Design and Technology

GCSE 2012
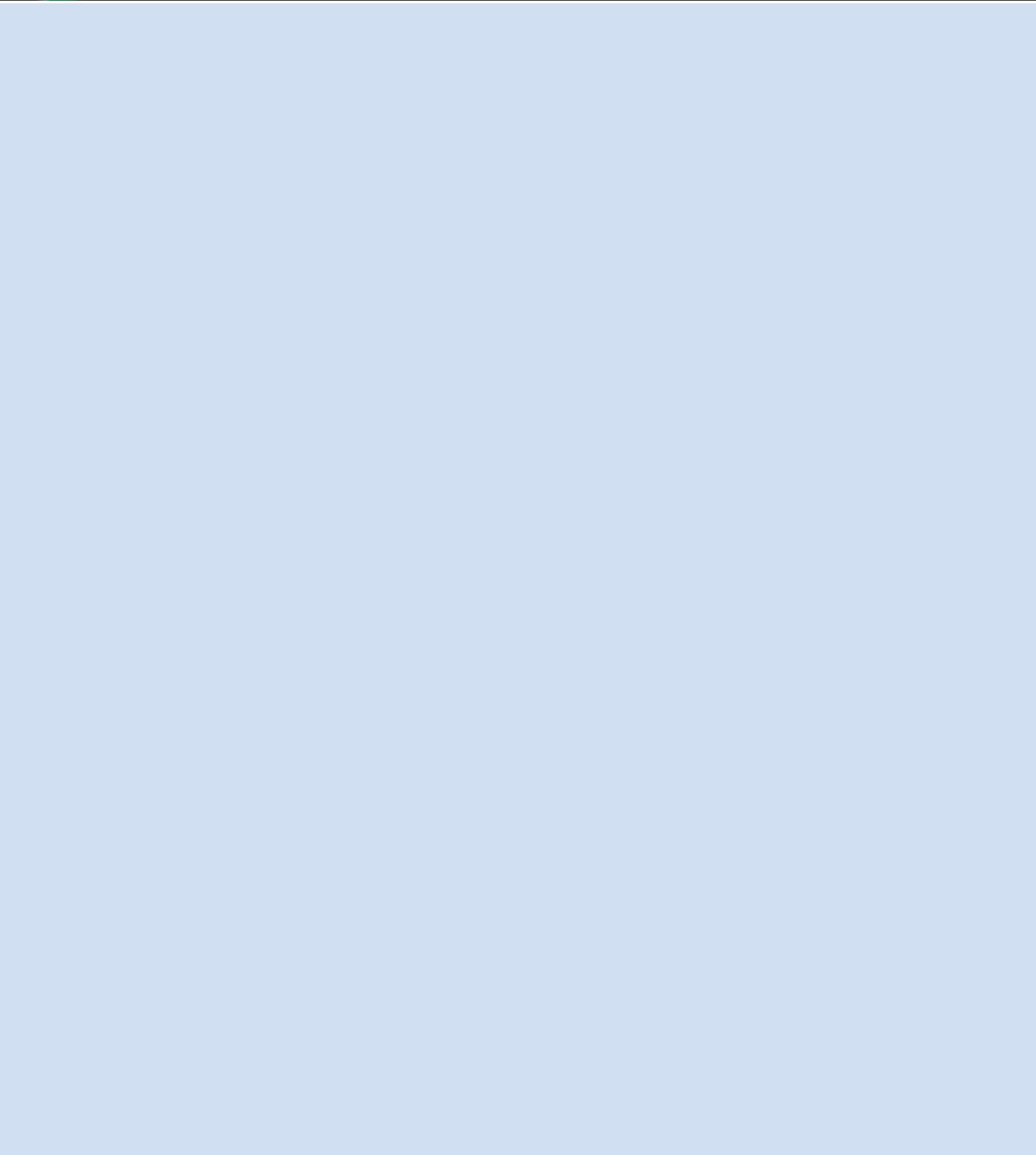
D&T: Graphics

Teachers' Handbook

J303/J043

Version 1

November 2012

OCR

CONTENTS

INTRODUCTION

OCR's GCSE in Design and Technology: Graphics specification entered first teaching in September 2009.

We have improved the quality of our GCSEs for teachers and students alike. We've made improvements in two key areas: updated and relevant content and a focus on developing students' personal, learning and thinking skills.

In addition and in response to reforms announced by the Government and in response to Ofqual mandated changes to GCSEs, unitised assessment of this qualification is being replaced by linear assessment from September 2012. This means that candidates commencing a two year course from September 2012 will take all of their GCSE units at the end of the course in June 2014.

The main changes are:
- Controlled assessment and examinations will be summative
- Examinations provide opportunity for extended writing and more varied question types
- All GCSEs will meet the requirements of the Equality Act.

OCR offers a range of support materials, developed following extensive research and consultation with teachers. We've designed them to save you time when preparing for the specification and to support you while teaching them.

It is important to make the point that this Teachers' Handbook plays a secondary role to the specifications themselves. The GCSE Design and Technology: Graphics specification is the document on which assessment is based: it specifies what content and skills need to be covered. At all times therefore, the Teachers' Handbook should be read in conjunction with the Specification. If clarification on a particular point is sought, then that clarification must be found in the Specification itself.

SUBJECT SPECIFIC GUIDANCE

This document is designed to support delivery of GCSE Design and Technology: Graphics (J303). We hope you will find it useful in planning your delivery and assessment opportunities.

There are three units available for Design and Technology: Graphics. They are:

- Unit A531: Introduction to designing and making

- Unit A533: Making quality products

- Unit A535: Sustainability and technical aspects of designing and making

These documents do not seek to prescribe how the subject should be delivered. They merely seek to show the breadth and range of learning opportunities within this subject area. We hope centres will use these as a starting point for developing inspiring and innovative courses that meet the needs of their students.

UNIT A535: SUSTAINABILITY AND THE TECHNICAL ASPECTS OF DESIGNING AND MAKING

This unit aims to develop a candidate's knowledge and understanding of sustainability, environmental concerns, cultural, moral and social issues. Candidates will look at how Design and Technology has evolved through examination of the products from the past and present. Candidates need to consider how future designs will impact on the world in which we live. They will need to study examples of both old and new products in order that they gain awareness and understanding of recent trends and innovations in design and production, labelling, packaging and the impact that the design of such products is having on the environment, society and the economy.

Candidates will need to consider how future designs/products will impact on the world in which we live. By looking at old and new products candidates will gain awareness and understanding of trends and innovations in design and manufacture, labeling, packaging and the impact that the design of such products is having on the environment, society and the economy.

Moral, cultural, economic, environmental and sustainability issues are inherent in design and technology.

The unit focuses on:

- Consideration of products

- Consideration of the environment

- Consideration of society and the economy

- Working with tools and materials

- Selecting processes

- Designing for success.

The paper consists of questions that focus on sustainability and technical aspects of design and making.

80 marks

40% of the total GCSE marks

1 hour 30 minutes written paper

Section A consists of 15 short answer questions and one question which may involve sketching, annotation, short sentences and extended writing. This section will focus on sustainability, product analysis and design.

Section B consists of three questions which may involve sketching, annotation, short sentences and extended writing. This section will focus on the technical aspects of working with materials, tools and equipment and design of products.

This unit will be externally assessed.

BANDED MARK SCHEME
It is to be expected that in Section B of the paper two questions will require detailed written responses and will be answered through a banded mark scheme. Banded mark schemes do require a more detailed and

technical answer that uses the correct subject specialist terminology and also takes into account the use of spelling, punctuation and grammar.

For example:

Level 1 (1-2 marks)

A basic analysis, showing some understanding. There will be little or no use of specialist terms. Answers may be ambiguous or disorganised. Errors of grammar, punctuation and spelling may be intrusive.

Level 2 (3-4 marks)

Adequate analysis, showing understanding. Candidates can provide a description using some specialist terminology although these may not always be used appropriately. The information will be presented for the most part in a structured format. There may be occasional errors in spelling, grammar and punctuation.

Level 3 (5-6 marks)

Thorough analysis, showing clear understanding. Specialist terms will be used appropriately and correctly. The information will be presented in a structured format. The candidate will demonstrate the accurate use of spelling, punctuation and grammar.

0 = No response worthy of credit

RESOURCES

Graphic Products to GCSE, ISBN 0-19-832789-7
Abigail and Philip Buckle

Working with materials, ISBN 0-00-327351-2
Chapman and Finney

Graphics, ISBN 0-528-23468-9

Design and make it, ISBN 0-7487-2474-5
Shepherd

Presentation techniques, ISBN 0-316-91243-3
Powell

The essentials of GCSE D&T, ISBN 0-1-903068-46-0
Eason

Special Packaging Designs (Agile Rabbit Editions),
ISBN 978-9057680540
The Pepin Press

Mail it (Agile Rabbit Editions), ISBN 978-9057680533
Pepin Van Roojen

Structural Package Designs (Agile Rabbit Editions)
ISBN 978-9057680441
The Pepin Press

Folding Patterns for display and publicity (Agile Rabbit
Editions), ISBN 978-9057680403
The Pepin Press

Paper Engineering for pop-up books and cards,
ISBN 978-0906212493
Mark Hiner

Pop-Up: Manual of Paper Mechanisms,
ISBN 978-1899618095
Duncan Birmingham

The Packaging Designers Book of Patterns
ISBN 978-0471731108
Laszlo Roth andGeorge Wybenga

www.designandtech.com

www.designandtech.co.uk

www.technologystudent.com

www.design-technology.info

www.dtonline.org

www.techsoftuk.co.uk

www.xara.com/uk/

www.adobe.com

http://www.carbonfootprint.com

http://www.ecofriendlykids.co.uk

http://www.recycle-more.co.uk

OTHER FORMS OF SUPPORT

In order to help you implement the new GCSE Design and Technology: Graphics Specification effectively, OCR offers a comprehensive package of support. This includes:

PUBLISHED RESOURCES

OCR offers centres a wealth of quality published support with a fantastic choice of 'Official Publisher Partner' and 'Approved Publication' resources, all endorsed by OCR for use with OCR specifications.

PUBLISHER PARTNERS

OCR works in close collaboration with three Publisher Partners; Hodder Education, Heinemann and Oxford University Press (OUP) to ensure centres have access to:

- Better published support, available when you need it, tailored to OCR specifications

- Quality resources produced in consultation with OCR subject teams, which are linked to
- OCR's teacher support materials
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- More resources for specifications with lower candidate entries
-
- Materials that are subject to a thorough quality assurance process to achieve endorsement

Hodder Education is the publisher partner for OCR GCSE Design and Technology : Graphics.

Hodder Education has produced the following resources for OCR GCSE Design and Technology : Graphics.

OCR Graphics for GCSE Student's Book
Paul Brannlund, Kevin Crampton, John Rolfe, Editor: Bob White
ISBN: 978 0340 98198 6
Published:24/04/2009

OCR Design and Technology for GCSE Dynamic Learning Network Edition CD-ROM ISBN: 978 0340 98203 7
(Available April 2009)

APPROVED PUBLICATIONS

OCR still endorses other publisher materials, which undergo a thorough quality assurance process to achieve endorsement. By offering a choice of endorsed materials, centres can be assured of quality support for all OCR qualifications.

ENDORSEMENT

OCR endorses a range of publisher materials to provide quality support for centres delivering its qualifications. You can be confident that materials branded with OCR's "Official Publishing Partner" or "Approved publication" logos have undergone a thorough quality assurance process to achieve endorsement. All responsibility for the content of the publisher's materials rests with the publisher.

These endorsements do not mean that the materials are the only suitable resources available or necessary to achieve an OCR qualification. Any resource lists which are produced by OCR shall include a range of appropriate texts.

PROFESSIONAL DEVELOPMENT

The 2012-13 OCR Professional Development Programme offers more accessible and more cost effective training, with the same valued content that you expect from us.

At OCR, we are constantly looking for ways in which we can improve the support we offer to teachers. Most recently we have been considering the increasing challenges that schools face in releasing teachers for INSET, and how OCR can make its professional development programme more accessible and

convenient for all.
From September 2012, our new improved programme will include:

- FREE online professional development units available when and where you want them
- FREE live web broadcasts of professional development events
- FREE face to face training for GCSE controlled assessment and GCE coursework
- A series of 'not to be missed' premier professional development events.

For more information, please email training@ocr.org.uk or visit www.ocr.org.uk/training.

OCR SOCIAL
Visit our social media site (http://www.social.ocr.org.uk). By registering you will have free access to a dedicated platform where teachers can engage with each other - and OCR - to share best practice, offer guidance and access a range of support materials produced by other teachers; such as lesson plans, presentations, videos and links to other helpful sites.

INTERCHANGE
OCR Interchange has been developed to help you to carry out day to day administration functions online, quickly and easily. The site allows you to register and enter candidates online. In addition, you can gain immediate and free access to candidate information at your convenience. Sign up at https://interchange.ocr.org.uk

FREQUENTLY ASKED QUESTIONS

UNIT A531: INTRODUCTION TO DESIGNING AND MAKING

Is this a compulsory unit?
This unit is compulsory for a GCSE in Design and Technology: Graphics (J303).

What is this unit worth?
This unit is worth 30% of the GCSE in Design and Technology: Graphics (J303) qualification.

What is the entry code for this unit?
The entry code for this unit is A531.

Does the final outcome have to be a three dimensional graphic product?
No. The outcome can be:
* a two dimensional outcome – where a candidate chooses to produce a 2D outcome, there must be sufficient rigor and depth in the making for higher marks to be awarded.
* a three dimensional outcome

Can students produce designs on a computer?
Yes. It is expected that candidates will use computer based methods and traditional hand skills to generate design proposals.

How is this unit assessed?
This unit is internally marked and externally moderated. Teachers should use the published marking criteria for Unit A531.

Is this unit assessed by a visiting moderator?
No. Candidates are required to take a minimum of two clear photographs of the product, which must be included in the design folder. The moderator will then request a sample of folders. There is no moderation visit.

Will candidates be able to re-enter units?
Yes. Controlled assessment units can be carried forward with the moderator mark from one session to the next i.e. June 2014 to June 2015. There is a separate 'carry over' code to re-enter the unit.

Is there a text book for this unit?
Yes. The recommended text book is GCSE Design and Technology: Graphics published by Hodder. This book covers all three units of the GCSE in Design and Technology: Graphics (J303) qualification.

Is there training available for this unit?
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UNIT A543: MAKING QUALITY PRODUCTS

Is this a compulsory unit?
This unit is compulsory for a GCSE in Design and Technology: Graphics (J303).

What is this unit worth?
This unit is worth 30% of the GCSE in Design and Technology: Graphics (J303) qualification.

What is the entry code for this unit?
The entry code for this unit is A533.

How is this unit assessed?
This unit is assessed by a 20 hour controlled assessment task.

Does the final outcome have to be a three dimensional graphic product?
No. It can be:
* a two dimensional outcome – where a candidate chooses to produce a 2D outcome, there must be sufficient rigor and depth in the making for higher marks to be awarded.
* a three dimensional outcome

Can students produce designs on a computer?
Yes. It is expected that candidates will use computer based methods and traditional hand skills to generate design proposals.

Is this unit assessed by a visiting moderator?
No. Candidates are required to take a minimum of two clear photographs of the product, which must be included in the design folder. The moderator will then request a sample of folders. There is no moderation visit.

UNIT A545: TECHNICAL ASPECTS OF DESIGNING AND MAKING

Is this a compulsory unit?
This unit is compulsory for a GCSE in Design and

Technology: Graphics (J303).

What is this unit worth?
This unit is worth 40% of the GCSE in Design and
Technology: Graphics (J303) qualification.

*What is the entry code for this unit? The entry code for this
unit is A535. How is this unit assessed?*
This unit is assessed by a 90 minute written test. The
test is externally set and marked.

What is the structure of the test?
The test is divided into sections A and B and is worth
80 marks. Section A consists of fifteen short answer
questions and one longer question. Section B consists
of three questions requiring answers that may involve
sketching, annotation, short sentences or more
extended writing. Each of the section B questions is
worth 15 marks.

Is the test tiered?
No. All candidates take the same test.

Will candidates need a drawing board for the test?
No. The test can be taken at a normal examination
table. Candidates should have writing equipment and
basic drawing equipment such as a pencil, eraser, ruler
and compass.

How should this unit be delivered?
This unit should be delivered through a number of
mini-tasks. These tasks will vary in nature, some will be
based around group discussion, others will involve the
candidate working with ideas and media, researching
concepts and recording information. Activities may
also involve visits to particular Technology Innovation
centres, industry, local councils, museums, etc. Evidence
should be collected and recorded (not assessed) and
can be used in preparation for the end of unit test.
Are exemplar test questions available?
Yes. Exemplar questions are available on the OCR
website and past test papers will also be made available
on the website.

Is there a text book for this unit?
Yes. The recommended text book is GCSE Design
and Technology: Graphics published by Hodder. This
book covers all three units of the GCSE in Design and
Technology: Graphics (J303) qualification.

Contact us

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