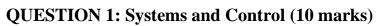
# SMARTWIZ GRADE 5 TECHNOLOGY EXAM

| MARKS: 50       | MARKS |   |
|-----------------|-------|---|
| TIME: 1 hour    |       |   |
| SCHOOL          |       |   |
| CLASS (e.g. 4A) |       |   |
| SURNAME         |       |   |
| NAME            |       | 1 |

# 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.



| 1.1 What is a system? Give an example. (5)   |           |
|--|-----------|
| 1.2 Name and explain the three main parts of a system. (5)                                   |           |
| OUECTION 2. Characteristic and Materials (10 and 12)   |           |
| QUESTION 2: Structures and Materials (10 marks)  2.1 Define what a structure is. (3)         |           |
| <b>2.2</b> Explain the difference between frame and shell structures. (4)                    | 4)        |
| 2.3 Why is it important to use strong materials in building struct                           | ures? (3) |
| QUESTION 3: Tools and Safety (10 marks) 3.1 List four tools commonly used in technology. (4) |           |
| 3.2 Describe two safety rules when using tools. (4)  |           |
| <b>3.3</b> Why should you wear safety gear when working with tools?                          | (2)       |
|  |           |

## **QUESTION 4: Processing (10 marks)**

**4.1** What is processing in technology? (3)



| <b>4.2</b> Name three different processes used to make or change products. (3)   |  |
|--|--|
| <b>4.3</b> How does joining materials help in technology? (4)  |  |
| QUESTION 5: Technology and the Environment (10 marks)  5.1 How can technology help protect the environment? Give two examples. (6) |  |
| 5.2 What is recycling? Why is recycling important? (4)   |  |
| TOTAL: 50 MARKS  |  |

## **MEMORANDUM:** Grade 5 Technology Exam Paper

**Total: 50 Marks** 

## **QUESTION 1: Systems and Control (10 marks)**

#### 1.1

- A system is a group of parts working together to do a task.
- Example: A washing machine. (5 marks)

## 1.2

- Three main parts of a system:
  - o Input: What goes into the system (e.g., water, electricity)
  - o Process: What the system does (e.g., washing clothes)
  - o Output: The result or product (e.g., clean clothes) (5 marks)

## **QUESTION 2: Structures and Materials (10 marks)**

## 2.1

• A structure is something built to support or hold something else. (3 marks)

## 2.2

- Frame structures are made with parts joined together to make a skeleton or frame (e.g., a bicycle frame).
- Shell structures have a solid surface or skin that supports weight (e.g., a dome). (4 marks)

## 2.3

• Strong materials are important so that structures don't break and stay safe and last long. (3 marks)

## **QUESTION 3: Tools and Safety (10 marks)**

#### 3.1

• Four tools: hammer, screwdriver, saw, pliers. (4 marks)

- Safety rules:
  - o Always wear safety gear when using tools.
  - o Use tools only for their intended purpose. (4 marks)

## 3.3

• Safety gear protects you from injuries and accidents. (2 marks)

## **QUESTION 4: Processing (10 marks)**

## 4.1

• Processing is changing raw materials into finished products. (3 marks)

## 4.2

• Examples of processes: cutting, shaping, joining. (3 marks)

## 4.3

• Joining materials helps build things by holding parts together to make a strong product. (4 marks)

## **QUESTION 5: Technology and the Environment (10 marks)**

#### 5.1

- Technology can help protect the environment by:
  - o Using solar energy instead of fossil fuels
  - o Creating machines that use less water or energy (6 marks)

## 5.2

- Recycling is reusing old materials to make new products.
- Recycling is important because it reduces waste and saves natural resources. (4 marks)