

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GENERAL CERTIFICATE OF SECONDARY EDUCATION**

A552/TS

DESIGN AND TECHNOLOGY

PRODUCT DESIGN

Designing and Making Innovation Challenge

TASK SHEET

**To be opened on the day of the examination
between 10 January 2010 and 25 January 2010**

JANUARY 2010

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

You will have a total of 6 hours to complete the examination in 2 × 3 hour sessions.

At the end of the examination you must have:

- **selected ONE of the challenges detailed on this paper;**
- **completed an answer booklet showing your creative thinking and how your idea works;**
- **produced a MODEL/PROTOTYPE to show the important features of your design;**
- **at least FOUR photographs fixed in your workbook showing your modelling, trialling and prototyping activities;**
- **completed the ‘Time to Reflect’ section of the workbook at some time between 24 and 72 hours after completion of the challenge.**

SCHOOL SPORTS DAY

SITUATION:

On a school sports day, not all students participate in the sporting events.

The opportunities for these students still to be involved and support the event and its arrangements are numerous.

From the lists of challenges on page 4 select ONE challenge for which you will design and manufacture a prototype solution.

Challenge 1 'Relay Race'

A relay race will be undertaken as part of the event. A visual method of confirming to the starter, that competitors are in the correct position and ready to start is required.

Challenge 2 'Refreshments and Snacks'

As part of the school sports day the school is going to undertake fundraising to purchase a mini-bus. You are required to design refreshments and snacks which will be sold as part of the fundraising effort. These items need to consider healthy lifestyles and the sports day theme.

Challenge 3 'Temporary Seating'

The judges at the sports day event need to move around the sports field for different events. A method of providing portable, temporary seating for the judges is required.

Challenge 4 'Event Controllers'

A number of students are going to act as 'event controllers'. They will collect competitors from waiting areas and take them to the correct position for the start of each event. These 'event controllers' and the events they represent will need to be visually identifiable to the competitors and spectators.

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