

SMARTWIZ

GRADE 6 TECHNOLOGY EXAM

MARKS: 50

MARKS	

TIME: 1 hour

SCHOOL _____

CLASS (e.g. 4A) _____

SURNAME _____

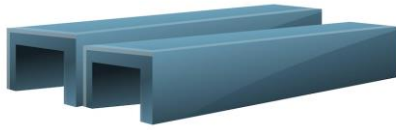
NAME _____

MYST PATHWORKS

Instructions for Students:

- > Read all instructions carefully before beginning the exam.
- > Write your name and student ID clearly on the answer sheet/booklet.
- > Answer all questions unless otherwise stated.
- > Show all your work/calculations where applicable.
- > Write clearly and legibly.
- > Use blue or black ink only. * Do not use correction fluid/tape.
- > No electronic devices (calculators, phones, etc.) are allowed unless explicitly permitted.
- > Raise your hand if you have any questions.
- > Do not talk to other students during the exam.
- > Any form of cheating will result in disqualification.

Question 1: Types of Structures (8 marks)



1.1 What is the difference between a frame structure and a solid structure? (2)

1.2 Give one example of a frame structure and one example of a solid structure. (2)

Frame structure: _____

Solid structure: _____

1.3 Name two reasons why people build bridges. (2)

1. _____
2. _____

1.4 What can happen if a structure is not stable? (2)

Question 2: Materials and Strengthening (10 marks)

2.1 What does it mean to reinforce a structure? (2)

2.2 Match the material to its use by completing the table below. (6)

Material	Use
Brick	Used for making _____
Steel	Used to build _____
Cardboard	Used to make _____
Glass	Used in _____
Wood	Used in building _____
Plastic	Used to make _____

2.3 Why do builders prefer using steel for tall buildings? (2)

Question 3: Energy and Electricity (8 marks)

3.1 What is the main source of electricity in South Africa? (1)

3.2 Name two **renewable sources of energy**. (2)

1. _____
2. _____

3.3 Why is it important to save electricity? (2)

3.4 Name **three appliances** found in a kitchen that use electricity. (3)

1. _____
2. _____
3. _____

Question 4: Tools and Safety (8 marks)

4.1 Why must you wear safety gear when using sharp tools? (2)

4.2 Fill in the missing words: (6)

Choose from the list: [goggles, apron, hammer, ruler, pliers, gloves]

1. To measure correctly, we use a _____.
2. To protect your eyes from dust, wear _____.
3. A _____ is used to hit nails.
4. A _____ helps protect your clothes.
5. You use _____ to grip or bend wires.
6. Hands are protected by wearing _____.

Question 5: Communication Technology (8 marks)

5.1 What is the role of the internet in communication? (2)

5.2 List any **four** ways people communicate using technology. (4)

1.

2.

3.

4.

5.3 Give two disadvantages of using too much technology for communication. (2)

1.

2.

Question 6: Design and Planning (8 marks)

6.1 What does it mean to “evaluate” a product after building it? (2)

6.2 List the first three steps of the design process. (3)

1.

2.

3.

6.3 Why is teamwork important when working on a technology project? (2)

6.4 What is a sketch used for during the design process? (1)

TOTAL: 50 MARKS

MEMO – Grade 6 Technology Exam

Total: 50 Marks

Question 1: Types of Structures (8 marks)

1.1

- A frame structure is made of parts joined together like a skeleton (e.g., jungle gym).
- A solid structure is made from a solid piece of material like a rock or brick wall. (2)

1.2

- Frame: Bridge, ladder
- Solid: Wall, dam (2)

1.3

- To allow people or vehicles to cross over obstacles like rivers or roads.
- To connect different places. (2)

1.4

- It can fall down, break, or injure people. (2)
-

Question 2: Materials and Strengthening (10 marks)

2.1

- To make it stronger by adding support or stronger materials. (2)

2.2 Table:

Material	Use
Brick	Houses or buildings
Steel	Tall buildings or bridges
Cardboard	Boxes or packaging
Glass	Windows
Wood	Furniture or building
Plastic	Bottles or containers

(6 × 1 = 6)

2.3

- Because steel is strong and flexible, and it does not break easily. (2)
-

Question 3: Energy and Electricity (8 marks)

3.1

- Eskom or coal power stations. (1)

3.2

- Solar energy, wind energy, water energy. (Any 2) (2)

3.3

- Saves money, helps the environment, prevents load shedding. (Any valid reason = 2)

3.4

- Kettle, fridge, microwave, stove, toaster (Any 3 = 3)
-

Question 4: Tools and Safety (8 marks)

4.1

- To protect your body from cuts or injuries when working. (2)

4.2 Fill-in-the-blanks:

1. Ruler
 2. Goggles
 3. Hammer
 4. Apron
 5. Pliers
 6. Gloves
- (6 × 1 = 6)
-

Question 5: Communication Technology (8 marks)

5.1

- It helps people share messages, videos, and emails quickly. (2)

5.2

- Email, WhatsApp, social media, video calls, cell phone calls, SMS. (Any 4 = 4)

5.3

- Eye problems, less face-to-face talk, addiction, cyberbullying (Any 2 valid = 2)
-

Question 6: Design and Planning (8 marks)

6.1

- To check if the product works well or needs changes. (2)

6.2

1. Investigate
2. Design
3. Make (3)

6.3

- Because sharing ideas and working together makes a project easier and better. (2)

6.4

- To show your idea before you build it. (1)
-

✓ **TOTAL: 50 MARKS**