



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education Ordinary Level

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**CDT: DESIGN AND COMMUNICATION**

**7048/02**

Paper 2: School Based Assessment

**October/November 2013**

INFORMATION FOR THE EXAMINATION IN 2013

No Additional Materials are required.

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**READ THESE INSTRUCTIONS FIRST**

You are required to spend two semesters (terms) designing and realising possible solutions to one of the following problems. Wherever possible you should apply your chosen problem to an actual location in your local area. **Remember that this is coursework and you may seek guidance from your teacher or any other sources that may support you in developing your design work.**



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This document consists of **6** printed pages and **2** blank pages.



- 1 Consider the situation where a jigsaw puzzle with moving parts is to be produced.

Research:

- (a) the design and construction of existing jigsaw puzzles and their packaging;
- (b) possible themes for the jigsaw puzzle.

Identify a suitable theme for the jigsaw puzzle and collect some information about it.

Develop designs for:

- (a) the jigsaw puzzle;
- (b) packaging for the jigsaw puzzle.

Produce prototypes of both the jigsaw puzzle and its packaging. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

- 2 Consider the situation where a tree-house is to be built.

Research:

- (a) the design and construction of existing tree-houses;
- (b) possible trees in which the tree-house could be built.

Identify a suitable tree in which the tree-house could be built and collect some information about it.

Develop a design for a tree-house.

Produce a model of the tree-house along with supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against its original specification so that it can be evaluated fully.

- 3** Consider the situation where a range of toy animals is to be produced. Each animal will be made from several pieces of card that slot together to make the final toy. The packaging for each animal will need to hang from a display stand.

Research:

- (a)** ways in which pieces of card can slot together without the use of glue or other additional materials;
- (b)** possible animals on which you could base your work.

Identify a suitable animal and collect some information about it.

Develop designs for:

- (a)** a slot-together toy animal made from card;
- (b)** packaging for the toy animal.

Produce prototypes of both the toy animal and its packaging. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

- 4** Consider the situation where a public building requires a stained-glass window.

Research:

- (a)** the design and construction of existing stained-glass windows;
- (b)** possible public buildings on which you could base your work;
- (c)** possible themes for the stained-glass window.

Identify:

- (a)** a suitable location for the stained-glass window;
- (b)** a suitable theme for the stained-glass window and collect some information about it.

Develop a design for a stained-glass window.

Produce a model of the stained-glass window along with supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against its original specification so that it can be evaluated fully.

- 5 Consider the situation where a souvenir T-shirt is to be produced for sale at a major sporting event. The T-shirt is to be promoted using a point-of-sale display stand.

Research:

- (a) possible sporting events on which your work could be based;
- (b) the design and construction of existing point of sale stands used to promote clothing.

Identify:

- (a) a T-shirt on which you will base your design. (You **do not** have to design the T-shirt);
- (b) a suitable sporting event and collect some information about it.

Develop designs for:

- (a) the graphics to go on the T-shirt;
- (b) a point-of-sale display stand that will hold the T-shirt.

Produce a prototype of the point-of-sale display stand and add graphics to the existing T-shirt that you have chosen to base your work on. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

- 6 Consider the situation where a bus shelter is required. The shelter will need to accommodate up to ten people while they wait at a bus stop.

Research:

- (a) the design and construction of existing bus shelters;
- (b) possible sites for the bus shelter.

Identify a suitable site for the bus shelter and collect some information about it.

Develop a design for a bus shelter.

Produce a model of the bus shelter along with supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against its original specification so that it can be evaluated fully.

- 7** Consider the situation where a food company is to produce a range of celebration cakes. Each cake will serve ten people.

Research:

- (a)** existing ways of packaging celebration cakes;
- (b)** possible events or occasions for which a celebration cake could be designed.

Identify a suitable event or occasion and collect some information about it.

Develop designs for:

- (a)** the top surface of the cake;
- (b)** packaging for the cake.

Produce a model of the cake and a prototype of the packaging. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

- 8** Consider the situation where your school or college requires a new logo and a notice board. The notice board will be located outside the main entrance to your school or college and be permanently fixed to the ground. The notice board will display the name of your school or college, the logo and a map of the site along with other relevant details.

Research:

- (a)** the design and construction of existing notice boards that are located outside;
- (b)** existing school logos;
- (c)** possible information that could be shown on the notice board.

Identify the details that will be shown on the notice board and collect some information about them.

Develop a design for:

- (a)** a logo that reflects the name of your school or college;
- (b)** a notice board.

Produce a model of the notice board along with supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your designs against their original specification so that they can be fully evaluated.

**9** Consider the situation where a card game to encourage healthy eating is to be produced.

Research:

- (a) possible aspects of healthy eating that could be included in your design;
- (b) the design and construction of existing card games and their packaging.

Identify the aspects of healthy eating that you will include in your design and collect some information about them.

Develop designs for:

- (a) a card game;
- (b) packaging for the card game.

Produce prototypes of both the card game and its packaging. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

**10** Consider the situation where a new perfume is to be produced.

Research:

- (a) existing bottles used to hold perfume;
- (b) the design and construction of packaging for perfume bottles;
- (c) possible details that could be included on the bottle and its packaging.

Identify the details that will be included on the bottle and its packaging and collect some information about it.

Develop designs for:

- (a) a perfume bottle;
- (b) packaging for the perfume bottle.

Produce a model of the bottle and a prototype of the packaging. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.



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