# SMARTWIZ GRADE 6 TECHNOLOGY EXAM

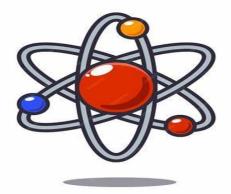
| MARKS: 50       | MARKS |   |
|-----------------|-------|---|
| TIME: 1 hour    |       |   |
| SCHOOL          |       |   |
| CLASS (e.g. 4A) |       |   |
| SURNAME         |       |   |
| NAME            |       | - |

# 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: Structures (10 marks)**



**1.1** What is a *structure*? Give one example. (2)

|                      | structures and two man-made structures. (4) |
|----------------------|---|
| Natural structures:  |   |
| Man-made structures: | DATE OF OUR THEFT A CH TENDERAL             |
|                      | MI I DI I PA I III VV WIND                  |

**1.4** Why is it important for buildings to have strong foundations? (2)

# **Question 2: Materials (8 marks)**

**2.1** What is meant by the term *material* in Technology? (2)



**2.2** Complete the table below by writing whether each material is natural or processed: (6) Material Natural or Processed? Wood Plastic Cotton Glass Wool Metal **Question 3: Tools and Equipment (8 marks) 3.1** Name any **four tools** used for cutting or measuring. (4) 1. — **3.2** Why is it important to **use tools safely**? (2) **3.3** What **protective clothing** should you wear when working with tools? (2) **Question 4: Electrical Energy (8 marks) 4.1** What is **electrical energy**? (2) **4.2** Name **two appliances** that use electrical energy. (2) **4.3** Why should we **not touch plugs with wet hands**? (2)

**4.4** What is the source of electricity in most homes? (2)

# **Question 5: Communication Technology (8 marks)**

**5.1** What is *communication technology*? (2)

**5.2** Name **three examples** of communication devices. (3)

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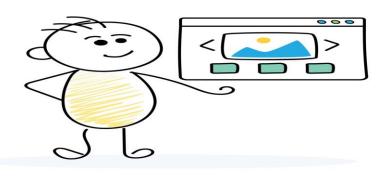
2.

**5.3** What are two **advantages** of using cell phones? (2)

**5.4** Mention one **disadvantage** of communication technology. (1)

# MYST PATHWORKS

**Question 6: Design Process (8 marks)** 



Web Design

**6.1** List the **five steps** of the design process. (5)

| 1  |  |
|----|--|
| 1. |  |
| 2  |  |
| ∠. |  |

3. \_\_\_\_\_

5.

| <b>6.2</b> Why is planning important before building something? (2) |  |
|---|--|
| <b>6.3</b> What is a <i>prototype</i> ? (1)                         |  |

**TOTAL: 50 MARKS** 



# **MEMO – Grade 6 Technology Exam**

**Total: 50 Marks** 

## **Question 1: Structures (10 marks)**

**1.1** A structure is something that has been built or made to support a load. Example: A house, bridge, chair. (2)

#### 1.2

- Natural structures: Tree, mountain
- Man-made structures: Bridge, building (4)
- 1.3 To allow people or vehicles to cross over something like a river or road. (2)
- **1.4** Strong foundations help to support the structure and keep it stable and safe. (2)

### **Question 2: Materials (8 marks)**

2.1 A material is what something is made from. It can be natural or processed. (2)

#### 2.2

#### **Material Natural or Processed?**

Wood Natural

Plastic Processed

Cotton Natural

Glass Processed

Wool Natural

Metal Processed

 $(6 \times 1 \text{ mark} = 6)$ 

# **Question 3: Tools and Equipment (8 marks)**

- **3.1** Any four of the following:
  - Ruler
  - Measuring tape
  - Scissors

- Hacksaw
- Pliers
- Hammer (Any correct = 4 marks)
- **3.2** To prevent injury or accidents while working. (2)
- **3.3** Gloves, goggles, apron, closed shoes. (Any correct protective clothing = 2)

## **Question 4: Electrical Energy (8 marks)**

- **4.1** Electrical energy is the energy from electricity used to power devices. (2)
- **4.2** Any two:
  - Kettle
  - Television
  - Microwave
  - Fan
  - Toaster (Any valid = 2)
- **4.3** Because it can cause electric shock, which is dangerous. (2)
- **4.4** Electricity from Eskom or power stations via power lines. (2)

# **Question 5: Communication Technology (8 marks)**

**5.1** It is technology used to send or receive messages and information. (2)

5.2

- 1. Cell phone
- 2. Computer
- 3. Television / Radio (Any valid = 3)

5.3

- Fast communication
- Can access internet (Any 2 = 2)

#### 5.4

• Expensive, causes distraction, reduces face-to-face interaction (Any valid = 1)

# **Question 6: Design Process (8 marks)**

6.1

- 1. Investigate
- 2. Design
- 3. Make
- 4. Evaluate
- 5. Communicate  $(5 \times 1 = 5)$
- **6.2** So you can work carefully, solve problems, and avoid wasting time or materials. (2)
- **6.3** A model or first version of a product to test an idea. (1)

