# SMARTWIZ GRADE 5 TECHNOLOGY EXAM

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

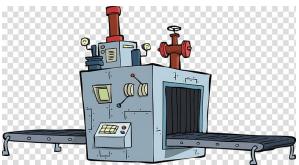
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## Instructions for Students:

- > 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: Inputs, Processes, and Outputs (10 marks)	
<b>1.1</b> Define what an input is in a system. Give one example. (4)	
<b>1.2</b> What happens during the process stage of a system? (3)	
<b>1.3</b> Give an example of an output in a kitchen appliance system. (3)	
QUESTION 2: Materials and Their Uses (10 marks)	
2.1 Name three common materials used in technology. (3)	
<b>2.2</b> Explain why it is important to select the correct material for a product. (4)	
2.3 What type of material would you use to build a chair? Why? (3)	
QUESTION 3: Simple Machines (10 marks)	
<b>3.1</b> What is a simple machine? (3)	
<b>3.2</b> Name two types of simple machines and give an example of each. (4)	
3.3 How do simple machines make work easier? (3)	

# **QUESTION 4: Safety in Technology (10 marks)**



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4.2 List three safety precautions you should to	ake when using a hammer. (5)
QUESTION 5: Environmental Impact	t (10 monks)
5.1 How can technology harm the environment	
5.2 What can we do to reduce the negative im	npact of technology on the environment? (5)

**TOTAL: 50 MARKS** 

# **QUESTION 1: Inputs, Processes, and Outputs (10 marks)**

#### 1.1

- Input is what goes into a system to make it work.
- Example: Electricity going into a toaster. (4 marks)

#### 1.2

• During the process stage, the system changes the input to do the job. (3 marks)

#### 1.3

- Output is what the system produces or does at the end.
- Example: Toast coming out of the toaster. (3 marks)

# **QUESTION 2: Materials and Their Uses (10 marks)**

#### 2.1

• Three common materials: wood, metal, plastic. (3 marks)

#### 2.2

• Using the correct material is important because it makes the product strong, safe, and suitable for its use. (4 marks)

#### 2.3

• Material for chair: wood (or metal/plastic) because it is strong and supports weight. (3 marks)

# **QUESTION 3: Simple Machines (10 marks)**

#### 3.1

• A simple machine is a tool that makes work easier by changing the direction or amount of force needed. (3 marks)

#### 3.2

- Two types:
  - o Lever (example: seesaw)
  - o Inclined plane (example: ramp) (4 marks)

• Simple machines make work easier by reducing effort or changing force direction. (3 marks)

# **QUESTION 4: Safety in Technology (10 marks)**

#### 4.1

• Following safety rules prevents accidents and injuries when using tools and machines. (5 marks)

#### 4.2

- Safety precautions with hammer:
  - Wear safety goggles
  - o Hold the nail correctly
  - Make sure the area is clear before swinging (3 correct = 5 marks)

# **QUESTION 5: Environmental Impact (10 marks)**

#### 5.1

- Technology can harm the environment by:
  - o Pollution from factories or machines
  - Cutting down trees for materials (2 examples = 5 marks)

## 5.2

- To reduce harm:
  - o Recycle materials
  - Use renewable energy sources like solar or wind power (2 good answers = 5 marks)