

Wordsworth High School



Tell: (011) 425 0144
Fax: (011) 849 2871
info@wordsworthhighschool.co.za
4 Wordsworth Road, Farramere, Benoni 1518
EMIS no: 700310854



GRADE 8 TECHNOLOGY ACTIVITIES.

TERM 2

2020

Read and learn about the 2 different types of materials on Page 62 and do the activity below:

ACTIVITY 1 (Pg. 63) (JULY)

1. (3)
2. (3)
3. (2)

We use raw materials, labour and Technology to create new products. This is called **Processing** (Pg 63). Can you tell what end products we get?

ACTIVITY 2 (Pg. 64)

[10]

Read the case study 1 on Pg 66 and do Activity 4 using the guidelines provided below:

REPORT (Pg 67) (JULY)

1. Write a draft report on the effective use of thicker, biodegradable plastic shopping bags. Divide your report into three sections:
 - I) The introduction. (5)
 - II) The body of the report. (10)
 - III) The conclusion. (5)
 - IV)

Use the following questions to guide you. (Body)

- a) Why are consumers paying for plastic shopping bags? (2)
- b) How does your school help to reduce the plastic bag pollution? (2)
- c) Are there strategies or better solutions that you can suggest, besides paying for bags, which could reduce plastic bag pollution? (2)
- d) Can you recommend two ways to make individuals more responsible for the environment. (4)

[20]

INVESTIGATE (JULY)

1. Read the case study 2 on Pg 69 / 70 the use the following guidelines to help you to investigate how waste paper and cardboard are recycled to [produce new products:
 - a) What areas did Tassie go to collect paper for recycling? (4)
 - b) How was the paper sorted out? (3)
 - c) Write out in point form, all the steps that were taken to recycle the paper, from how the impurities were removed to the final recycled product. (5)
 - d) Give three benefits for recycling paper. (3)

[15]

DESIGN OF OPEN ENDED CONTAINER (JULY)

1.
 - a) From the developments given on Pg 73 choose one to make an open ended 3D container FROM A 2D DESIGN using an A4 paper (5)
 - b) Choose an average sized package of your choice, for example, a soap box, or cell phone container, etc. Design and make the packaging for the product that you have chosen using any recycled material. The packaging must be designed from a Development, cut out, then folded to form a 3D product. (5)

Explain how you will take note of the things below:

2. Consider the following:
 - Purpose of packaging.
 - What material is suitable and how much would it cost.
 - Aesthetics.
 - Ergonomics.(8)
3. Safety:
 - 4 safety practices
 - 3 safety wear.(7)

PAT ACTIVITY

1. INVESTIGATION (AUGUST)

(Pg 78 – 80)

After looking at several examples of products that have a negative impact on society, learners do the following:

- a) List three negative impacts that a motor vehicle has on society. (3)
- b) List three methods of counteracting the negative impact of carbon emissions from cars. (6)
- c) Copy and complete the table below by listing one positive impact and one negative impact that each product has. (11)

Product of technology	Positive impact	Negative impact
1.Cell phones		
2.Cold drink cans		
3.Plastic bags		
4.Cars		
5.Geysers		

[20]

SCENARIO

Mr Nkunzi, the mining magnet of Ekurhleni, wants to venture into other forms of business other than mining. He has began a Fast Food Chain and so he has approached you the Grade 8 learner of Wordsworth High School to partner with him. Mr Nkunzi is an environmentalist and he is very concerned about the huge amount of litter from paper, plastic and card board around Benoni. He wants to use recycled material, where he can, for his Fast Food chain. The major challenge that Mr. Nkunzi faces is how he will get an attractive packaging for the Fast Food Chain. These are the instructions and conditions he wants you to fulfill:

ACTIVITY I (AUGUST)

- 1) A design brief consists of an identified problem concerning the project to be made, from the scenario, and a possible solution. From the scenario above, write a design brief. (5)
- 2) Give **3** specifications that you identify in the scenario. (3)
- 3) Identify **2** constraints you will face when solving the problem. (2)

[10]

ACTIVITY 2 -STRUCTURES

Revision of forces that act on materials: (Term 1 and also Pg 81 - 84)

- a) Sketch and name the 5 forces that act on structures. Use arrows to show force direction for each one. (15)
- b) Investigate and record how the following materials are adopted to withstand forces. Give a brief description and use sketches to illustrate your answer.
- i) Concrete. (4)
 - ii) Plywood. (4)

SELECTING MATERIAL FOR CONSTRUCTION.

(AUGUST)

- C i) Which of the Metals listed on Pg 85 would you use to build a bridge and why? (2)
- ii) Why do you think the HSS is suitable to build a class room desk frame? (2)
- iii) Copy and complete the table below by giving the uses of each metal section.

Metal section	Uses
I-Beam or H-Beam	
Angle Iron	
T-bar	
HSS (Square, Rectangular or Circular)	

(8)

[20]

DESIGN

(AUGUST)

Collect a logo with a slogan from any existing fast food outlet and paste it into your book (ie Nandos, Chicken Licken, KFC, Fishaways, Debonairs, etc)

- a) Think of a kind of fast food that you would like to be involved in.
- b) Design a packaging into which the food will be stored in and on it do the following:
- i) Design a Name (2) and Logo (3) for the fast food chain.
 - ii) Think of and write a "Slogan" (4) that will go with your Fast Food chain.

- iii) Generate 2 different free hand sketches of what the packaging will look like. (2)
- iv) Choose 1 drawing from the 2 in (iii) and make a final drawing in 3D double vanishing point using colour, texture and shading (Pg 40 & 41) (9)
- v) The packaging must be made exclusively out of recycled material (name the material you intend to use) (2)
- vi) The packaging must be very attractive (Aesthetics). (3)
- vii) List the materials you will need to make the packaging. (2)
- viii) Make a list of 3 tools and equipment you will use. (3)
- ix) Make a list of any 5 safety features you must keep in mind. (5)

[35]

MAKING OF PRODUCT. (AUGUST)

- i) Make model of the packaging for your fast food company. It must have all the features listed above (Design b) and it must be 100 % your own idea. (100)

EVALUATE (AUGUST)

- ii) Evaluate in terms of effectiveness. (5)
- iii) Communicate with family and friends. (10)