



TERM 2 EXEMPLAR TEST

GRADE 7

SUBJECT: TECHNOLOGY
FORMAL ASSESSMENT TASK
2024

TOTAL MARKS: 50

DURATION: 1 Hour

Name: _____

Class: _____ Date: _____

School: _____ Teacher: _____

INSTRUCTIONS

- 1 This question consists of FOUR SECTIONS.
- 2 Answer ALL the questions.
- 3 Read ALL the questions carefully before you write the answers.
- 4 Number your questions exactly as they appear in the question paper.
- 5 Write neatly and legibly.
- 6 Sketches must be clear, neat and done in pencil.

	<u>SECTION A:</u>	
	QUESTION 1: MULTIPLE CHOICE QUESTIONS	
1	Choose the correct answer from those given to make the statement true. Write only the letter of your choice, e.g. 1.10 C.	(10)
1.1	A lever where a fulcrum is in the middle is the A. 1 st class lever B. 2 nd class lever C. 3 rd class lever D. 4 th class lever	1
1.2	Limits to what can possibly work A. Drawing B. Design C. Perspective D. Constraints	1
1.3	A cave is structure A. Man-made B. Frame C. Triangular D. Natural	1
1.4	Another word for the pivot point at which a lever is supported A. Framework B. Fulcrum C. Load D. Effort	1
1.5	 are used to guide a designer to complete a drawing. A. Centre lines B. Construction lines C. Outlines D. Dashed lines	1
1.6	The first step in technological process is A. Product B. Investigation C. Materials D. Dimensions	1

1.7	The..... is the input force that is needed in order for the lever to work. A. Fulcrum B. Load C. Mechanical advantage D. Effort	1
1.8	A machine or tool that operates by compressed or pressured air is..... A. Pneumatic B. Master cylinder C. Hydraulic D. Plunger	1
1.9	Which is an example of the first- class lever? A. Tweezers B. Office Stapler C. See-saw D. Office punch	1
1.10	A type of force that squashes a member A. Tension force B. Shearing force C. Compression force D. Torsion force	1

SECTION B: STRUCTURES QUESTION 2**(5 Marks)**

Match column A with Column B. Write only the correct letter next to the corresponding number e.g. 3.1. C

COLUMN A	COLUMN B
2.1 Triangulation	A height , width, length
2.2 Mechanical advantage	B. Short and clear statement which outlines the problem or need
2.3 Dimension	C. Requirements that the product must meet to solve a problem
2.4 Specification	D. Lifting a load using little or no force
2.5 Design brief	E The strength of triangle to strengthen a frame structure

QUESTION 3

3.1 Look at the picture below- why are they called structures?		(4)
		
3.2	Name any 2 (TWO) methods that can be used to strengthen structures.	2
<u>SECTION C: DESIGN AND GRAPHIC COMMUNICATION</u> [21 Marks] QUESTION 4		
4.1	Differentiate between design brief and design specification	[4]
4.2	List 5 ways of communicating ideas about design in Technology	[5]
4.3	The method of sizing up or sizing down is called scaling – is this statement true or false	1
4.4	Differentiate between ergonomics and aesthetics	2
4.5	What is a working drawing and what is its function?	4
4.6	Draw a box with the following measurements. Length = 500m, height 600, breadth = 300mm. Use the provided grid.	5
5.1	SECTION D: MECHANICAL SYSTEM QUESTION 5	[18]
a)	Name 3 things that all systems have in common	3
b)	List 3 things that levers have in common	3
c)	What is Mechanical Advantage?	2
d)	What is a linkage?	2
5.2	Look at the picture below and identify the effort, fulcrum and load.	3



Levers can be used for reasons other than to gain a mechanical

advantage.

Look at the figure below and answer the questions that follow. The girl is trying to sweep the floor with a broom that has a long handle.



5.3.1	Which one is the load between the wooden broom, girl and dust on the floor?	1
5.3.2	What class lever is the girl using?	1
5.3.3	Explain how the tool makes the task easier and what else is being gained by the girl?	3

