

# UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Ordinary Level

#### **CDT: DESIGN AND COMMUNICATION**

7048/02

Paper 2 School Based Assessment

October/November 2009

INFORMATION FOR THE EXAMINATION IN 2009

No Additional Materials are required.

# **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.



1 Consider the situation where the Post Office in your country is to issue a set of four commemorative postage stamps in a presentation pack. The stamps are to feature local wildlife.

#### Research:

- (a) recent issues of commemorative stamps and presentation packs;
- (b) local wildlife.

Identify the wildlife that you will feature in your designs and collect some information about it.

Develop designs for a set of four stamps and the presentation pack.

Produce prototypes of the stamps and presentation pack along with 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 beach hotel requires a landing jetty and a secure storage facility for water sports equipment.

# Research:

- (a) similar existing facilities;
- **(b)** the range of water sports equipment that would need to be stored.

Identify a suitable site for the jetty and storage facility and collect some information about it.

Develop designs for the jetty and storage facility.

Produce a model of the jetty and storage facility along with supporting drawings that fully communicate your designs.

3 Consider the situation where a series of six cycling guides are to be produced. Each guide will feature a cycling route of approximately ten kilometres long and enable visitors to your local area to see places of interest as well as local flora and fauna.

#### Research:

- (a) existing guides in terms of their format and the information they contain;
- (b) areas that would be suitable as cycle routes.

Identify a suitable area for a cycle route and collect some information about the places of interest and the flora and fauna in that area.

# Develop designs for:

- (a) one cycling guide. The guide is to be made from a single sheet of A3 paper folded to give a suitable format:
- **(b)** a folder to hold six cycling guides.

Produce prototypes of both the cycling guide and the folder. 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 range of model aircraft kits is to be produced. Each kit will consist of an A3 sheet of card on which is printed the developments (nets) to be cut out and glued together to make an aircraft along with the instructions on how to make the model.

#### Research:

- (a) existing card model kits;
- **(b)** aircraft on which you could base your work.

Identify a suitable aircraft and collect some information about it.

Develop a design for a model aircraft made from a sheet of A3 card.

### Produce:

- (a) a prototype of the sheet of A3 card with the developments and instructions on;
- **(b)** a card model which has been made from the A3 sheet.

These should be accompanied by supporting drawings that fully communicate your designs.

**5** Consider the situation where an electronics company requires packaging to hold an MP3 player and its accessories.

#### Research:

- (a) MP3 players and associated accessories;
- **(b)** existing ways of packaging MP3 players.

Identify a suitable MP3 player and its accessories that you will design packaging for and collect some information about them.

Develop a design for a piece of packaging to hold an MP3 player and its accessories.

Produce a prototype of the packaging together 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.

6 Consider the situation where a new book is to be published. For a limited period of time the book will be sold in a special paper carrier bag. The design on the carrier bag is to link with the theme or story line of the book.

#### Research:

- (a) possible themes or story lines that could be used for the book;
- (b) the designs of existing paper carrier bags.

Identify:

- (a) a suitable theme or story line for the book and collect some information about it;
- **(b)** a title for the book.

Develop designs for:

- (a) a dust jacket (cover) for the book;
- **(b)** a paper carrier bag for the book.

Produce prototypes of both the dust jacket and the carrier bag. These should be accompanied by supporting drawings that fully communicate your designs.

7 Consider the situation where a sports company requires packaging for a pair of sports shoes. The design of the packaging is to be linked to a major sporting event.

#### Research:

- (a) sports shoes;
- (b) major sporting events that your design could be linked to.

Identify:

- (a) the sports shoes you will design your packaging for and collect some information about them;
- (b) the major sporting event you will base your design on and collect some information about it.

Develop a design for a piece of packaging to hold a pair of sports shoes.

Produce a prototype of the packaging 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.

**8** Consider the situation where a new teenage magazine is to be launched. To encourage sales a free gift will be attached to the front cover of the magazine.

#### Research:

- (a) possible subjects that the content of the magazine could feature;
- **(b)** the types of free gift that are given away with existing magazines.

Identify:

- (a) the subject that your magazine will be based on and collect some information about it;
- **(b)** a title for the magazine;
- (c) the type of free gift that will be given away with the first issue.

Develop designs for:

- (a) the front cover of the magazine;
- **(b)** the free gift and a method of attaching it to the front cover.

Produce prototypes of both the front cover and the free gift. These should be accompanied with supporting drawings that fully communicate your designs.

9 Consider the situation where a restaurant requires a menu giving details about the food and drink that it has available for young children. To add interest to the menu it is to have at least two features that pop-up when the menu is opened.

#### Research:

- (a) the types of food and drink that appeal to young children;
- (b) pop-up mechanisms;
- (c) possible themes that your design could be based on.

Identify:

- (a) a name for the restaurant;
- (b) the food and drink that will be listed on the menu;
- (c) a suitable theme for the design and collect some information about it.

Produce a prototype of the pop-up menu 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.

10 Consider the situation where a play house is to be built for children aged between three and eight years old.

#### Research:

- (a) existing play houses;
- **(b)** possible sites for the play house;
- (c) possible themes that the design could be based on.

Identify:

- (a) a site for the play house;
- **(b)** the theme you will base your design on and collect some information about it.

Develop a design for a play house.

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

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