

Please write clearly in block capitals.

School _____

Class _____

Name _____

Teacher _____

KS3 DESIGN & TECHNOLOGY

DESIGN & TECHNOLOGY

Key Stage 3 (Years 7-9) · End-of-Year Practice Paper · Set A · National Curriculum

Time allowed: 1 hour

Materials

For this paper you must have:

- a pen.
- no other materials are required.

Instructions

- Use black ink or black ball-point pen.
- Answer all questions in the spaces provided.
- Do all rough work in this book.
- In all calculations, show clearly how you work out your answer.

Information

- The maximum mark for this paper is 60.
- The marks for questions are shown in brackets.
- You are reminded of the need for good English and clear presentation.

For Examiner's Use	
Question	Mark
1	
2	
3	
4	
5	
6	
TOTAL	

Answer all questions in the spaces provided.

1 This question is about materials.

1.1 Name one natural timber (wood).

[1 mark]

1.2 Name one type of metal and one property of it.

[2 marks]

1.3 What is the difference between a thermoforming and a thermosetting plastic?

[2 marks]

1.4 Give one reason why a designer would choose a particular material for a product.

[2 marks]

1.5 Explain why MDF or plywood is often used instead of natural wood.

[3 marks]

2 This question is about tools and equipment.

2.1 Name one tool used to cut wood.

[1 mark]

2.2 Name one tool used to make a hole.

[1 mark]

2.3 Describe one safety rule when using workshop tools.

[2 marks]

Question 2 (continued)

2.4

What is a 'jig' or 'template' used for?

[2 marks]

2.5

Explain why accuracy is important when making a product.

[4 marks]

3

This question is about the design process.

3.1

What is a 'design brief'?

[2 marks]

3.2

Name two stages of the design process.

[2 marks]

3.3

Why do designers carry out research before designing?

[2 marks]

3.4

Describe what is meant by a 'specification'.

[2 marks]

3.5

Explain why a designer makes a prototype before making the final product.

[2 marks]

4

This question is about cooking and nutrition.Do not
write
outside the
box

4.1

Name two nutrients the body needs.

[2 marks]

4.2

Give one function of protein in the body.

[1 mark]

4.3

Why is it important to wash your hands before preparing food?

[2 marks]

4.4

Describe one rule for storing raw meat safely.

[2 marks]

4.5

Explain what a 'balanced diet' is and why it matters.

[3 marks]

5

This question is about sustainability.

5.1

What do the '6 Rs' help designers to do?

[2 marks]

5.2

Name three of the '6 Rs'.

[3 marks]

5.3

Give one reason why reducing the materials used in a product is good for the planet.

[2 marks]

Question 5 (continued)

5.4

Explain one way a product could be designed to be more sustainable.

[3 marks]

6

This question is about designing a product.**Read the brief below. 'Design a desk tidy to hold pens, pencils and small items for a student's desk.'**

6.1

Write two points for the specification of this product.

[2 marks]

6.2

Suggest a suitable material for the desk tidy and give a reason.

[2 marks]

6.3

Describe how you would make sure your desk tidy is safe to use.

[3 marks]

6.4

Explain how you would test and evaluate your finished desk tidy against the brief.

[3 marks]

END OF QUESTIONS