 If you were on the panel to decide how to address the issue of climate change, what points would you need to consider before making any recommendations? List at least five points and say why they are important to consider.

F.Doba

1.) Grade 8(EMS)-Revision of all activities from textbook for term 1 and notes from Notebook (Page 4.44)

2.) Grade 10(Business Studies)

Studying for Term 1 work from the scope

3.) Grade 11(Business Studies)

Studying of Term 1 work from scope

4.) Grade 12(Business Studies)

Complete activities from Term 1 in notes

Summarise notes on Insurance and Assurance from notes

Completion of Notes in notebook

Accounting

Work for the holidays

1.) Grade 7(EMS) –Read through Term 2 Unit 1 from Head start EMS (Textbook).

Do the following activities:

Act.1 Pg.59

Act.2 Pg.60

Act.4 Pg.63

2.) Grade 9(EMS) –New Era Accounting Textbook

Task 1.6

Task 1.7

Task 3.8(Only CPJ/CRJ)

3.) Grade 10(Accounting) –New Era Accounting Study Guide

Question 8 -15

4.) Grade 11(Accounting) –New Era Accounting Study Guide

Question 17/19

New Era Accounting Textbook

Question 13 -13.1/13.2/13.5/13.6/13.11/13.12

5.) Grade 12 (Accounting) NSC – Matric Support /Intervention book

Task C3 Pg.58

D2 Pg.66

F1 Pg.82

F2 Pg.85

F3 Pg.88

H2 Pg.94

H3 Pg.96

Work with past papers syllabus covered in Term 1(Companies)