

SMARTWIZ

GRADE 7 TECHNOLOGY EXAM

MARKS: 50

MARKS	

TIME: 1 hour 30 minutes

SCHOOL _____

CLASS (e.g. 4A) _____

SURNAME _____

NAME _____

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.

This test consists of 4 pages, excluding the cover page.

SECTION A: TECHNOLOGY IN THE HOME 🏠 (10 MARKS)



1. Look at the image and answer the questions:

1.1 Name two appliances you can see in the picture.

1. _____
2. _____ (2)

1.2 What type of energy does a kettle use?

_____ (1)

1.3 Give one reason why we should turn off appliances when not in use.

_____ (1)

1.4 Fill in the correct word: *electricity*, *gas*, or *solar* (2)

- a) The fridge runs on _____.
- b) Some stoves use _____ for cooking.

1.5 List TWO ways to save energy at home. (2)

1. _____
2. _____

1.6 Why is it dangerous to touch wet hands to a plug? (2)

SECTION B: STRUCTURE MATERIALS 🛠️ (15 MARKS)

2. Look at the materials and match them to their uses:

🪵 Wood

🧱 Brick

 Plastic

 Metal

USE	MATERIAL (Choose from above)
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2.1 Building strong walls	_____ (1)
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2.2 Making soft drink bottles	_____ (1)
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2.3 Furniture like chairs	_____ (1)
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2.4 Tools like screwdrivers	_____ (1)
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2.5 Which of the materials above is the most waterproof?
_____ (1)

2.6 Why is wood not ideal for building bridges?
_____ (2)

2.7 What is the difference between *natural* and *man-made* materials?

_____ (2)

2.8 Write N for Natural or M for Man-made next to each: (3)

a) Plastic → _____

b) Stone → _____

c) Steel → _____

2.9 Why is it important to choose the correct material for a design? (2)

SECTION C: DESIGN AND PLANNING (15 MARKS)

3. You need to design a simple phone stand made from recycled materials.

3.1 What is the purpose of your phone stand?
_____ (1)

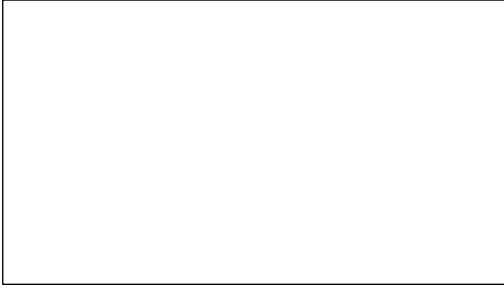
3.2 Choose TWO materials you would use.

1. _____
2. _____ (2)

3.3 List TWO tools you would need.

1. _____
2. _____ (2)

3.4 Below is a blank space. Draw your phone stand and label TWO parts. (5)



3.5 Why is it better to reuse old materials than buy new ones? (2)

3.6 Name one safety rule when using scissors or cutting tools. (1)

3.7 How can you make your design more stable? (2)

SECTION D: SAFETY AND RESPONSIBILITY 🚒 ⚠️ (10 MARKS)

4. Look at the safety symbols and answer:



4.1 Match the symbols to the meanings:

- A. Danger: Electric Shock
- B. Wear Gloves
- C. Eye Protection Needed
- D. General Warning

1. ⚡ → _____
2. 🧤 → _____
3. 👁️ → _____
4. ⚠️ → _____ (4)

4.2 Write T for True or F for False: (3)

- a) You can leave tools on the floor. _____
- b) You must check tools before using them. _____
- c) It's okay to eat while working with tools. _____

4.3 Why is safety so important when working with tools and materials? (2)

4.4 What should you do if a tool is broken? (1)

TOTAL: 50 MARKS



MEMO

SECTION A: TECHNOLOGY IN THE HOME (10 MARKS)

1.1 (Any two correct answers)

- Kettle ✓
 - Stove ✓
 - Fridge ✓
- (2 marks)

1.2 Electricity ✓ (1)

1.3 To save energy / To prevent fire / Safety ✓ (1)

1.4

a) Electricity ✓

b) Gas ✓

(2 marks)

1.5

- Turn off lights when not in use ✓
 - Unplug appliances ✓
 - Use energy-saving bulbs ✓
- (Any two – 2 marks)

1.6 Because water conducts electricity and it can shock you ✓✓ (2)

SECTION B: STRUCTURE MATERIALS (15 MARKS)

2.1 Brick ✓

2.2 Plastic ✓

2.3 Wood ✓

2.4 Metal ✓ (4 marks)

2.5 Plastic ✓ (1)

2.6 It is not strong enough / It can rot / Not durable ✓✓ (2)

2.7

Natural: comes from nature ✓

Man-made: made by humans using machines or chemicals ✓ (2)

2.8

- a) M ✓
- b) N ✓
- c) M ✓ (3 marks)

2.9 To make sure it is safe / works well / lasts long / fits the purpose ✓✓ (2)

SECTION C: DESIGN AND PLANNING (15 MARKS)

3.1 To hold a phone upright / To make using a phone easier ✓ (1)

3.2

- Cardboard
- Plastic bottles
- Ice cream sticks ✓✓ (Any two valid – 2 marks)

3.3

- Scissors
- Glue gun
- Ruler
- Pencil ✓✓ (Any two valid – 2 marks)

3.4 Drawing:

- Clear structure drawn ✓
- Two correct labels ✓✓
- Showing function or support ✓✓ (5 marks)

3.5 Saves money / Good for the environment / Less waste ✓✓ (2)

3.6 Cut away from yourself / Ask an adult for help / Keep hands away ✓ (1)

3.7 Use a wide base / Add weight / Use strong materials ✓✓ (2)

SECTION D: SAFETY AND RESPONSIBILITY (10 MARKS)

4.1 Matching Symbols:

- 1. ⚡ → A ✓
- 2. 🧤 → B ✓
- 3. 🕶️ → C ✓

4. ⚠️ → D ✓ (4 marks)

4.2

a) F ✓

b) T ✓

c) F ✓ (3 marks)

4.3 To prevent accidents / Keep everyone safe / Avoid injury ✓✓ (2)

4.4 Report it to a teacher or adult / Do not use it ✓ (1)

TOTAL: 50 MARKS

