Model Assignment
Issued January 2008

OCR Level 2 Nationals in ICT

Unit 3: Digital imaging - plan and produce computer graphics

Please note:

This OCR model assignment may be used to provide evidence for the unit above. Alternatively, centres may wish to adapt this assignment or devise their own assignment for the purposes of assessment. It is the centre's responsibility to ensure that any adaptations made to this assignment allow candidates to meet all the assessment objectives and provide sufficient opportunity for candidates to demonstrate achievement across the fullrange of grades.

The scheme codes for these qualifications are:

OCR Level 2 National First Award in ICT	06324
OCR Level 2 National Award in ICT	06325
OCR Level 2 National First Certificate in ICT	06299
OCR Level 2 National Certificate in ICT	06276

The QCA Accreditation Number for this unit is:

Unit 3: Digital imaging - plan and produce computer graphics   J/500/2223

This OCR model assignment remains live for the life of these qualifications.

Contents

Guidance For Centres

1 General

1.1 OCR model assignments are issued free to centres on approval and are available to download from our website: www.ocr.org.uk.

1.2 Centres may choose to:

- use OCR model assignments for formal summative assessment of candidates

- tailor OCR model assignments for formal summative assessment of candidates

- use OCR model assignments as a benchmark for devising their own assignment.

1.3 This assignment has been designed to meet the full assessment requirements of the unit. Candidates will need to take part in a planned learning programme that covers the underpinning knowledge and skills of the unit.

2 Before carrying out the assignment

2.1 Candidates should be provided with a copy of the *Candidate Information* section of this booklet.

2.2 Candidates may carry out preparations prior to undertaking the tasks; there is no time limit for this.

3 When completing the assignment

3.1 Candidates should be allowed sufficient time to complete all of the tasks. The amount of time may vary depending on the nature of the tasks and the ability of individual candidates. It is suggested that evidence is produced in several sessions.

3.2 Each candidate must produce individual and authentic evidence for each task within the assignment.

3.3 Centre staff may give support and guidance to candidates. This support and guidance should focus on checking that candidates understand what is expected of them. It is not acceptable for tutors to provide model answers or to work through answers in detail.

3.4 Candidates may use information from any relevant source to help them with producing evidence for the tasks.

3.5 It is acknowledged that candidates in their responses may refer to situations in the scenario but as the scenario is fictitious this does not break any rules of confidentiality.

However, candidates must be guided on the use of information from other sources to ensure that confidentiality is maintained at all times.

4 After completing the assignment

4.1 Candidates' evidence is assessed by the centre's assessor against the qualification specification contained in the Centre Handbook. When grading candidates' work centres **must** use the grading descriptors in the unit. For further information about assessment please refer to the section on Assessment and Moderation in the Centre Handbook.

4.2 Assessors' decisions should be quality assured across the centre through internal moderation. For further information about internal moderation please refer to the section on Assessment and Moderation in the Centre Handbook.

5   Presentation of work

5.1   Candidates may use the *Candidate Checklist* provided to ensure that they submit evidence for ALL tasks. They can do this by using the *Candidate Checklist* as a contents page inserting references/page numbers in the boxes provided.

5.2   Centres may wish to discourage candidates from excessive use of plastic wallets for presentation of their evidence as this may hinder the assessment process. Instead centres may wish to encourage candidates to present their work so that it is easily accessible, eg spiral bound, stapled booklet, treasury tag.

6   Acceptable evidence

6.1   For guidance on generation and collection of evidence please refer to the section on Assessment and Moderation in the Centre Handbook.

7   Reworking the assignment

7.1   If candidates do not meet the minimum PASS requirements for the assessment objectives, further work will be required.

7.2   Tutors may give feedback to candidates to support and guide them in producing evidence to the required standard.

Notes For Tutors

Introduction to the Tasks

The tasks have been designed to enable candidates to demonstrate their knowledge and understanding of how to design and create graphics. It is assumed that candidates will have acquired these skills before starting this assignment.

In these tasks candidates will demonstrate their understanding of different image types by researching and describing bitmap and vector images relevant to the scenario. They will produce plans for the production of their own graphic images, source the required components and record the sources. They will use appropriate graphic software to create the graphics and present their completed graphics in a suitable format for display.

The tasks have been designed so that all of the assessment objectives in Unit 3 are addressed. The tasks are designed to be completed in sequence.

The graphics created in Task 4 and the presentation for Task 5 may be supplied in hard copy or electronic format.

These guidance notes should be used in conjunction with the unit specification and Centre Handbook.

The Tasks

Task 1:   Describe and evaluate bitmap and vector images

Assessment Objective 1 is assessed in this task.

Candidates should collect, display and describe images relating to the scenario.

Tutors may provide candidates with a bank of suitable graphics from a range of sources, from which candidates may select some or they may search for graphics themselves. Graphic sources provided should include all of:

- images printed on paper (newspapers, magazines, posters)
- images printed on other surfaces (packaging, labels, signs)
- images viewed on screen (digital artwork, backgrounds and buttons)
- maps, diagrams, plans.

Candidates will need to choose at least two graphics.   These must come from at least two of the bullet points above.

For higher levels, candidates need to indicate the size of the graphics. This can be the physical dimensions (width and height) and/or the file size, as appropriate. For example the physical dimensions would be appropriate for a paper-based image whereas both file size and physical dimensions might be appropriate for a web-based image.

Task 2: Plan the production of graphic images

Assessment Objective 2 is assessed in this task.

Candidates should produce plans for at least two graphics to meet the needs of RoxyChocs. The number of graphics that candidates need to create will depend on the complexity of the graphics. It is important that the planned graphics will give candidates the opportunity to demonstrate the use of an appropriate range of the bitmap and vector tools listed in Candidate Task 4. It is expected that tutors will discuss candidates' plans and advise them on the number of graphics they need to create to meet this requirement.

Tutors should stress to candidates the importance of documenting their plans **before** they start creating and editing the graphics - they should not start creating their own graphics until Task 4.

Candidates should produce a rough sketch for each graphic. These sketches do not have to be artistic but merely a representation of the candidate's ideas.

Tutors may set an overall deadline for the assignment. However Distinction level candidates need to set their own deadlines for the completion of the remaining tasks of the assignment.

Task 3: Source and store components for graphic products and record sources

Assessment objectives 3 and 4 are assessed in this task.

Candidates should source the components needed for their own planned graphics. As they do, they should keep a record of their sources. They are not required to seek permission to use graphics, although higher level candidates should show an awareness of copyright law.

Candidates must use a table to record details of every graphic collected. A template is provided for this purpose although candidates may create their own.

At Merit and Distinction levels candidates must source graphics from all of the listed categories. The differentiator between these two levels is the appropriateness of the graphics stored.

Task 4: Use graphics software to create, edit and combine graphic images

Assessment objective 5 is assessed in this task.

Candidates should use their graphic manipulation skills to create the graphic images they planned in Task 2, editing and combining the components they sourced in Task 3.

Tutors should encourage candidates to produce sufficient graphics to demonstrate their ability to use a range of tools appropriately. If necessary candidates might plan and create graphic(s) additional to those planned in Task 2 in order to meet this requirement.

Screenshots can be provided on paper, in electronic format or using screen capture software.

For higher levels, file formats should be fit for purpose.

Task 5: Present work to a client using a suitable display format

Assessment objective 6 is assessed in this task.

Candidates will present their created graphics in a format of their choice. Candidates are not required to give an oral presentation although they may choose to do so. The witness statement provided on pages 11-12 could be completed if an oral presentation is used.

Pass level candidates need only show some consideration of size. It is acceptable for tutors to orally question the candidate and record the answers. The witness statement template could be used for this.

AO4 Record of Graphics Collected

Candidate Name: _____

Source of Graphic	Date collected	File name	File size	Where graphic is stored	Details of copyright applied to graphic and its use

Explain how copyright legislation applies to the graphics that you have sourced and stored in this task. (Merit and Distinction levels only)

Witness Statement – Task 5

AO6	Present work to a client for a specific purpose, using a suitable format for display

CANDIDATE NAME	
ASSESSOR NAME	
Date	

Task 5	SUMMARY OF ACTIVITY OBSERVED

KNOWLEDGE AND SKILLS DEMONSTRATED

FEEDBACK TO CANDIDATE/AREAS FOR IMPROVEMENT

RECORD OF QUESTIONS/ANSWERS

ASSESSOR QUESTION 1

CANDIDATE RESPONSE 1

ASSESSOR QUESTION 2

CANDIDATE RESPONSE 2

ASSESSOR QUESTION 3

CANDIDATE RESPONSE 3

ASSESSOR SIGNATURE:		**DATE:**	

CANDIDATE SIGNATURE:		**DATE:**	

Model Assignment: Candidate Information

OCR Level 2 Nationals in ICT

Unit 3: Digital imaging - plan and produce computer graphics

CANDIDATE NAME:

General Information for Candidates

Q   *Do I have to pass this assignment?*

A   Yes. You must pass this assignment to achieve the full qualification.

Q   *What help will I get?*

A   Your tutor will help you when completing the OCR model assignment and will make sure that you know what resources/facilities you need and are allowed to use.

Q   *What if I don't understand something?*

A   It is your responsibility to read the assignment carefully and make sure you understand what you need to do and what you should hand in. If you are not sure, check with your tutor.

Q   *Can I copy other people's work?*

A   No. The work that you produce must be your own work and you may be asked to sign a declaration to say that the work is your own. You should never copy the work of other candidates or allow others to copy your work. Any information that you use from other sources, eg books, newspapers, professional journals, the Internet, must be clearly identified and not presented as your own work.

Q   *Can I work in a group?*

A   Yes. However, if you work in a group at any stage you must still produce work that shows your individual contribution.

Q   *How should I present my work?*

A   You can present your work in a variety of ways, eg hand-written, word-processed, on video. However, what you choose should be appropriate to the task(s). For some work, eg presentations, coaching sessions, role-play, work experience, you will need to provide proof that you completed the task(s). A witness statement or observation sheet could be used for this. If you are unsure, check with your tutor.

Q   *When I have finished, what do I need to hand in?*

A   You need to hand in the work that you have completed for each task. Do not include any draft work or handouts unless these are asked for. When you hand in your work make sure that it is labelled, titled and in the correct order for assessing.

Q   *How will my work be assessed?*

A   Your work will be marked by an assessor in your centre. The assessor will mark the work using the assessment objectives and the grade descriptors in the qualification specification.

Scenario

RoxyChocs

Two friends have been making and selling handmade chocolates to their colleagues, friends and neighbours for about two years. Their chocolates have been extremely popular and all their customers have been persuading them to expand their work and start up a professional business. The friends have heeded this advice and have recently formed a company called RoxyChocs. Their aim is to supply handmade chocolates for special occasions (eg weddings, birthdays, anniversaries, parties).

RoxyChocs has asked you to produce graphics which can be used to promote its range of handmade chocolates eg

- company logo

- graphics for chocolate box covers

- graphics for decorative ribbons

- graphics for wrappers

- graphics that could be used for posters, leaflets and other advertising material

- graphics that could be used on the company website.

The friends would like you to keep them involved and informed throughout your research, planning and production process. They have instructed you to present your researched images, initial ideas and plans for approval before beginning to create your graphics. You will then source suitable components for use when you create your own graphics for RoxyChocs. You will need to ensure that you do not breach any legislation and should, therefore, keep a record of all sourced components.

You will need to create graphics for RoxyChocs and present them to the friends using a suitable presentation format.

Tasks

Unit 3 tasks overview

For this unit, in Task 1, you need to research images from a range of sources then describe them. In Task 2 you will produce plans for the graphics that you will be creating. In Task 3 you will source appropriate components in preparation for creating your own graphics, and record your sources. In Task 4 you will use your creative skills to create the graphics and in Task 5, you will present these graphics.

Task 1: Describe and evaluate bitmap and vector images

Assessment Objective 1

Before you begin planning and creating your own graphics, you need to research and collect images relating to the RoxyChocs scenario. These may be from the Internet, on paper or other sources.

Use the activities below to produce evidence for your assignment.

A Collect and display graphics from at least two of the sources listed below:

- images printed on paper (newspapers, magazines, posters)
- images printed on other surfaces (packaging, labels, signs)
- images viewed on screen (digital artwork, backgrounds and buttons)
- maps, diagrams, plans.

You should note down the source for each graphic you collect.

To achieve Pass level you should collect a range of graphics from **two** different sources eg one image printed on paper and one image viewed on screen.

To achieve higher levels you should collect a range of graphics from **three** different sources.

(Evidence of the original graphics could be provided by photographing, scanning, cutting and sticking or importing from the Internet or other electronic sources. Evidence of the source of each graphic could be recorded in a word processed document.)

B For each graphic collected, describe:

- the purpose
- the suitabilty for the purpose
- the target audience (Higher levels only)
- the physical dimensions and/or file size (Higher levels only)
- the message conveyed (Distinction level only)
- why the graphics convey the message effectively or not. (Distinction level only)

To achieve Pass level you need to describe the purpose and comment on the suitability of the graphics collected.

To achieve Merit level you need to describe the purpose, audience and suitability of the graphics, and give details of the size of some graphics.

To achieve Distinction level you need to describe the purpose, audience and suitability of the graphics. Suggest what message, if any, is being conveyed and discuss why the graphics convey this message effectively or not. Give details of the size of most of these graphics.

(This could be evidenced in a word processed document displaying the graphics collected. Hard copies of graphics from magazines etc could be glued into a portfolio with hand-written or word processed notes.)

Task 2:   Plan the production of graphic images

Assessment Objective 2

In this task you should produce the plans for at least two graphics for RoxyChocs. Planning is essential and must be carried out **before** you start creating the graphics. You will not start to create the graphics until Task 4.

Use the activities below to produce evidence for your assignment.

To achieve Pass or Merit level you need only complete parts **A** and **B** of this task.

A   Refer to the scenario on page 15. Consider the types of graphic that would be suitable for RoxyChocs. Decide how many and which graphics you want to create to demonstrate your graphic skills.

For each graphic that you intend to create:

- describe the target audience

- describe the purpose/message

- describe how you will use ideas from the research you carried out in Task 1 (Higher levels only)

- discuss where the graphic will be used (Distinction level only)

- identify the physical dimensions, resolution and file format (Distinction level only)

(Evidence could be a word-processed document.)

B   Plan the graphics you intend to create by sketching a design for each. On your sketches you should identify:

- paper size and orientation

- component parts

- resolution, size and colour mode of component parts

- line styles and thickness

- text style, size and colour

- basic shapes

- colours.

To achieve Pass level your sketches should identify some of the key areas from the list above

To achieve Merit level your sketches should identify most of the key areas from the list above

To achieve Distinction level your sketches should identify all the key areas from the list above.

(Evidence could be annotated hand-drawn sketches.)

C Set deadline dates for the production of your graphics. (Distinction level only)

(Evidence could be a word-processed document.)

Task 3: Source and store components for graphic products and record sources

Assessment objectives 3 and 4

In this task you will source the components that you need to create the graphics you have planned. As you collect these components you should keep a record of your sources.

Use the activities below to produce evidence for your assignment.

To achieve Pass level you need only complete parts **A** and **B** of this task.

A Collect and save the components that you will need to use when creating your graphics in Task 4. You may use all or part of any existing graphics from at least two of the following sources:

- computer graphics using eg. World Wide Web, clip-art library on the Internet or on a CD-ROM

- digital camera - you should consider the image quality and output size, then transfer the images onto a computer and save them

- scanner - you should select appropriate scanning software and set the scanning resolution, consider the file size then transfer the images onto a computer and save them.

To achieve Pass level you should source and store graphics from two of the categories listed above.

To achieve Merit level you should source and store graphics from all three categories listed above. Most of your graphics should be appropriate.

To achieve Distinction level you should source and store graphics from all three categories listed above. All your graphics should be appropriate.

(Evidence could be screenshots of your folder(s) showing the saved files, and printouts or screenshots of the graphics.)

B Create a table and record the source of every graphic you collected in part **A** of this task. Show the source of each graphic, when you collected it, where you have stored it, the filename, file size and whether or not it is copyright-free.

To achieve Merit level your record should be detailed and should be clear enough for others to locate some of your stored graphics.

To achieve Distinction level your record should also be accurate and should be clear enough for others to locate most of your stored graphics.

(Evidence must be a table with appropriate column headings and details for each graphic collected. This should include:

- *the location/source*

- *collection date*

- *filename*

- *file size*

- *whether any copyright applies to it and its use.)*

C   Explain how copyright legislation applies to the graphics that you have sourced and stored in this task. (Higher levels only)

(Evidence could be a paragraph added to the end of your table.)

Task 4:   Use graphics software to create, edit and combine graphic images

Assessment objective 5

In this task you will use your graphic manipulation skills to create the graphic images you planned in Task 2, editing and combining the components sourced in Task 3.

Use the activities below to produce evidence for your assignment.

To achieve Pass or Merit level you need only complete part **A** of this task

A   Create your graphics ensuring you use a range of vector and bitmap tools.

You must show the development and range of tools used, eg by taking screenshots whilst you are producing each graphic. . You do not need a screenshot to show every step of the creation of each graphic, but the combined screenshots for your graphics should show that you have used a range of the following bitmap and vector tools listed below. To achieve higher levels you must annotate your screenshots to explain what you have done.

Examples of bitmap and vector tools you might use include:

- selection and freehand tools

- drawing/painting techniques

- use of layers as well as moving and positioning layers/elements

- cut, copy, crop, paste

- rotate and flip

- brush types and shape

- colour and colour adjustment

- fill and fill styles

- filters

- opacity/transparency

- adjust image size

- geometric and freehand shapes eg circle/ellipse, square/rectangle, polygons and pre-defined shapes

- straight and curved lines and arrows/line styles

- stroke thickness and shadow

insert and manipulate text, alignment and order

- group/ungroup.

Make sure that your graphics are saved. For higher levels you should ensure that your graphics are saved in the most suitable file format.

To achieve Pass level you will create graphics using a limited range of bitmap and vector tools and you will show some development work.

To achieve Merit level your created graphics should be fit for purpose and will show use of a range of bitmap and vector tools. Your development work will explain the processes you used. Most of your graphics will be saved in appropriate file formats.

To achieve Distinction level your created graphics should also be fit for audience. You will show use of a wide range of bitmap and vector tools. All your graphics will be saved in appropriate file formats.

(Evidence could be the created graphics printed in colour or provided electronically and annotated screenshots of the development process.)

B Explain why you used the chosen tools to create your graphics. (Distinction level only)

(Evidence could be additional annotations on your screenshots.)

Task 5:   Present work to a client using a suitable display format

Assessment objective 6

In this task you need to present your created graphics to RoxyChocs, choosing a suitable format for display.

Use the activities below to produce evidence for your assignment.

To achieve Pass or Merit level you need only complete part **A** of this task.

A Decide which of the methods listed below will be the most appropriate to present your created graphics:

- electronic portfolio

- paper-based portfolio

- mock-up webpage

- exhibition/display

- slide presentation

- any other suitable method.

Present the graphics using the method(s) that you have chosen. Ensure all your graphics are displayed clearly and in full, including all text and colours.

You will need to show that you have considered:

- file size and dimensions (width and height) of each graphic

- file type (Higher levels only)

- resolution (Higher levels only)

- colour mode. (Distinction level only)

(Evidence will be the presented graphics and an explanation of your considerations.)

B Explain why you chose the method(s) you did to present your graphics (Distinction level only).

(Evidence could be a word-processed document.)

Model Assignment: Candidate Checklist

OCR Level 2 Nationals in ICT

Unit 3: Digital imaging - plan and produce computer graphics

CANDIDATE NAME:

For task 1 (AO 1) have you:	Completed (✓)
A collected and displayed graphics from **different** sources?	
Evidence provided (please ✓):	Ref/Page no(s)
❏ word-processed document(s)	
❏ paper-based portfolio of graphics	
❏ or other (please give details) _____	

For task 1 (AO 1) have you described:	Completed (✓)
B the purpose and suitability of each graphic? the target audience and size? (Merit and Distinction only) the message conveyed and effectiveness? (Distinction only)	
Evidence provided (please ✓):	Ref/Page no(s)
❏ word-processed document	
❏ or other (please give details)	

For task 2 (AO 2) have you:	Completed (✓)
A described each graphic you intend to create?	
Evidence provided (please ✓):	Ref/Page no(s)
❏ word-processed document	
❏ or other (please give details)	

For task 2 (AO 2) have you:	Completed (✔)
B produced sketches?	
Evidence provided (please ✓):	Ref/Page no(s)
❏ annotated hand-drawn sketches	
❏ or other (please give details)	

For task 2 (AO 2) have you:	Completed (✔)
C set deadlines (Distinction only)?	
Evidence provided (please ✓):	Ref/Page no(s)
❏ word-processed document	
❏ or other (please give details)	

For task 3 (AOs 3 and 4) have you:	Completed (✔)
A collected and saved components for your graphics?	
Evidence provided (please ✓):	Ref/Page no(s)
❏ screenshot(s) of your folder(s) showing the saved files	
❏ printouts or screenshots of the graphics	
❏ or other (please give details)	

For task 3 (AOs 3 and 4) have you:	Completed (✔)
B recorded your sources in a table?	
Evidence provided (please ✓):	Ref/Page no(s)
❏ a word-processed table showing the sources	
❏ or other (please give details)	

For task 3 (AOs 3 and 4) have you:	Completed (✔)
C explained how copyright affects your sourced graphics?	
Evidence provided (please ✔):	Ref/Page no(s)
❏ a paragraph at the end of your table	
❏ or other (please give details)	

For task 4 (AO 5) have you:	Completed (✔)
A created your graphics? shown development? annotated your screenshots? (Higher levels only)	
Evidence provided (please ✔):	Ref/Page no(s)
❏ your created graphics as colour printouts *or*	
❏ saved electronic files of your created graphics	
❏ screenshots of the development process	
❏ or other (please give details)	

For task 4 (AO 5) have you:	Completed (✔)
B explained why you used the chosen tools?	
Evidence provided (please ✔):	Ref/Page no(s)
❏ annotated screenshots	
❏ word-processed document	
❏ or other (please give details)	

For task 5 (AO 6) have you:	Completed (✓)
A presented your graphics?	
Evidence provided (please ✓):	Ref/Page no(s)
❏ electronic portfolio	
❏ paper-based portfolio	
❏ mock-up webpage	
❏ exhibition/display	
❏ slide presentation	
❏ any other suitable method	

For task 5 (AO 6) have you:	Completed (✓)
B explained your choice of method(s) for presenting your graphics? (Distinction only)	
Evidence provided (please ✓):	Ref/Page no(s)
❏ word-processed document	
❏ any other suitable method	