

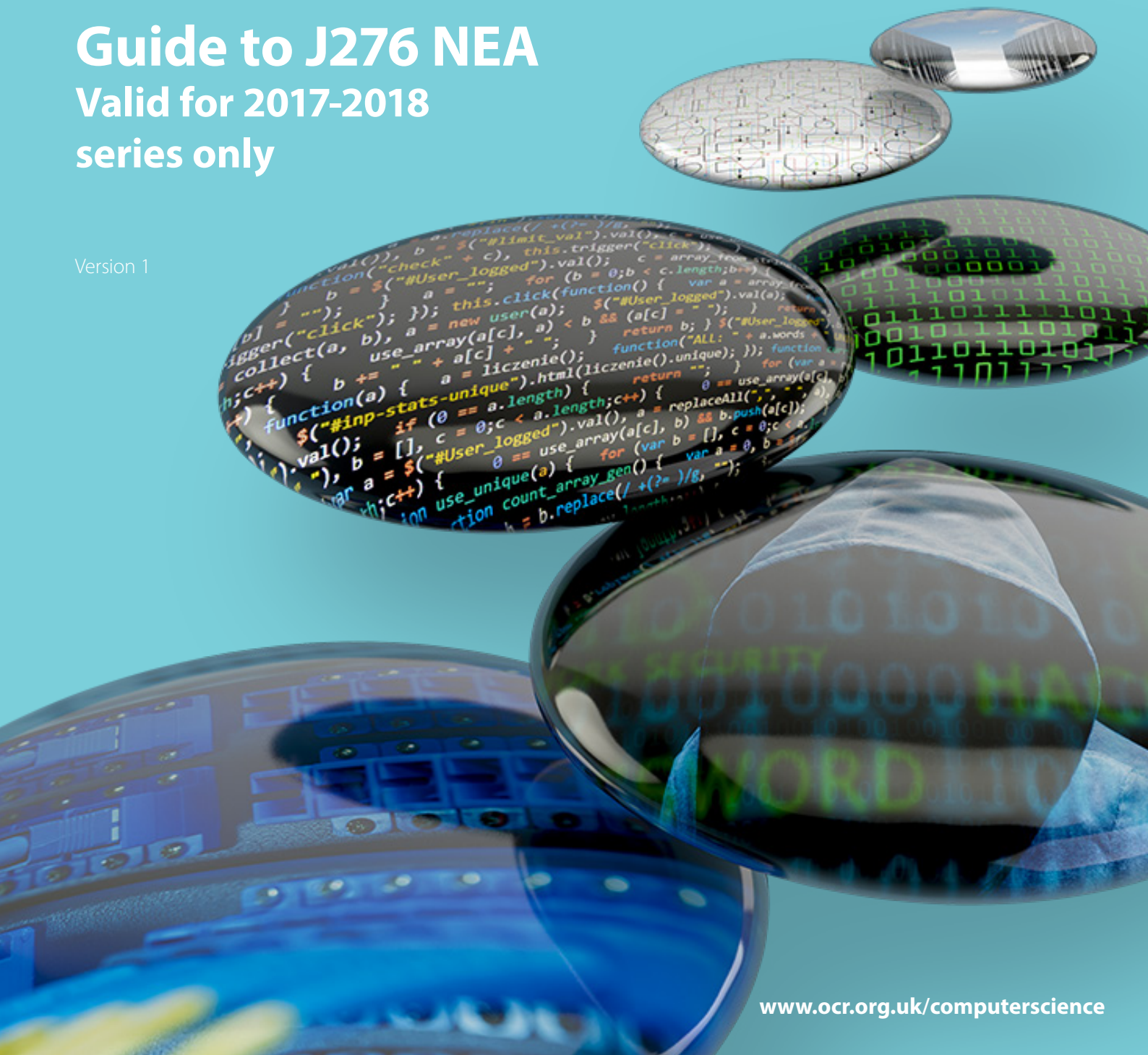
GCSE (9–1)
Teacher Guide

COMPUTER SCIENCE

J276
For first teaching in 2016

Guide to J276 NEA
Valid for 2017-2018
series only

Version 1



Disclaimer

This document has been produced as a support document for the J276 Computer Science Specification, and in reference to the Non-Examined Assessment Component 03/04.

This is a **support document only** and does not supersede any information in the J276 Computer Science Specification.

Should a discrepancy exist, the Specification will take precedence.

Any queries relating to this document should be directed towards the Computer Science Subject Team, who may be contacted by either:

- a. Emailing computerscience@ocr.org.uk
- b. Calling 01223 553 998

Please note that this document will be updated **annually**. Centres should ensure that they are reading the most recent version for the relevant examination series.

Contents

Non-Examined Assessment (NEA)	6
What is NEA?	6
What proportion of the GCSE is NEA?	6
When are the tasks released?	6
Where do I find the tasks?	6
How many tasks do I choose?	6
What if I cannot access Interchange?	6
Preparing for the NEA component	7
Preparing candidates for NEA	7
Familiarise candidates with the conditions	7
Familiarise candidates with resources	7
Preparing the programming techniques	7
Expose candidates to the NEA experience	7
Confidence in computational thinking	7
Embed the ‘process for success’	8
Confidence in techniques	8
Confidence in testing	8
Confidence in the mark scheme	8
Confidence in documentation	8
Preparing teachers for NEA	9
Familiarity with the levels of control	9
Preparation of resource banks	9
There are many solutions	9
Using ‘worked solutions’ for support	9
NEA as a form of assessment	9
Knowing the level of support allowed	9

Delivery of the NEA	10
Setting up secure accounts	10
Separate to usual school accounts	10
Time bound	10
Remove potential for external access	10
Remove shared drive access	10
Access to an external Integrated Development Environment (IDE)	10
How do I resource the NEA?	11
The resource bank	11
Creating the resource bank	11
Permissible resources for the resource bank	11
Non-permissible resources for the resource bank	11
Using previous programs	11
Coping without the Internet	11
Handling paper based resources	11
Updating the resource bank for each series	12
Including the mark scheme	12
Including the task	12
Access to the NEA tasks	12
Referencing offline resources	12
The process of submitting the NEA task	13
Assessing work	13
Using the Unit Record Sheet	13
Internal standardisation	13
Candidate authentication	13
New Centre Authentication Form (CCS161)	13

Electronic submission	13
Submission of code	13
Sending the work to the board	14
Date of submission	14
Sending my sample	14
Requests for further work	14
Submission check list for teachers	15
Frequently asked questions	16
Should I restrict access to mobile devices?	16
Can candidates bring in notes made outside of the NEA environment?	16
Do I need to remove displays within the classroom?	16
How long should I allow for the NEA?	16
When can I start the NEA?	16
Are solutions allowed to be posted on line?	16
Can I send a paper-based sample?	16
Which task should I choose?	16
Can candidates practise the tasks outside of the NEA environment?	16
What guidance can I give to candidates?	16
Should candidates reference sources?	16
What should I do if I suspect candidate malpractice?	16
Do I need to submit the resource bank at moderation?	16
Support links for the NEA	17
Specification J276 Computer Science	17
Websites	17
GCSE J276 Computer Science CPD Courses	17
Marking support materials	17

Non-Examined Assessment (NEA)

What is NEA?

The non-examined assessment is a set of three tasks supplied by OCR. Each candidate submits an attempt for **one** of the tasks chosen from the set given for that year.

NEA is carried out under prescribed conditions, set by OCR. Teachers **must** ensure that these controls are in place before allowing candidates to work on their NEA task. Once completed, teachers then mark the work and submit the final mark for each candidate to OCR for moderation. OCR then moderates each Centre's work.

What proportion of the GCSE is NEA?

Currently the NEA is worth 20% of the total marks available for the GCSE (9-1) Computer Science qualification.

When are the tasks released?

Each year there will be a set of three tasks released on 1 September for the academic year of that exam series, e.g. the tasks released on 1 September 2017 are for submission in March 2018; then the following year, a new set of three tasks will be released on 1 September 2018 for submission in March 2019, and so on.

Where do I find the tasks?

The tasks are available to download from OCR Interchange. They are found by navigating to 'Coursework and tests' --> 'Controlled Assessment Materials' section.

How many tasks do I choose?

There are three tasks to choose from, from which a candidate must complete one for final submission. There are no restrictions on which task a candidate may submit. For instance, you may have 3 Computer Science teaching sets, Set A, Set B and Set C. Set A may complete NEA Material 1, Set B complete NEA Material 2, and Set C completes NEA Material 3. Alternatively, you could set the same NEA task across the whole cohort, or let each candidate pick one from the three available. You must ensure you submit the correct tasks for that series. Submitting the wrong tasks for that series will be viewed as maladministration.

What if I cannot access Interchange?

Teachers are strongly recommended to have access to Interchange. This can be set up for you by your Exams Officer. If you cannot get access to Interchange, you will need to ask your Exams Officer to download and give you the materials for the NEA on 1 September for the relevant exam series.

Preparing for the NEA component

Preparation of candidates will be key to a successful NEA submission. The NEA will likely feel unfamiliar to both candidates and teachers when compared to the traditional classroom environment. With this in mind, we would recommend the following steps to prepare for the NEA.

Preparing candidates for NEA

It is very important to recognise that NEA differs significantly from standard assessment practise that would otherwise be normally carried out as part of summative assessment within a classroom learning environment. The level of support and feedback is tightly prescribed, and assessment for learning, or other support/guidance that would normally take place within the classroom, is likely to contravene the levels of control stipulated in the Specification and JCQ Instructions.

Familiarise candidates with the conditions

Candidates are often unaware of the restrictions that will be placed on them during NEA. We would suggest that programming tasks are carried out using the same conditions and restrictions that they will follow for the live NEA to prepare them for the real thing. Candidates should be familiar with where and what support they are entitled to receive, and learn to work confidently within these conditions.

Familiarise candidates with resources

The availability of resources will be restricted, and are only available 'offline'. This means that candidates who generally rely heavily on 'live' internet access will need to adjust to not having access to the internet during their NEA. Therefore, we would recommend that candidates know where to access support resources that they would be expected to use during the NEA. We would also encourage that candidates are familiarised with the resources that they will have access too. They can then make suggestions for resources that they feel may help them, which may not be present within the resources currently available. You may then make these available, as long as they adhere to guidance given later within the "Creating the Resource Bank" section.

Preparing the programming techniques

The specification lists the techniques and principles of programming that candidates should be familiar with. We would expect that candidates would be prepared in all of the techniques before undertaking the live NEA tasks. Individual NEA tasks will test the majority of the programming techniques stated within the specification.

A key to delivering the programming techniques is to test candidate's understanding of 'why' they are using a certain technique, as opposed to solely assessing their skill in implementing that technique. Whilst implementation of techniques is, of course, very important, a candidate's understanding of why they are using the technique will allow them to choose appropriate techniques for tasks and also allow them to be confident in 'thinking outside the box' when solving problems.

Expose candidates to the NEA experience

It is possible to use our coding challenges booklet (<http://www.ocr.org.uk/Images/260930-coding-challenges-booklet.pdf>) to give candidates a real experience of the NEA. You can impose the same restrictions as the NEA when asking them to complete a coding challenge. You can also mark and assess it using the NEA Mark Scheme, which will help familiarise candidates with the marking grids.

The most important part of this process is that you **can** then provide feedback after the 'mock' and use that process of assessment for learning so that candidates are fully confident with the expectations of the mark scheme and can recognise where weaknesses in their documentation may lie. We would not suggest a full 20 hour mock, but perhaps build in assessment in smaller chunks, as part of teaching day to day lessons.

Understanding the mark scheme and expectations for content and structure of the write up is important to embed, as candidates will not be allowed guidance on this within controlled conditions.

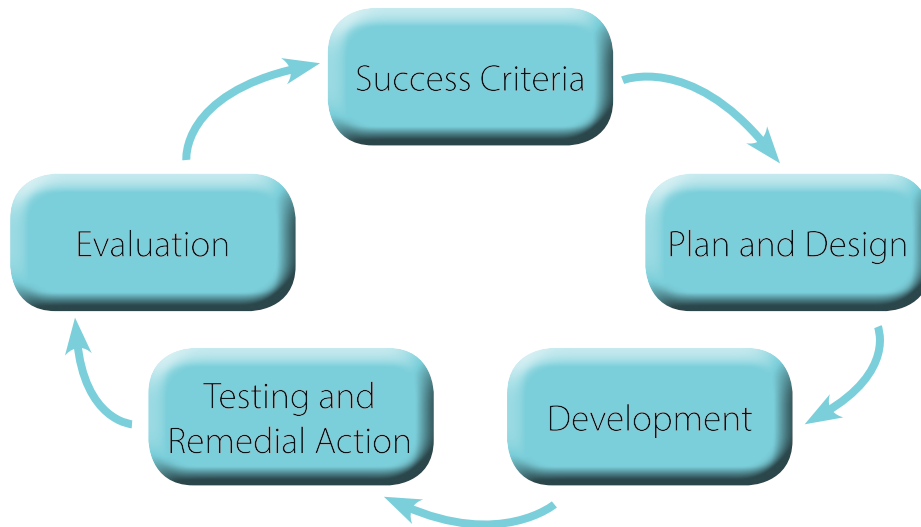
Confidence in computational thinking

The key to accessing the NEA is confidence in problem solving. This can be achieved through lots of repetition of problem solving challenges. Challenges which encourage novel use of techniques will also help candidates develop confidence in applying their learning. Our coding challenge booklets have lots of common problems, and some more unique ones, that will really challenge a candidate's ability to create innovate and efficient solutions. Coding one or two challenges every half term will really stand your candidates in good stead. You may then use one coding challenge as a formal assessment that encourages them to document their beginning-to-end process using the NEA 'Process for Success'.

Learning does not stop outside of the classroom however, and we would encourage teachers to motivate candidates to practice other tasks outside of school.

Embed the ‘process for success’

We have developed the ‘process for success’, which is included here.



We would expect candidates to have used this throughout KS3 and into KS4. Familiarity with this process will reassure candidates when they are within the NEA environment, as they will understand the process that they will need to go through for each development cycle. Reinforcing this process from an early stage will breed confidence when it comes to completing the live NEA task.

Confidence in techniques

The ability to use techniques is not the crux of being confident in the NEA; it is knowing what each technique does, and how/where it could be used that will empower a candidate to create a solution. Therefore, we would encourage teachers to develop candidate’s understanding of each technique, abstracted from the language of choice. Embedding this level of knowledge will allow candidates to assess problems and apply techniques to the problem, rather than solely being ‘told’ where and when to use techniques. This could limit their range of computational thinking and may lead to less efficient solutions. Enabling candidates to become confident in applying computational techniques abstractly will also help with solving problems in the exam.

Confidence in testing

It is important that candidates are aware of the increased importance of testing within the new specification. Candidates who do not robustly test their solutions may limit their access to the highest mark band. ‘2.3 Producing Robust Programs’ is a specific topic within the specification, and it may be useful to teach this section before starting the NEA. Testing is expected to be a continual part of the iterative design process. Candidates should be comfortable with this way of testing, as well as running final tests at the end/completion of the project. Reverse engineered testing is easily spotted, and not to be encouraged.

Confidence in the mark scheme

It is prudent to familiarise candidates with the mark scheme before they commence the live NEA task. This may be done through either discussion of the mark scheme in lessons, or through use and application by carrying out a ‘mock NEA’ as described above. Ideally, both will help highlight to candidates the requirements to reach the upper mark bands for each strand of the mark scheme.

Confidence in documentation

We recommend submission of a single narrative document (word processed) for the NEA write up. Ideally this document will be converted to a .pdf for submission. Candidates should be familiar with the following skills:

- ✓ Page Numbering
 - To help referencing evidence in the write up.
- ✓ Headers/Footers (for Centre Number, Candidate Number, Name, Title)
 - This is a formal requirement when submitting work to the board.
- ✓ Use of Heading 1, Heading 2 and Heading 3
 - This will support readability and allow a table of contents to be automatically generated.
- ✓ Table of Contents
 - This will help moderators locate work/evidence more effectively.
- ✓ Using/manipulating screen shots
 - Clearly laid out screen shots with word wrapped text/annotation will help moderators locate evidence
 - Cropping and sizing to help reduce unwieldy file sizes.
- ✓ Spelling and Grammar Check.
- ✓ Structure of the write up.
- ✓ There is no template to follow, but candidates should be aware of the key sections and evidence that should be included.

Preparing teachers for NEA

Familiarity with the levels of control

NEA is carried out under prescribed levels of control, which are detailed in the specification. Teachers should always ensure that they have the most recent copy of the specification. Further guidance may also be available through the JCQ Instructions for conducting NEA.

These documents are located here:

OCR GCSE 9-1 Computer Science Specification:

<http://www.ocr.org.uk/Images/225975-specification-accredited-gcse-computer-science-j276.pdf>

JCQ instructions for conducting non-examination assessments:

<http://www.jcq.org.uk/exams-office/non-examination-assessments>

OCR GCSE 9-1 Computer Science Webpage:

<http://ocr.org.uk/qualifications/gcse-computer-science-j276-from-2016/>

Preparation of resource banks

OCR provides guidance on what resources may be used within the resource bank. Guidance is provided later within this document under the 'How do I resource the NEA' section.

OCR provide resources for common languages, which will provide a baseline set of resources for centres. Centres are free to add to and develop these, as long as they adhere to the guidelines of the specification, JCQ requirements and guidance within this document. Once the NEA tasks are released, you are not allowed to add to the resource bank.

There are many solutions

The new NEA tasks are designed to be open to a wide range of solutions, and pathways to a solution. Candidates may chunk the component parts separately, use different techniques in different parts, and develop their own coding 'DNA' or style. The key is whether or not the solution works in the first instance, and then an assessment of how efficient it is.

Moderators will not be marking against one 'perfect solution' and will assess the work on its merits. As part of their submission, candidates may combine techniques in ways that you may not have thought of. As long as their solution works and is efficient, they will score just as strongly as another candidate who has a working, efficient solution using a different combination. Whilst it may feel foreign to have a wide range of solutions, this is one of the joys of Computer Science and should be encouraged and embraced.

Using 'worked solutions' for support

Historically, we recognise that some teachers use solutions for the coding from more experienced colleagues in order to provide ideas in how the task may be solved. However, there is a tendency that where this happens, candidates may unintentionally be guided into producing solutions that, across the cohort, are inherently similar. We strongly encourage teachers to be mindful that there are many ways NEA tasks could be solved.

NEA as a form of assessment

NEA tasks are created to assess a wide range of ability.

Care must be taken not to guide candidates to solutions to problems where not permitted, or give guidance which contravenes the allowed levels of support as specified within the Specification and JCQ Instructions, in an effort to ensure that all candidates 'complete' the NEA task in its entirety.

Knowing the level of support allowed

With the changes to NEA, teachers may assist candidates in certain ways. It is important that you are familiar with where you may provide assistance, and where assistance is restricted. The level of support that is allowed will feel very different to that which you would normally employ in a learning environment day to day.

Preparing both yourself and candidates for this difference will help foster confidence in dealing with potential questions from candidates and supporting candidates as effectively as possible. Details of permitted support allowed are contained within the specification on page 22.

Delivery of the NEA

Setting up secure accounts

NEA accounts must be totally secure, meaning that candidates can only access their account when under formal control conditions. This should be taken into account when creating NEA accounts for candidate use.

It is the centre's responsibility to ensure that all NEA accounts adhere to the requirements of the specification and JCQ Instructions for NEA.

The following sections highlight common issues that should be considered.

Separate to usual school accounts

By creating unique accounts, you may add restrictions to these accounts, such as restriction of internet access, without affecting their day to day study. You may also create unique access to network drives for storage of work, so that there is no way they can access their work outside of formal control conditions.

Time bound

It is imperative that candidates cannot gain access to these accounts when say, for instance, they go to the library at lunch. Network management programs will allow you to either enable/disable accounts manually, and most are likely to be able to create a schedule for this.

Remove potential for external access

Be wary if you are using a Virtual Learning Environment (VLE) or similar. Ensure your NEA accounts cannot be accessed externally by candidates through any portal system you may have within the school, such as a VLE. Also remove any other programs that may allow candidates external access, e.g. Mail Clients, File Sharing, Web Browsers etc.

Remove shared drive access

It is important that candidates only have access to the resource bank created for that exam series which includes their preparatory notes. Any other access to network locations may allow candidates access to unauthorised materials, or the ability to export/share work with each other.

Access to an external Integrated Development Environment (IDE)

The specification allows access to an online IDE for use during the NEA. Centres are responsible for ensuring that the same formal control restrictions are applied within the IDE. IDEs that cannot comply with formal control requirements should not be used for NEA completion. Centres must also be confident that the IDE does not allow access outside of the IDE.

How do I resource the NEA?

The resource bank

Centres will be required to produce an offline bank of resources for the candidates' use during the NEA. From the 1 September, and until the centre submit their marks to the OCR, the resource bank should only be accessed through controlled NEA accounts. Offline resources, where used, should be referenced appropriately. Please see the 'Referencing offline resources' section below. We recommend that the resource bank is **read only access** for candidates, to help prevent additional materials being added by candidates.

Creating the resource bank

The resource bank is likely to be a folder, with suitable sub folders, that has resources to support understanding of the techniques described within the specification. You may say have a folder on "Loops", within which may be videos, generic syntax support, lesson slides etc. However, centres are free to structure their resource bank in any suitable way. Centres may also choose to create a restricted VLE or intranet website to structure their resource bank.

Centres may create and append resources to this bank **until the 1st September**. Once the NEA tasks have been released, Centres **must not** add any more resources to that bank. Effectively, this is likely to mean that the resource bank is compiled by the end of the July term in Year 10 (assuming a 2 year GCSE, with examinations in Year 11).

If you move are moving centres, you are advised to liaise with your future centre to ensure a suitable resource bank is in place for the NEA **before** 1 September. Should you find, upon moving, that no resource bank exists, you **must contact OCR directly**.

Permissible resources for the resource bank

The following resources are **allowed** to be used:

- ✓ previous programs
- ✓ endorsed text books
- ✓ other text books, including reference books (e.g. Programming Books for your language)
- ✓ generic Programming Syntax Support
- ✓ generic teaching resources/lesson slides
- ✓ generic programming technique resources
- ✓ OCR published resources (e.g. Pseudocode guide)
- ✓ offline videos
- ✓ offline webpages
- ✓ specification
- ✓ mark scheme.

Non-permissible resources for the resource bank

The following resources are **not authorised** for inclusion in the resource bank:

- ✗ similar but different tasks to the NEA
- ✗ writing frames
- ✗ templates
- ✗ other materials restricted by the conditions outlined within the specification or JCQ Instructions
- ✗ materials created/added after the 1 September release of the NEA task for that series.

Using previous programs

Candidates can include previous programs within their preparatory notes. This may also include the write up/ documentation for the program. Candidates should be made aware that copying and pasting of previously generated code will not be credited. Candidates should only be awarded credit where they have developed beyond the research/resource that they have used.

Teachers have a responsibility to ensure that any teacher-provided materials do not mimic the NEA task.

Coping without the Internet

Candidates are inherently used to just 'looking on the web' for answers. Whilst there is a massive source of good quality information on the World Wide Web, often candidates can spend a long time trying to locate it. This is where the offline resource bank can be of great support, as candidates will ideally be able to find high quality support quickly. Overfilling the resource bank may overwhelm candidates.

It may be that candidates find websites and videos that support their learning during normal lesson time, in which case you may store them for future use. However, they may not be added to the resource bank once the NEA tasks for that exam series have been released.

We would recommend that candidates become familiar with the offline resource bank prior to using it and also familiar in how to reference the resources they may use.

Handling paper-based resources

It may be that some resources or preparatory notes are hand written.

It is the Centre's responsibility to ensure that no work is brought in to, or removed from the NEA environment. All work must be kept securely in between Formal Control sessions.

Updating the resource bank for each series

Once the NEA tasks are released for a series (1 September), the resource bank should **not be updated** with any further content. This is to protect the bank of resources from containing any 'similar but different' tasks. Teachers have a responsibility to **ensure that any resources they provide within the resource bank do not mimic the task.**

Once the NEA marks have been submitted, teachers may then update the resource bank and develop it in preparation for the next series.

Including the mark scheme

Candidates may have access to the mark scheme and this may be stored electronically within the NEA resource bank if desired. Candidates should be familiar with the mark scheme through exposure in normal teaching time before undertaking the NEA. The mark scheme may be converted to 'pupil-speak' so that candidates understand how they will be assessed. However, it should not be tailored to suit a particular task.

Including the task

Centres must be careful that, should the task be provided electronically, it remains secure at all times. Candidates cannot take the NEA task out of the NEA environment. Centres must not provide external access to this document. Any instance of making an NEA task document public, or available to candidates outside of the NEA environment will be considered maladministration and will be investigated. Action may then be taken against the Centre or teacher.

To ensure the integrity of the NEA document, we would recommend that it is given out in paper copy at the start of the session, and collected at the end. Where digital copies of live tasks are given to candidates, it is the centre's responsibility to ensure that these copies remain secure, and can only be accessed during NEA formal control.

Access to the NEA tasks

The NEA tasks are restricted documents and only accessible for authorised centres. Centres are responsible for maintaining the security of the NEA tasks. Distribution of the NEA tasks to 3rd parties is considered maladministration and will be investigated. Action may then be taken against the Centre or teacher.

Referencing offline resources

Candidates **must always reference resources** they use to support them during the NEA task. Not referencing a resource and using it for support could be viewed as plagiarism, and action taken against the candidate.

Candidates should use a local path reference to the location of the resource within their folder.

Example – Local resources: *I struggled to get my program to write to the console window and used my earlier Hello_World program to help me do this. (H:/ResourceBank/CandidateNotes/ClassExercise 1 – Hello World.py).*

Books and publications should be referenced through use of a suitable referencing system to allow the moderator to check the resource if needed. For example:

Example – Textbooks Notes: *I used the Python for Dummies (Python for Dummies Guide, Snake Publishing (2015) 5th Edition, Pg. 5) to help me with the syntax for getting data from a user.*

The process of submitting the NEA task

Assessing work

Marking should be undertaken using the mark scheme and a 'best fit' approach. Once assessed, marks should be totalled, checked for accuracy and internally standardised.

Training for marking the NEA tasks is available through the CPD Hub (<http://cpdhub.ocr.org.uk/>). Further guidance is available from the Examiner's Report, made available after each examination series. This is available from the subject webpage.

Using the Unit Record Sheet

Each candidate's marks should be recorded on the relevant Unit Record Sheet (URS). These will be available from the J276 Computer Science webpage. Teachers should complete both columns on the URS – one for the mark awarded in each section (and subsequent mark total for the submission) and also the justification/notes section. This is where the teacher has a chance to:

- Justify any marking decisions
- Draw attention to pages within the work where evidence is located
- Note any additional support that may have been given

Best practice is to complete these with pertinent information to help support the moderators. Moderators look to support teacher's marking where possible, and this column helps direct moderators towards key evidence and justification for teacher marks. Moderators will look at the URS first, and this should be the focal point of teacher annotations. However, you may also add annotation to the candidate's work if needed.

The URS must be included within the folder which contains the submission of the candidate's work.

Internal standardisation

Where a centre has multiple teachers delivering and marking NEA, it is imperative that internal standardisation takes place. The centre must ensure that this process has taken place before submitting marks to the board. This will help standardise marks internally and ensure that the standard of marking applied within the centre is consistent.

Candidate authentication

Candidates must complete a standard Candidate Authentication form. These are stored at the centre and must be produced to the moderator or exam board on demand. This form is located on the subject webpage.

New Centre Authentication form (CCS161)

There is a unique NEA Centre Authentication form for J276 (9-1) Computer Science. This is located on the subject webpage and must be completed by all teachers who have been involved in delivering the NEA task. **In addition**, a Senior Member of Staff (not the Head of Centre) will also be required to sign the form to confirm that all NEA regulations have been adhered to. **A Centre Authentication form must be sent with the sample to the moderator.** Please note that this is a unique requirement for the J276 (9-1) Computer Science qualification.

Electronic submission

All work sent to the board must be submitted electronically. This can either be:

- online through the Repository
- postal submission via CD/DVD/Pen-drive.

A suitable file structure and naming convention should be used to allow a moderator to quickly locate all work by a candidate. We suggested a single, word processed document for presentation of candidate's work. Where possible, we recommend converting submissions into the .pdf format. Where appropriate the folder may also contain video evidence, or other documents pertinent to the candidate's submission.

Centres may find that printing to PDF and using a PDF Editor to annotate comments to the candidate's submission is a useful process to use. Please ensure that all documentation is clear and readable before submitting, e.g. Flowcharts are displayed correctly, diagrams are clear etc.

Annotated and/or marked work should be kept securely. Annotated/marked work may not be shared with candidates.

CDs/DVDs/USB Storage Media **must be clearly marked/labelled** with the:

- ✓ centre number
- ✓ centre name
- ✓ component code.

Submission of code

Candidates should have evidence of annotated code within the Development section(s) of their documentation. There is **no requirement** to submit separate source files, or compiled code. Where suitable, the raw code may be copied and pasted into the documentation for reference. Source files/code files and executable files will not be opened by the examiners for security reasons and therefore **cannot be relied upon** as evidence.

Sending the work to the board

Date of submission

The date of submission of marks for Component 03/04 to the board is the **31 March** prior to the relevant examination series. Marks must be submitted to the board, on, or prior to, this date. Once submitted, marks must not be changed by the centre before sending the sample. Your Exams Officer will be able to support you with this process.

Sending my sample

OCR will request a specific sample once your marks have been submitted to the board. This usually happens 2-3 working days after you have submitted your marks.

Please ensure that you have not copied shortcuts into the submission folders instead of the actual files for submission!

Requests for further work

Centres must be aware that the moderator/OCR may request additional samples of work. Centres should ensure that the entire cohort of work is marked and the URS completed to help this process run smoothly. Requests may be made at any time from submission of sample. Delays in sending further samples may affect the release of results.

It is advisable to keep copies of submitted work, as sampled work will not be returned before the deadline for Enquiry About Results (EAR).

Submission Check List for teachers:

Have you ensured you have...

- One continuous document ideally in PDF format per candidate (where possible).
- Collated all of the appropriate evidence for the candidate into one folder.
- Internally standardised all work to ensure consistency (where more than one teacher has marked the NEA task(s)).
- Completed one URS form for each candidate, with comments/justifications added.
- Checked all addition of marks for accuracy.
- Have standard Candidate Authentication Forms for all work signed and stored at the centre.
- Completed the NEA Centre Authentication Form (CCS161) and included it with the sample.
- Used a suitable naming convention for the file structure (clearly showing centre and candidate numbers for each piece of evidence).
- Included the URS for each candidate in the same folder as the candidate's work.
- Kept a back-up copy of the sample submitted.
- Cross checked the sample request with the work you are about to send!
- Labelled your media clearly with the centre number, centre name and unit code.
- Checked that the media used opens as expected, and all documents open/work as expected.
- Checked that you have not copied shortcuts inadvertently.
- Used the correct address for the moderator if using postal submission.
- Used recorded delivery for extra security.

Frequently asked questions

Should I restrict access to mobile devices?

Formal control during the NEA requires candidates to have no access to the internet. Please ensure that any mobile devices are not able to be accessed by candidates when undertaking NEA environments. This also includes the use of smart watches or similar devices that can connect remotely to provide web access or other unauthorised resources. Devices that may take pictures should also be restricted to help protect both the NEA document and the exporting of code.

Can candidates bring in notes made outside of the NEA environment?

Candidates are not permitted to bring in any research they carry out from outside of the NEA environment after they have had sight of the NEA task(s).

Do I need to remove displays within the classroom?

Teachers must ensure that any display material or similar within the NEA environment does not provide excessive guidance. This may include annotated exemplar work, worked examples of techniques, writing frames etc. Further guidance may be found on the JCQ website.

How long should I allow for the NEA?

The NEA is limited to 20 hours and this is explicit. Candidates who have Access Arrangements (e.g. extra time, readers, etc.) for formal exams may still access this support for NEA. You should seek support from your Exams Officer to request this. However, once the allowed time has been completed, the NEA has finished.

When can I start the NEA?

The tasks are released on 1 September for that examination series. Centres are allowed to commence the NEA from that point onwards.

Are solutions allowed to be posted on line?

Candidates and centres are required to protect the validity of the NEA assessment. Publishing solutions, in full or in part, to the NEA tasks is prohibited. Candidates must be aware that they cannot post, share or otherwise disclose code or solutions the NEA tasks.

Teachers are reminded that they **must not** produce templates or model answers and publish them online.

Can I send a paper-based sample?

No. Any work sent to the moderators should be electronic. This helps speed up the moderation time, and is also more environmentally friendly!

Which task should I choose?

OCR provides a range of tasks to help engage candidates and provide a range of contexts. Centres are free to choose any combination of tasks for submission. However, each candidate will only submit a single attempt at one NEA task. This allows centres to either:

- Choose one task for their entire submission for that series;
- Choose a separate task for each class group/set;
- allow candidates to pick the task they prefer.

All tasks are balanced and require similar skills – there is no advantage of picking one task over another, apart from having the choice of different contexts.

Can candidates practise the tasks outside of the NEA environment?

Candidates are not allowed to:

- Take an NEA task document home with them.
- Access their work externally outside of the NEA environment.
- Take their work home with them.
- Bring in any work/notes into the NEA environment.

All work submitted must have been carried out under formal control and completed under supervision.

Whilst candidates may choose to do extra research outside of the NEA environment and/or 'practice' the coding, no external work/sources/notes may be brought into the NEA environment.

What guidance can I give to candidates?

Candidate feedback is tightly prescribed within the specification and JCQ guidelines. The guidance you may give is also shown on the front of each NEA task. Teachers must ensure that they do not give detailed feedback to help improve work or correct errors.

Assessment for Learning feedback sheets or similar relating to their NEA progress **may not** be given to candidates at any time during the NEA. Please note that feedback of any level **will breach control levels for NEA** and thus be viewed as **malpractice**.

Should candidates reference sources?

Yes. Candidates are expected to reference all sources that they use within their work. This will support the moderation process should a moderator want to confirm that a candidate has not plagiarised their solution. Failure to reference sources that they rely on constitutes plagiarism.

What should I do if I suspect candidate malpractice?

Your Exams Officer will be able to support you in the correct procedure to follow if you believe that a candidate has committed malpractice.

Do I need to submit the resource bank at moderation?

No. Centres **do not** need to submit the resource bank to the board within the moderation sample.

Centres may be required to submit their resource bank at a later date, e.g. during a malpractice investigation, and must ensure they keep an un-edited version of the resource bank available for inspection, if requested.

Support links for the NEA

Specification J276 Computer Science:

- [Specification](#)

Websites:

- [J276 Computer Science Website](#)
- [JCQ Instructions for Non-Examination Assessments](#)

GCSE J276 Computer Science CPD Courses*:

- [Reviewing Delivery and Assessment of Component 03](#)
- [Best Practice in Computer Science](#)
- [Certificate in Computing for Teachers](#)

Other courses are available from <http://cpdhub.ocr.org.uk> which may provide other general support.

Marking support materials*:

- [Marking Component 03](#)

* please note that CPD Hub requires a log in to access these courses.



We'd like to know your view on the resources we produce. By clicking on the 'Like' or 'Dislike' button you can help us to ensure that our resources work for you. When the email template pops up please add additional comments if you wish and then just click 'Send'. Thank you.

Whether you already offer OCR qualifications, are new to OCR, or are considering switching from your current provider/awarding organisation, you can request more information by completing the Expression of Interest form which can be found here:

www.ocr.org.uk/expression-of-interest

OCR Resources: *the small print*

OCR's resources are provided to support the delivery of OCR qualifications, but in no way constitute an endorsed teaching method that is required by OCR. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources. We update our resources on a regular basis, so please check the OCR website to ensure you have the most up to date version.

This resource may be freely copied and distributed, as long as the OCR logo and this small print remain intact and OCR is acknowledged as the originator of this work.

OCR acknowledges the use of the following content:
Square down and Square up: alexwhite/Shutterstock.com

Please get in touch if you want to discuss the accessibility of resources we offer to support delivery of our qualifications:
resources.feedback@ocr.org.uk

Looking for a resource?

There is now a quick and easy search tool to help find **free** resources for your qualification:

www.ocr.org.uk/i-want-to-find-resources/

www.ocr.org.uk/gcsereform

OCR Customer Contact Centre

General qualifications

Telephone 01223 553998

Facsimile 01223 552627

Email general.qualifications@ocr.org.uk

OCR is part of Cambridge Assessment, a department of the University of Cambridge. *For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored.*

© **OCR 2017** Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office 1 Hills Road, Cambridge CB1 2EU. Registered company number 3484466. OCR is an exempt charity.

