

Hillcrest High School

Grade 8

TECHNOLOGY

JUNE 2025

MARKS: 100

EXAMINER: Mrs N. Magubane

TIME: 1 Hour

MODERATOR: Mrs

MEMO

INSTRUCTIONS

1. The question paper consists of 5 questions and 5 pages including the cover page.
2. Question 5 and the Computer Literacy questions are attached to your answer booklet.
3. Answer all questions in the spaces provided.
4. Write your name and grade clearly and neatly in the space provided.
5. Highlight your Technology teacher's name above.
6. Technological based answers must be written.
7. All drawings/sketches must be completed using a sharp pencil and drawing instruments unless otherwise instructed.
8. Marks will be deducted for untidy work especially drawings/sketches.

QUESTION 3 STRUCTURES**[30]**

- 3.1. Define the following terms:
- 3.1.1. When a structure falls over because is unstable (2)
 - 3.1.2. When triangular shapes are formed by members ✓ that are used to brace a structure / stabilise a structure. ✓ (2)
 - 3.1.3. Fracture is when an object cracks or breaks because too much pressure is placed on it. (2)
 - 3.1.4. When the top section of a structure carries more weight than the bottom section, making it unstable. (2)
 - 3.1.5. A structure built against or projecting from a wall ✓ which serves to support or reinforce a wall. ✓ (2)
- 3.2.
- 3.2.1. A – compression ✓
B – tension ✓ (2)
 - 3.2.2. Compression is a force that pushes against a member ✓ and tension is a force that pulls apart a member. ✓ (2)
 - 3.2.3. They could put a column in the middle of the bridge to better support the centre. ✓ (2)
They could install horizontal metal (galvanised beams) to ensure that structure is stable/reinforced to handle the load. ✓
 - 3.2.4. Spanning over a gap ✓ and supporting a load ✓ (2)
- 3.3. Cable stayed bridge ✓, connected by cables to the nearest tower ✓ (2)
- 3.4.
- 3.4.1. A – Strut D – Beam (5)
B – Arch E – Tie
C – Column
 - 3.4.2. A - strut holds members of a framework in place by pushing against them. ✓ (5)
B - a curved structure spanning an opening, supporting the weight of the load above. ✓
C - vertical member that transmits the weight of the structure above to other elements below ✓
D - supported on its two ends. These parts lie horizontally. It resists bending ✓
E - tie is a member that holds or pulls two parts of structure together ✓

QUESTION 4 GRAPHIC COMMUNICATION**[10]**

- 4.1.
- 4.1.1. Parker ✓
 - 4.1.2. PSL/ Premier soccer league ✓
 - 4.1.3. Kaizer chiefs ✓
 - 4.1.4. Eskom ✓
 - 4.1.5. Proudly South African ✓
- 4.2.
- 4.2.1. Ability to make the drawings more realistic ✓ (1)
 - 4.2.2. It shows what the real object feels like, ✓ It can show rough, smooth, shiny or patterned textures ✓ (2)
 - 4.2.3. It shows the directions from which light is falling on the object ✓. It helps to show the shape of the object. ✓ / To create shadows where the light does not reach. ✓ (2)

NAME: _____ GRADE 8 _____

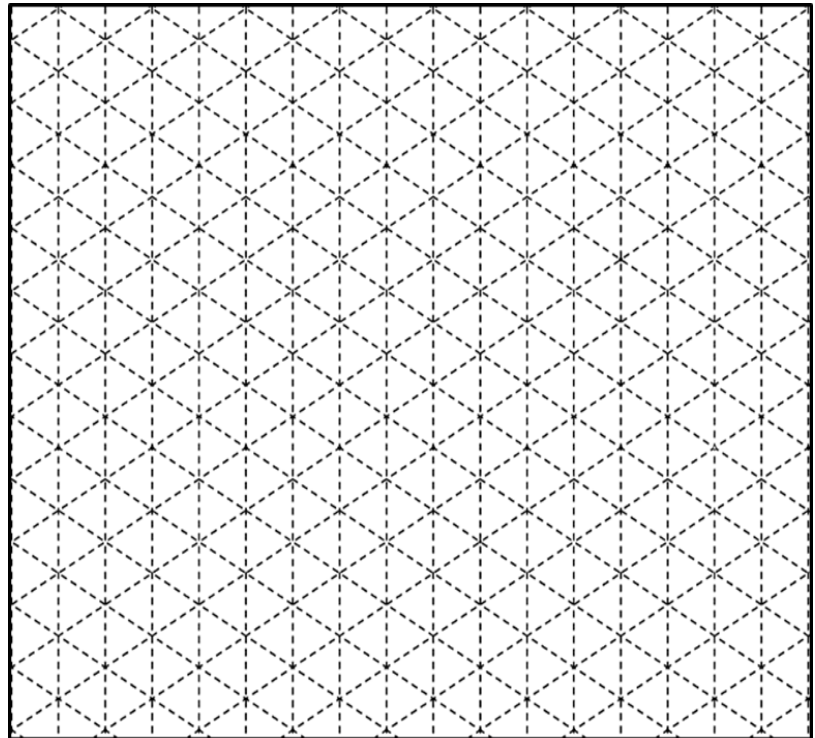
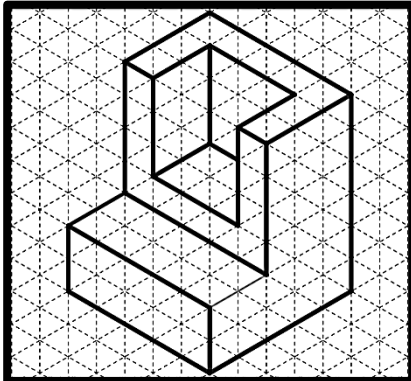
SUBJECT EDUCATOR: GORDON/STOLS/MAGUBANE

Q1 20	Q2 20	Q3 30	Q4 10	Q5 20	TOTAL 100

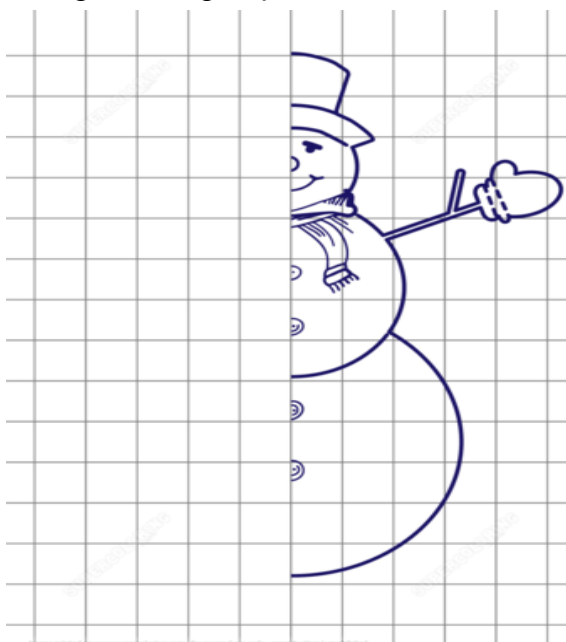
QUESTION 5 DRAWING

[20]

5.1. Redraw the isometric grid below on the grid provided. (15)



4.4. Finish the drawing on the grid provided include colouring in (5)



RUBRIC		
Accuracy	3	
Colour	2	
TOTAL	5	

COMPUTER LITERACY

[10]

- 1. 1.1. Insert (5)
- 1.2. Design
- 1.3. References
- 1.4. Home
- 1.5. Layout

- 2. (5)

