



education

Department of
Education
FREE STATE PROVINCE

SENIOR PHASE

GRADE 7__

TECHNOLOGY

MID-YEAR TEST

JUNE 2025

Marks: 60

Durations: 75 minutes

Instructions and information

- This paper consists of 09 pages.
- Answer all the questions on this paper.
- Write neatly and legibly.
- Write your names on the space provided.
- Use pencil, relevant colours to draw and a blue or black ink to write.

LEARNER NAME: _____ GENDER: _____

SCHOOL: _____

MARKS OBTAINED [SECTIONS]		
SECTION A 30 MARKS	SECTION B 18 MARKS	SECTION C 12 MARKS

SECTION A [INVESTIGATE]

QUESTION 1

Choose the correct answers from a list of possible answers. Underline the correct answers.

1. Frame structures such as cell phone towers and windmills are strengthened through _____
 - A. Tubing
 - B. Triangulation
 - C. Corrugation
 - D. Folding (1)

2. The lines that show aspects of the product which are not visible but are drawn in short dashes.
 - A. Construction lines
 - B. Outlines
 - C. Hidden lines
 - D. Scales (1)




3. Which of the following steps indicate the correct order of the design process?
 - A. Investigate, make, design, evaluate, and communicate.
 - B. Communicate, design, make, evaluate, and investigate.
 - C. Design Investigate, make, evaluate, and communicate
 - D. Investigate, design, make, evaluate, and communicate. (1)

4. The structures that are made by people are called _____.
 - A. Man-made structures
 - B. Shell structures
 - C. Natural structures
 - D. Solid structures (1)

QUESTION 2

Complete the missing information in the table

(6)

PICTURE	TYPE OF STRUCTURE	PURPOSE	NATURAL OR MAN MADE
 EGGSHELL	2.1	2.2	2.3
 SPIDER WEB	FRAME STRUCTURE	2.4	2.5
 BICYCLE	2.6	TO SUPPORT THE LOAD.	MAN MADE

QUESTION 3

3.1 “Everyone who designs and makes a product as part of their job does Technology”.

3.1.1 List two careers that involve the use of technology. (2)

3.1.2 For each career, give an example of a task that involves technology. (2)

3.2 Study the pictures of different levers below and answer the questions that follow.

A



B



C



D



3.2.1 The middle element of the lever set determines the _____ of the lever. (1)

3.2.2 What class of lever is each of the objects above?

A. _____

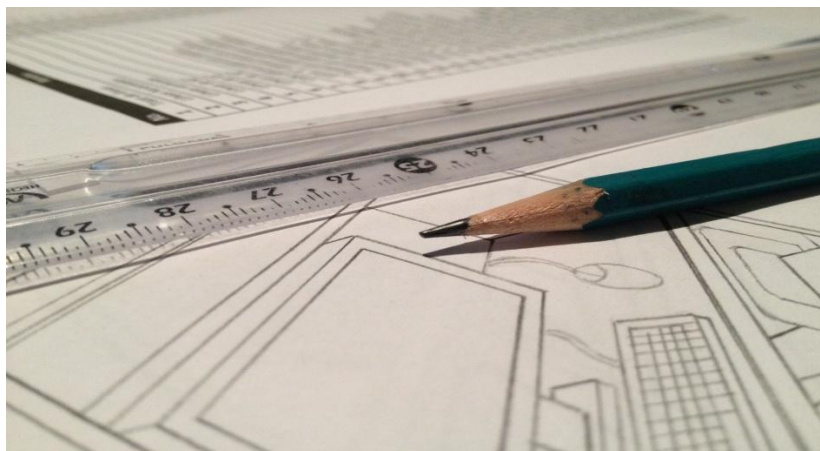
B. _____

C. _____

D. _____

(4)

QUESTION 4



4.1 What is graphic communication used for in Technology? (3)

4.2 Designers use three types of lines to produce detailed drawings.

a) Name the three types of lines. (3)

b) Explain the function of each type of line. (3)

c) Draw each line below your explanation in the space below. (3)

[30 MARKS]

SECTION B [KNOWLEDGE]

QUESTION 5

5.1 Explain what a design brief is. (2)

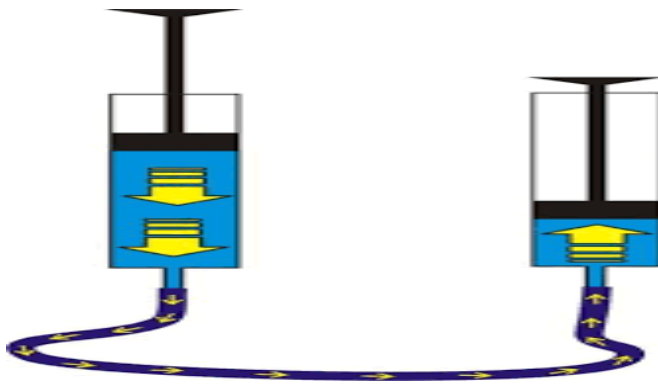
5.2 Describe the difference between design specifications and design constraints. (6)

5.3 Your neighbour works long hours and wants to make sure that his dogs have enough water throughout the hot summer days. He saw the bird feeder that you made and thought that something similar might be the solution to his problem.

5.3.1 What is the product that is to be designed? (2)

5.3.2 Who is it for?

(2)



5.4 You learnt about machines that use liquids and air to function.

5.4.1 What do we call machines that use air to function? _____ (1)

5.4.2 What are machines that use liquid to function called? _____ (1)

5.4.3 Your grandmother has come to visit. She has never heard of a subject called Technology. Explain to her what technology is. (4)

[18 MARKS]

SECTION C [ATTITUDE AND VALUES]

QUESTION 6



6.1 Study the pictures above and answer the questions that follow to describe the different features of each product.

(4)

Questions	Running shoe	Wheelbarrow
How will it impact the environment?		
3.7 How will it impact society?		

6.2 Some people use a solar-powered cell phone.



A solar-powered cell phone

6.2.1 Suggest where this type of cell phone might be used. Give a reason for your answer. (3)

6.2.2 Describe the advantages that cell phones bring to communities. (3)

6.2.3 What effect does this solar-powered cell phone have on the environment? (2)

[12 MARKS]