

GCSE

**DESIGN & TECHNOLOGY
(PRODUCT DESIGN)**

Unit 2 Designing and Making Innovation Challenge

6 hours in either **one** 6 hour session or **two** 3 hour sessions plus 30 minutes to reflect on design ideas within 72 hours of the completion of the challenge.

The 6 hour examination can be conducted at the discretion of the centre between 10th January and 26th January 2007.



Candidate Name

Centre Number

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Candidate Number

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Date of Challenge

Date of Reflection

Session 1

Session 2

INSTRUCTIONS TO CANDIDATES
Please clearly write below

Title of the Innovation Challenge

For Examiner's Use

Design	22	
Communication	10	
Use of Materials	12	
Analysis	12	
Reflection	4	
Total	60	

INSTRUCTIONS TO CENTRES

It is essential that centres follow the instructions printed in the Teacher's Guide for the conduct for running this Innovation Challenge.

The activity is designed to take place in a design room, studio or workshop (not the centre's examination room/hall).

This document consists of **13** printed pages and **1** blank page and an Insert.

Time to Reflect

Use this page to reflect on what you have done.

This can ONLY be completed during the period 24 hours after and within 72 hours of the completion of the challenge. No other pages of this workbook can be added to, or amended during the 30 minute reflection time.

Session 1

- 1 What could you design? What are your initial thoughts?
Use sketches and notes to communicate your thoughts.

- 2 What are your best ideas?

1

2

3

Possible design brief(s).

1

2

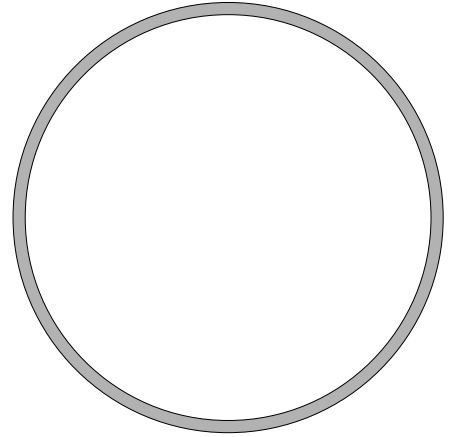
3

Additional space

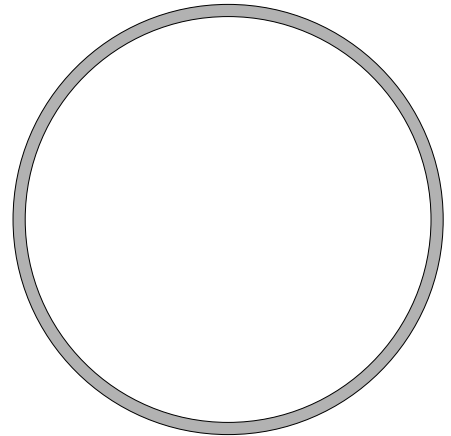
5 Start designing. Use sketches, notes and/or models to show your ideas.

7 **'Traffic Light Zone'**.

What problems can you see?

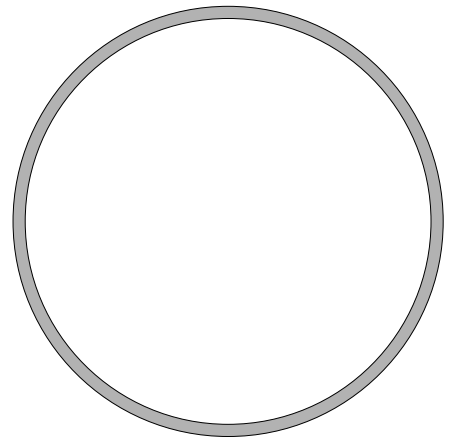


Which is your best idea?



6 What do you think of your ideas so far?

Which is your most unusual idea?



Additional space

8 Developing your idea (Photograph 1)

14 Complete this box ONLY in Session 2

Check that your design meets your original specification



9 'Reflect and Record'

'Talk the Talk' selling your product idea to others.

You will be asked to present your ideas (no more than 2 minutes). Use the space below to plan what you will say. Think about your brief, specification and key factors of your design.

10 'Green Zone'

Record any suggestions made by others in your group.

Modifications you could make.

11 'Question Time'

- 1 What does your design do?
- 2 What would you like your design to do?
- 3 How could your design become environmentally friendly?
- 4 How does your design appeal to the user group?

Additional space

12 'Your Model'

List the materials/ingredients you have chosen to make your prototype.

Component description	Materials/ingredients

How could these components be joined/combined together?

How could CAM or other electronic devices help you make your prototype?

13 Action plan for Session 2.

Session 2

Welcome back, in the space (Box 14 on page 7) please record any further thoughts that you have had since Session 1 about your product.

15 'Go make' You have 40 minutes construction time.

Progress report 1

Problems I have come up against so far.

Possible solutions.

16 'Go make' You have 40 minutes construction time.

Progress report 2

Did the above work? Why?

Which areas have been successful so far?

17 Plan what you will be doing/making for the final 40 minutes of construction time.

'Go make'

You have a final 40 minutes construction time.

Additional space

3 Decision Time!
Your Design Brief

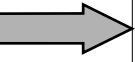
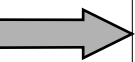
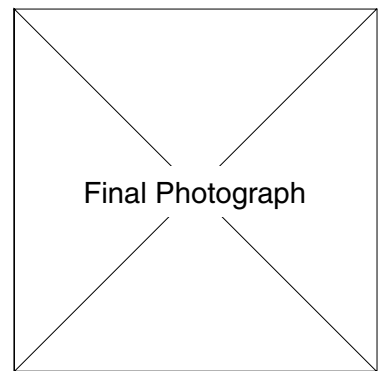
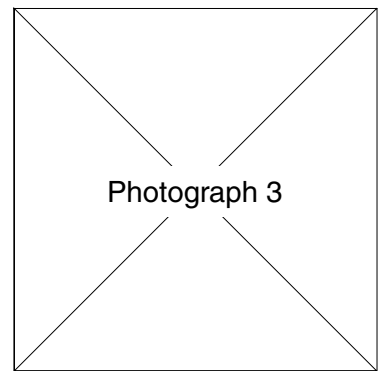
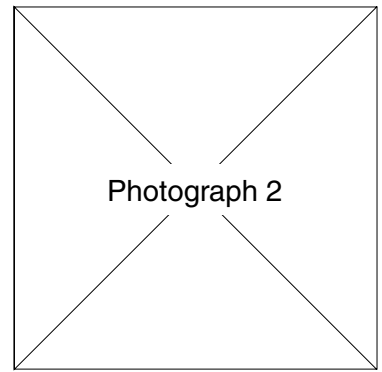
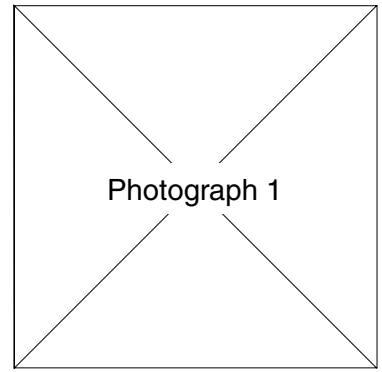
I am going to design and make a ...

My intended clients/users are ...

My intended design will be used in ...

4 Your Design Specification

To be successful my product must ...



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