

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

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

7048/02

Paper 2: School Based Assessment

October/November 2012

INFORMATION FOR THE EXAMINATION IN 2012

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.



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



1 Consider the situation where a mobile phone company requires packaging for a mobile phone and its accessories.

#### Research:

- (a) mobile phones and associated accessories;
- (b) existing ways of packaging mobile phones.

Identify a suitable mobile phone 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 a mobile phone and its accessories.

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.

2 Consider the situation where the reception area of a hotel is to be refurbished.

## Research:

- (a) hotels on which you could base your work;
- **(b)** existing hotel reception areas.

Identify a suitable hotel and collect some information about what the hotel needs in its reception area.

Develop a design for a hotel reception area.

Produce a model of the hotel reception area 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 children's pop-up book about world-famous buildings is to be published.

#### Research:

- (a) the various buildings that could be featured in the book;
- (b) the design and construction of pop-up books and the mechanisms they use.

Identify:

- (a) two buildings that you will feature in the book and collect some information about them;
- **(b)** a suitable title for the book.

Develop designs for:

- (a) the front and back covers of the book;
- (b) two pop-up pages.

Produce a prototype of the book along with supporting drawings that fully communicate your designs.

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

4 Consider the situation where a range of jewellery based on insects is to be produced. Each piece of jewellery will be packaged in a blister pack.

#### Research:

- (a) the design and construction of existing blister packs;
- (b) insects on which you could base your work.

Identify a suitable insect and collect some information about it.

Develop designs for:

- (a) a piece of jewellery;
- **(b)** a blister pack.

Produce prototypes of both the jewellery and the blister pack. These should be accompanied by supporting drawings that fully communicate your designs.

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 toy company requires packaging to hold a model of a Formula One racing car.

#### Research:

- (a) existing ways of packaging model cars;
- **(b)** Formula One racing cars on which you could base your work.

Identify a suitable Formula One racing car and collect some information about it.

Develop a design for a piece of packaging to hold a model of a Formula One racing car.

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.

6 Consider the situation where a new shop, selling locally made craft work and souvenirs, is to open.

#### Research:

- (a) existing shops that sell craft work and souvenirs;
- **(b)** possible sites for the shop.

Identify:

- (a) a suitable site for the shop and collect some information about it;
- (b) a suitable name for the shop.

Develop designs for:

- (a) the layout of the shop;
- **(b)** the shop front and entrance.

Produce a model of the shop layout and shop front, along with supporting drawings that fully communicate your designs.

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 band or singer is to undertake a world tour. At the end of the tour a souvenir DVD and booklet will be produced.

#### Research:

- (a) bands and singers that you could base your work on;
- (b) existing ways in which souvenir DVDs and booklets are packaged.

Identify a suitable band or singer and collect some information about them.

Develop designs for:

- (a) a card box to hold the DVD and booklet;
- **(b)** the front cover of the booklet.

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

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 bus is to be converted into a mobile youth club for teenagers.

#### Research:

- (a) buses on which you could base your work;
- (b) the facilities that teenagers would like to have in a mobile youth club.

Identify a suitable bus that you will base the conversion on and collect some information about it.

Develop a design for a mobile youth club.

Produce a model that shows the internal layout of the mobile youth club. This should be accompanied by 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.

9 Consider the situation where a toy company is to produce play houses for children aged between two and six years old. The play houses will be made from corrugated cardboard and will be based on famous children's stories.

#### Research:

- (a) possible stories that the design could be based on;
- **(b)** non-permanent ways of joining corrugated cardboard together.

Identify a children's story that you will base your design on and collect some information about it.

Develop a design for a play house made from corrugated cardboard.

Produce a prototype of the play 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.

10 Consider the situation where outdoor housing and an exercise pen are required for a family pet.

## Research:

- (a) the possible types of family pet that the design could be produced for;
- **(b)** existing outdoor housing and exercise pens for family pets.

Identify a suitable family pet and collect some information about its housing and exercise requirements.

Develop a design which provides outdoor housing and an exercise pen for a family pet.

Produce a model of the housing and the exercise pen 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.

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