

Design & Technology (Food Technology)

General Certificate of Secondary Education **GCSE J302**

General Certificate of Secondary Education (Short Course) **GCSE J042**

Report on the Units

June 2010

J302/J042/R/10

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This report on the Examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the Examination.

OCR will not enter into any discussion or correspondence in connection with this report.

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Design and Technology (Food Technology) (J302)**

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Chief Examiner's Report

This report provides an overview of the work seen in the written examination Units 2 and 4 and the Controlled Assessment Units 1 and 3, for candidates who took the examination during this series. It precedes a more detailed report to centres from each subject area within the Innovator Suite and highlights general issues that have occurred across the suite of specifications.

This report has been prepared by the Chief Examiner, Assistant Chief Examiners, Principal Examiners and Principal Moderators and covers all specifications within the Innovator Suite. It should be read in conjunction with the examination papers, the mark schemes, and the marking criteria for assessment given in the specification booklets.

This is the second examination series in the first year for the new Innovator Suite.

An important point for teachers to remember about the Terminal Rule in relation to this suite of specifications and re-sits:

The terminal rule is a QCDA requirement. Candidates must be entered for at least two units out of the four (full course) at the time that they certificate. ie the end of the course.

Please be aware that the QCDA rule states that marks scored for terminal units will be the marks used in the calculation of candidate grades. Therefore, if one of the candidate's terminal units is a re-sit and the mark is poorer than the original mark, the poorer mark will be used to calculate the final grade for that candidate.

Obviously, the terminal unit marks are then added to the highest marks scored in the other units making up the certificate.

Teachers are reminded that it is also a requirement of QCDA that candidates are now credited for their accurate use of spelling, punctuation and grammar across all four units.

It is pleasing to see that centres and candidates have responded well to the new style of examination approach, especially when the nature of the work between subject areas within the suite is so varied. Centres are to be commended for this.

Written Examination - Units 2 and 4

Unit 2 - For this examination series of the new GCSE Innovator suite entries were seen from all six subject specialisms:

A512 Electronic and Systems Control
A522 Food Technology
A532 Graphics
A542 Industrial Technology
A562 Resistant Materials
A572 Textile Technology

The overall performance and range of results for Unit 2 varied considerably. Many of the candidates demonstrated a general awareness of the main points and issues linked to sustainable design, but often failed to answer in sufficient depth to gain high marks.

In **Unit 2 - Section A** of the papers most candidates across the suite attempted to answer some of the questions, some candidates however did give 'no response' (NR) answers. Candidates need to be encouraged to give an answer for the multiple choice style of questions even if they are uncertain that they are correct.

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With reference to Section A of the paper it was noticeable that;

- At times, candidates had not read the instructions correctly and centres would benefit from explaining the correct examination procedures and requirements to the candidates.
- Candidates need to be able to identify signs and symbols in particular giving information about materials, products and safety issues in relation to environmental and design issues.
- Candidates must take greater care when circling their answers in Section A. They should not circle more than one answer and completely clear incorrect circles to eradicate confusion in marking.

Unit 2 - Section B of the papers showed more varied responses and teachers need to ensure that they read the subject specific reports for further detailed feedback on specific issues and individual question performance. Many candidates did manage to use subject specific 'terms' in their answers, but at times these lacked sufficient depth and tended to be generally weak. Occasionally candidate answers were merely taken from the question itself and care needs to be taken here. For example, where two reasons or an explanation was required the same point was made twice with slight word variation.

Candidates need to be made aware of the importance of the wording for each question and have struggled to answer specific questions in regards to 'explain' or 'describe'. Many candidates did not score marks on these questions, because they gave a list of unrelated points instead of developing one of these.

The questions marked with an asterisk * provided candidates with an opportunity to give a detailed written answer combining good subject knowledge with an ability to produce a structured response. The range of responses varied considerably in the specific subject areas and it is advisable that guidance is sought from the subject report within this document.

Hand writing, at times, was difficult to decipher and candidates need to be prepared to make an effort with their hand writing, particularly on the banded mark question * and questions requiring a detailed explanation or discussion of points.

Centres are reminded that candidates are marked on spelling, punctuation and grammar on the banded mark scheme question. It is also important to note here that candidates need to ensure that they write legibly and within the areas set out on the papers.

Unit 4 - For this examination series of the new GCSE Innovator suite entries were seen from the following subject specialisms:

A514 Electronic and Systems Control
A524 Food Technology
A534 Graphics
A544 Industrial Technology
A564 Resistant Materials

On the whole candidates responded well to this Unit across the suite of subjects, with very few questions showing 'no response' (NR), which was encouraging. Candidates should be reminded that it is always better to attempt an answer, rather than leave a blank space with a guaranteed zero.

It is still apparent this series that candidates need to be practiced in examination technique; reading the questions carefully, responding to the instructions given in the questions and having an awareness of the full range of question formats.

All candidates seemed to have sufficient time to complete the paper and were able to access most parts of all the questions, which is encouraging.

Centres are to be reminded that questions marked with an **asterisk*** provide candidates with the opportunity to give detailed written answers combining good subject knowledge with an ability to produce structured, coherent responses. This type of question format still requires practice, although candidate performance was much improved this series.

CONTROLLED ASSESSMENT – Units 1 and 3

This series has seen portfolios for all subject areas being submitted both through postal and repository pathways. Most centres have been prompt in the dispatch of documentation to OCR and moderators, which is to be commended.

In general, centres have been successful in applying the marking criteria for both Units 1 and 3. However, it was noticeable that some candidates were being awarded full marks for work that lacked rigour and depth of analysis. Words highlighted on the marking criteria grids such as 'appropriate', 'fully evaluated', 'detailed' and 'critical', which appear in the top mark band, were not always adhered to.

Centres are reminded to apply the mark scheme on a 'best fit' basis. For each of the marking criteria, one of the descriptors provided in the marking grid, that most closely describes the quality of the work being marked, should be selected. Marks should be positive, rewarding achievement rather than penalising failure or omissions.

It was noticeable this series that a significant proportion of portfolios, particularly for Unit 1, resembled the legacy format. Care must be taken here to ensure that the marking criteria and format for the Innovator Suite is not confused with the legacy approach.

It is important that centres encourage candidates to organise the portfolio according to the different marking criteria strands as it enables the candidates to produce work that clearly shows an understanding of the controlled assessment requirements. Portfolios should be clearly labelled with the Candidate and Centre name and number, with the Unit code and title also evident. (*Specification - 5.3.5 Presentation of work.*) This is particularly important when the Centre submits work via the OCR Repository, where individual files are used to store portfolio work. Centres need to ensure that candidates clearly label each file using the marking criteria section headings; this facilitates a more effective completion of the moderation process.

Centres are also reminded to ensure that the OCR cover sheet is evident on each portfolio of work, outlining the theme and the starting point chosen by the candidate.

Many candidates included a bibliography or referenced their research sources, which was pleasing to see. It is good practice to ensure that candidates acknowledge sources of information used for the development of their portfolio work.

There was still some evidence this series of strong teacher guidance influencing candidate portfolios. Where this was evident it greatly hampered the candidate's ability to show flair and creativity, and therefore achieve the higher marks. Centres should avoid the over-reliance on writing frames for candidates work. It is essential that candidates have the opportunity to show flair and creativity in the way they approach the various aspects of these units.

Centres are to be reminded that the '*controlled assessment task must NOT be used as practice material and then as the actual live assessment material. Centres should devise their own practice material using the OCR specimen controlled assessment task as guidance.*'
Specification - Section 5.2.2 Using Controlled Assessment Tasks.

It was noticeable this series that some candidate's failed to provide any visual evidence of practical work within their portfolio. Centres are reminded to ensure that candidates provide clear

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photographic images in both portfolios for Units 1 and 3, particularly within the making and evaluation sections.

It was noticeable that where candidates had scored the high marks, they had used specialist terms appropriately and correctly and had presented their portfolio using a structured format.

Centres are to be commended on the amount of work produced for the portfolios in Units 1 and 3, which has been realistic in terms of the amount produced and the time allocated to this unit – 20 hours.

Unit 1 – specific areas of importance

Centres are to be reminded that Themes for Unit 1 are based around environmental awareness and sustainable resources/processes. Therefore, it is considered good practice for teachers to encourage candidates to consider Eco-design and sustainability when making decisions and combining skills with knowledge and understanding, in order to design and make a prototype product. This knowledge base also acts as a 'spring board' to active learning for Unit 2.

It was evident through the portfolio that candidates struggled with the critical evaluation section of the marking criteria. Unit 1 requires that the candidate evaluates the processes and subsequent modifications involved in the designing and making of the final prototype **ONLY**. Too many references were made to the performance of the prototype against the specification, which meant that candidates' marks were compromised. (Not applicable to Food Technology)

Unit 3 – specific areas of importance

Due to the low number of entries for this Unit specific guidance is limited. However, centres need to ensure that candidates complete a quality product for Unit 3. The weighting of marks available for the making section therefore, must be reflected in the time available for the candidates to complete a quality outcome.

A521 Introduction to designing and making

General Comments

Candidates should be encouraged to organise their portfolio into separate sections according to the assessment criteria and show appropriate use of ICT. Some candidates did not divide their work into sections. Portfolios should be labelled clearly with both the candidates name and number.

Too many Centres marks required adjustments because the levels of response in the Assessment Objectives had been interpreted too leniently.

Too often the higher attaining candidates were awarded top marks, when in fact the work didn't really show great capability and depth of involvement. Words such as 'appropriate', 'fully evaluated', 'detailed' and 'critical' which appear in the top mark band, were not really adhered to.

There was lack of written evidence in some candidates' folders of the adaptations/modifications to the recipes being trialled during Designing. Clearly, this is not within the philosophy of Design and Technology – Food Technology. Candidates should be encouraged to use their own ideas creatively throughout the whole design and make process.

Work which is annotated by the teacher clearly helps the moderation process. Some Centres had done this particularly well. There should be photographic evidence of the practical work along with written teacher comments. This is particularly important for the low attaining candidates where there is little written evidence in their portfolio. A separate cover sheet containing reference to the assessment criteria applied is required by OCR.

The use of writing frames and pre-printed sheets should be used with caution. It is important that high achieving candidates are given the opportunity to show flair and creativity in approaching the assessment criteria.

Assessment Criteria

The level of response is an important part of the mark scheme and should be carefully considered when assessing candidates work. The levels should equate to the quality of the evidence, the capability and depth of involvement that has been employed to produce what is on offer. Within an Assessment Criteria the quality of evidence to fulfil a particular level of response at a lower level must be very different from the evidence that might fulfil a similar level of response at a higher level. The capability and depth of involvement must be evident to gain the marks at the higher level.

The portfolio should start with the chosen Theme/Product and a starting point and all the work produced should relate to this chosen theme and starting point. Candidates should also develop a new product that meets an identified aspect of current healthy eating guidelines.

Cultural Understanding

Candidates had collected and presented information on how changes in society, including cultural issues have influenced the products available today but many did not relate the information to their chosen theme/product.

Portfolios included information on how wise choice of food products can promote healthy lifestyles, though sometimes this section was not concise.

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Some candidates completed mind maps to highlight issues but then gave no explanation or meaningful conclusions/reflections on them.

A number of Centre's were over generous when marking this section because of lack of independent analysis.

Reference sources should be acknowledged.

A high level of response to this section would include:

- Chosen product/theme and starting point clearly stated at the start of the portfolio.
- Considering how changes in society, including cultural issues have influenced the range of food products available today in relation to their chosen product/theme.
- Evidence of how wise choice of food products can promote healthy lifestyles.
- Information being presented concisely and the sources acknowledged.

Creativity

Most candidates used a questionnaire to identify the needs of the user/target group/a nutritional focus but in some cases questions were irrelevant, graphs were not analysed and/or the Design Brief did not arise from the findings of research. Centres credited candidates with full marks when there was little supportive evidence for the choice of the design brief and when a precise design brief had not been given. The Design Brief must include 1 nutritional focus. Many candidates did not justify their choice of target group and/or nutritional focus. Some candidates chose more than 1 nutritional focus resulting in the application of the nutritional data becoming more difficult later on in the portfolio. Centres should not set the target group and/or nutritional focus. Some candidates presented their design brief as a long and wordy "mini-specification". Candidates need to be encouraged to present a clear and concise design brief which allows the opportunity to demonstrate a wide range of practical skills.

Questionnaires that lacked focus did not allow candidates to identify the qualities respondents require from a new product which resulted in existing products not being evaluated against identified needs and the design brief and the design specification at the beginning of the Designing Section not being developed from analysis of research. In some centres evaluation of existing products took place before candidates carried out the questionnaire. A number of Centres credited candidates with high marks when analysis of the questionnaire results was very superficial.

Too many Centres allow candidates to use the same proforma chart and look at the same 4 products irrespective of their design brief and identified needs so in many cases the products evaluated are not appropriate. In some cases products are evaluated in the form of a table with no conclusions drawn from the results. Detailed evaluation of 1 product was seen by some Moderators but a number commented that evaluation of the chosen product tended to be very limited and superficial. Evaluation of packaging is not required.

Many candidates had used one method of research to identify and record relevant data to help design a creative innovative product. However, the data was not always presented concisely.

A high level of response to this section would include:

- Carrying out research eg questionnaires/interviews/available statistical data to identify the qualities required for the design of a creative, innovative food product/target group/a nutritional focus that the portfolio will focus on;
- Providing a detailed analysis of the results in order to identify the needs of the user/target group/nutritional focus which then leads to a clear and precise design brief;
- A design brief that includes 1 nutritional focus.

Example of a concise and precise design brief: - Design and make a lower in fat ready meal aimed at families.

- Critically evaluating existing products against the needs of the intended user(s) – 4 products in chart form with a conclusion and 1 product in detail;
- Relevant data which is edited and presented concisely. All sources of information should be acknowledged

Weaker candidates tended to make very little reference to results of research resulting in rather vague briefs and superficial evaluation of existing products. This would be regarded as a low level of response.

Designing

The quality of design specifications varied widely. Some candidates produced very detailed design specifications, other design specifications were far too brief and in some cases, they tended to be teacher led. There was evidence of the design specification not reflecting the findings from research in the Creativity Section of the portfolio.

The use of proforma sheets for the planning and evaluating of products limited candidates' creativity and initiative and tended to result in repetitive responses.

Some candidates chose products that showed little or no skills or only allowed them to show the same skills.

Most candidates chose 4 products to trial but too many failed to adapt or modify original recipes to be creative, innovative, fit their design specification and design brief, and to record and explain the proposed changes.

Detailed annotated diagrams, equipment lists, methods, time plans or flowcharts are not required for this section. However, candidates are required to list the practical skills they will use for each product.

Some candidates had trialled and tested a wide range of interesting solutions. There was good evidence of star diagrams/profiles and rating charts but marks were lost if these results were not always explained or conclusions drawn.

Detailed evaluations of ideas against the specification was a weak area in this section for many candidates. Evaluations were often cursory with only a ticked chart and this cannot be considered a detailed evaluation. Some candidates had evaluated each solution but then failed to make any reference to the specification. Other candidates had evaluated the making of the products rather than the product itself. Some candidates failed to suggest any improvements to the product.

Nutritional analysis of the trialled products according to the candidates chosen nutritional focus was disappointing. A significant number of candidates failed to refer to their nutritional focus using available data, when evaluating their trialled products. Some candidates discussed more than one nutritional focus which is not required. Other candidates did not show any reference to a nutritional focus, a requirement of Unit 521.

Reasoned decisions re ingredients and equipment for the final product (prototype) in many centres was well done but many candidates failed to apply relevant nutritional data according to their nutritional focus when giving reasoned decisions.

Marks for the application and understanding of nutritional knowledge according to the chosen nutritional focus are awarded to the Making Section.

A high level response to this section would involve:

- A detailed design specification reflecting research findings from the Creativity section of the portfolio
- Proposing a wide range of appropriate solutions – listing a range of ideas before choosing 4 ideas to trail, with detailed evaluation against the specification, design brief and chosen nutritional focus.
- For each product to be trailed – listing ingredients and practical skills, adaptations clearly explained and justified to produce creative and innovative ideas, nutritional analysis according to the chosen nutritional focus, evidence of testing by 3 tasters, detailed evaluation against the specification, design brief and nutritional focus using results from testers as evidence, discussion of improvements taking into account users views.
- Using a wide range of appropriate techniques to present solutions.
- Giving reasoned decisions for ingredients, equipment for the final product (prototype), applying relevant nutritional knowledge and understanding

Making

Some candidates produced products that demonstrated a wide range of skills, but it was noticeable that many Centres are crediting candidates with high marks without evidence of this range of skills.

The use of digital cameras allowed candidates to include photographs of their work. Centres are reminded that the minimum requirement is a photograph of the final product.

Nutritional analysis according to the chosen nutritional focus should be evident along with a flowchart for the making of the final prototype (product).

To achieve high marks for practical work candidates need to select and use appropriate ingredients and equipment, work safely, hygienically, skilfully to prepare, shape, form, mix, assemble (wide range of skills) and produce high quality, creative and innovative outcomes.

A high level response to this section would be:

- Producing a detailed flowchart which clearly shows all process required for the making of the final product (prototype)
- Showing thorough understanding and application of the chosen nutritional focus throughout the portfolio
- Being resourceful and adaptable with materials, foods and equipment.
- Selecting and using appropriate ingredients and equipment
- Working safely, hygienically, skilfully to prepare, shape, form, mix, assemble (wide range of skills)
- Produce high quality, creative and innovative outcomes

Evaluation

Some candidates provided evidence of testing of the final product (prototype) but conclusions, were often superficial and unsupported, resulting in the evaluations being descriptive rather than evaluative.

Comments when evaluating against the design specification often lacked specific detail, stating the product had met the specification without any justification.

A high level of response to this section would be:

- Critically evaluating their product against the design specification and design brief using results of testing (5 testers) to give meaningful conclusions.
- Suggesting possible improvements
- Using specialist terms appropriately and correctly, presenting information in a structured format and accurate use of spelling, punctuation and grammar.

Good Practice within Administration of the Controlled Assessment

Work should be removed from ring binders, presented so that pages can be turned without having to remove sheets from plastic wallets and securely fastened together eg by means of a tag, then clearly labelled with Centre Number, Name and Candidate Number. Mark sheet/annotation sheet should be attached to each piece of work.

The Controlled Assessment Mark Sheet(s) should be sent to the Moderator with the MS1. Centres need to make sure that this paperwork arrives to the Moderator by the date specified by OCR and portfolios should be sent within 3 days of receipt of the request for the sample.

Encourage the candidates to divide their work under headings for the separate Assessment Criteria.

Where more than 1 teacher is involved in the assessing of candidates work, the centre should carry out effective internal standardisation to ensure a reliable rank order.

A522 Sustainable design

Examiners Report

The overall performance and range of results was disappointing. Many candidates did not have sufficient knowledge to answer the questions, particularly those parts of questions aimed at the higher grades. There were a high number of 'no response' answers again indicating that the in many cases the whole of unit (A522) had not been taught. It was particularly disappointing to see candidates not attempting some of the questions in section A. Some candidates also ringed more than one answer and therefore did not score any marks.

Many of the candidates demonstrated a general awareness of the main points and issues linked to sustainable design however they lacked the specific knowledge and understanding required to answer questions in depth. Candidates tended to either give limited responses or to write at length on points unconnected with the question e.g. question 18d where wrote about exercising as a way of reducing calorie intake. Basic nutritional knowledge was poor, with few candidates being able to give the function of protein or being able to explain why we need to reduce our fat and sugar intake.

There was little evidence of candidates underlining key words in the questions to determine what was required in the answer. Candidates need to be made aware of the importance of the wording of each question and they need to understand the difference between terms like 'name', 'explain' and 'discuss'. They also need to consider carefully who the question is asking about: whether it is the manufacturer or the consumer. Many candidates did not score marks on the explain questions because they gave a list of unrelated points instead of developing one of these in the case of a question worth two marks. When questions ask the candidates to explain e.g. question 17d candidates will not score four marks for four separate points. They need to explain two points in detail.

The vocabulary of the candidates, themselves, was generally limited. There were only a few cases where specialist terms were used appropriately. Spelling of key words, such as ingredients, nutrients, and vitamins was poor and vague terms were often used that did not convey sufficient understanding to warrant marks.

Vague terms used in answers included: healthy, healthier, health issues, rotting teeth, bad teeth, heart attack, heart problems, help the environment, bad for you, pollution, climate change, harmful gases, environmentally friendly, costs more. Candidates wrote about being on a diet – but failed to specify what sort of diet.

It is particularly important on the banded mark question that candidates use specialist terms appropriately and correctly.

Comments on Specific Questions

Question 1

The majority of candidates answered this question correctly. The most common incorrect answer was cardboard.

Question 2

The majority of candidates identified putting vegetables in the compost bin as the correct answer.

Question 3

It was clear that where candidates had been taught this they knew the correct answer.

Question 4

The majority of candidates knew that eggs could be 'free range' answered this question correctly.

Question 5

Candidates who had good nutritional knowledge answered this correctly. However many candidates thought chicken was the correct answer.

Question 6

The majority of candidates stated 'do not freeze' or 'not suitable for freezing'. It was disappointing to see that some candidates did not attempt to answer this question,

Question 7

Many candidates gave a good answer to this. Some however did not put enough information and said 'use again' and therefore did not score a mark.

Question 8

The majority of candidates used the information from Fig. 1 on the exam paper and gave the answer of storage instructions or use by. Some candidates still do not know what is needed by law on packaging and incorrect answers included display until, product code, bar code.

Question 9

Many candidates have clearly not been taught about the use of a temperature probe / food thermometer. There were quite a few candidates who did not make any response to this question. Common incorrect answers seen were microwave and oven.

Question 10

Where students had good nutritional knowledge they answered this question correctly. Quite a lot of candidates named a food containing protein rather than a function of protein in the diet.

Question 11

The majority of candidates answered this question correctly.

Question 12

Candidates who had good nutritional knowledge answered this correctly. Of the true and false questions this was the one which most candidates did not score on.

Question 13

The majority of candidates knew that canning was a method of preserving food.

Question 14

The majority of candidates knew that there is an increase in the number of households recycling.

Question 15

The majority of candidates answered this question correctly.

Section B

Question 16

- (a) Most candidates attempted to answer this question. However their understanding of product analysis was weak. Correct answers frequently seen were related to identifying a gap in the market, checking to see if it meets the specification and making changes / improvements to the product. Many candidates wrote about carrying out research e.g. questionnaires, about packaging, health and safety issues and to see if consumers would buy it. Marks were not awarded for these responses.
- (b) (i) The majority of candidates identified India as the country that the product originated from, but several copied from the illustration and wrote Ogden's farm or UK.
(ii) Most candidates scored one mark for this question. More able candidates were able to score the higher marks. Candidates need to ensure that their answers are different and that they don't repeat the same statement in a different way. There were a lot of responses that said the product might be healthier, this needs to be qualified – healthier than what.
- (c) Candidates answered this question well. They made reference to consumers wanting to know where the produce was from, how the animals were cared for and supporting the local economy. Incorrect responses were often linked to traceability.
- (d) Most candidates scored marks on this question and showed that they knew how to successfully adapt the product. Some candidates did not score full marks as they gave the same reason twice. Candidates need to be taught not to repeat their answers within a question. The majority identified cream and full fat yogurt as the ingredients to be changed, there were very few other suggestions for changes.

- (e) Candidate's knowledge of the cook-chill process and how it affects the shelf life of a product was weak. Most frequent correct answer was 'shorter shelf life', but very few went on to gain a second mark. The majority of candidates misunderstood the question and wrote about extending the shelf life. Some candidates did not understand the term 'shelf life' and referred to the product being stored on the supermarket shelf, rather than in the chilled compartment.

Question 17

- (a) There were some good answers here where candidates scored two marks. However most only gained one mark for making the point that only one hotplate or burner was used. Many candidates did not read the question carefully and described the steaming as a method of cooking and therefore did not score any marks.
- (b) The majority of candidates scored one mark out of the three available. Using a microwave, cooking a whole meal in the oven and the family eating together were the most common correct answers. A number referred to eating foods that do not have to be cooked or wrote about non-cooking equipment (e.g. tumble dryers) no credit was given for these answers.
- (c) This was not well answered. Those who scored a mark made reference to the power level or wattage of the microwave. A minority explained the how the label enabled consumers to reheat ready meals correctly.
- (d) Some candidates repeated the question in their answer and therefore did not have enough space to write a detailed response which would give them four marks. Candidates needed to explain two points and not just write four separate points to get full marks. Some candidates did not read the question carefully and wrote about energy with reference to nutrition or to the cooking of foods in the home and therefore did not score any marks.
- (e) Many candidates did not write enough to score the full amount of marks. This is an explain question and required candidates to explain two points. Many candidates scored two points and wrote about food miles, local produce. Candidates did show good knowledge of Fair-trade and how it supports third world countries.

Question 18

- (a) Some candidates still think that nutritional information informs consumers of ingredients which they are allergic to. Some candidates answers were too vague to credit with a mark e.g. 'so you know what's in it' or how healthy this could have referred to either the ingredients or the nutrition. Candidates who gained marks frequently wrote about: being able to make informed choices, able to compare products, and to see how the product met dietary requirements.
- (b) Most candidates scored two marks for identifying the fresh strawberries and lack of artificial colourings/sweeteners/flavourings. More able candidates were able to explain the benefits of these and therefore scored full marks. Abbreviation hyper was common and was not given credit – candidates need to use technical language correctly. Few candidates understood that young children should not have skimmed milk. Statements about semi-skimmed milk and its fat content were often inaccurate. Several just listed the ingredients without giving reason for or against.

- (c) (i)** Most candidates could make a statement about why we should reduce the amount of fat we eat or just listed other conditions. However many did not get the second mark as their response was not detailed enough. Many candidates still use incorrect terminology such as fat clogs arteries, fat causes heart attacks.
- (ii)** Most candidates were able to identify a different reason to (i) this was because they had usually written a list of conditions rather than one explained reason. However many candidates are still referring to the rotting of teeth. It is important that candidates are taught correct subject terminology. Diabetes was correctly identified by many candidates but virtually no explanation of this were given for the second mark
- (d)** This is the banded response question. On a few occasions there was evidence of candidates planning their answer in the form of a mind map. This helped them focus their answers and meant they gave more detailed responses. Many candidates answers were simply a list of points and there was no development of their ideas. Most candidates wrote about changing the foods that they eat, making better choices and looking at labels. Some candidates did not read the question carefully and wrote about other ways of reducing weight e.g. by exercising – this was not part of this question. Candidates need to practice answering this type of question.

A523 Making quality products

General Comments

Candidates should be encouraged to organise their portfolio into separate sections according to the assessment criteria and show appropriate use of ICT. Portfolios should be labelled clearly with both the candidates name and number.

Assessment Criteria

Work which is annotated by the teacher clearly helps the moderation process. There should be photographic evidence of the practical work along with written teacher comments. A separate cover sheet containing reference to the assessment criteria applied is required by OCR.

The use of writing frames and pre-printed sheets should be used with caution. It is important that high achieving candidates are given the opportunity to show flair and creativity in approaching the assessment criteria.

The portfolio should start with the chosen Theme/Product and all the work produced should relate to this chosen theme.

Designing

The design brief should be clear and concise.

The chosen theme and design brief should be analysed carefully so candidates can arrive at an appropriate design specification for a creative and innovative product which includes a target group.

The design specification should be structured to allow candidates to demonstrate a wide range of practical skills.

A range of possible, appropriate products should be listed before choosing 4 ideas to trial that allow candidates to demonstrate a wide range of practical skills.

Candidates are required to include forward planning at the start of the Designing Section eg week by week plan – marks awarded to Making.

For each product to be trialled candidates should: -

- List ingredients
- Clearly explain adaptations – products should be creative and innovative
- If nutrition forms part of the design brief and/or design specification candidates are required to carry out nutritional analysis during the trialling of their products and refer to the results during evaluation.
- Make each product and provide photographic evidence – marks awarded to the making section of the assessment criteria. The photographs required by OCR are to be the candidate's practical products. Other photographs should be acknowledged or not included.
- Practical ideas must be creative and innovative if high marks are awarded.
- Show evidence of testing by three tasters
- Evaluate against each point in the specification using results from testers as evidence
- Discuss any improvements taking into account testers views.

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- Candidates are required to choose one of the trialled products for product development and clearly explain why the chosen product is being taken forward and why other ideas have been rejected.

Making

One product should be taken forward to product development.

Candidates are required to carry out 2 modifications before deciding on their final product. The first modification should show reference to the comments made when the product was originally trialled. All further modifications should be justified, reflecting comments made by testers from the previous modification so the product is being developed according to user(s) views. Each modification should be evaluated in detail.

Practical ideas must be creative and innovative.

During product development candidates should: -

- List and cost ingredients giving reasons for the changes being made showing consideration to the comments given when the product was originally trialled and the comments made by testers during development work.
- Show evidence of testing by 5 tasters.
- Carry out nutritional analysis if this is relevant to the brief/design specification

For the final product there should be evidence of: -

- Reasoned decisions for the choice of the ingredients and equipment
- Costing of the ingredients
- Nutritional analysis if this forms part of the brief and/or design specification.
- A product specification which should arise from the design specification and conclusions reached from development work including a labelled sketch/drawing of the final product
- A plan for the making of the final product eg flowchart

To achieve high marks for practical work candidates need to select and use appropriate ingredients and equipment, work safely, hygienically, skilfully to prepare, shape, form, mix, assemble (wide range of skills) and produce high quality, creative and innovative outcomes.

Evaluation

There should be evidence of testing by 5 tasters. A high level response requires candidates to critically evaluate the final prototype (product) against the product specification and design brief using results of testing to give meaningful conclusions, leading to suggestions for possible improvements. Specialist terms should be used appropriately and correctly, information should be presented in a structured format and there should be accurate use of spelling, punctuation and grammar.

Good Practice within Administration of the Controlled Assessment

Work should be removed from ring binders, presented so that pages can be turned without having to remove sheets from plastic wallets and securely fastened together eg by means of a tag, then clearly labelled with Centre Number, Name and Candidate Number. Mark sheet/annotation sheet should be attached to each piece of work.

The Controlled Assessment Mark Sheet(s) should be sent to the Moderator with the MS1. Centres need to make sure that this paperwork arrives to the Moderator by the date specified by OCR and portfolios should be sent within 3 days of receipt of the request for the sample.

Encourage the candidates to divide their work under headings for the separate Assessment Criteria.

Where more than 1 teacher is involved in the assessing of candidates work, the centre should carry out effective internal standardisation to ensure a reliable rank order.

A524 Technical aspects of designing and making

General comments

The overall performance of candidates was pleasing. The paper was appropriate and a wide range of marks were evident. Not many candidates scored 40+marks but there were very few below 15 marks. There was very little evidence of candidates highlighting the key words of a question before answering it. Candidates need to practise answering questions during the course, particularly those questions aimed at the higher grades.

It was pleasing to see an improved knowledge of nutrition and those candidates were able to gain easy marks on question 3b, correctly giving two nutrients in meat and their function. Likewise, those candidates who were able to give the functions of ingredients in cookies picked up four easy marks in 4b.

Candidates need to read the questions carefully, for example, several lost marks for stating a fruit instead of a vegetable at the start of the paper.

Candidates need to consider how many marks are awarded to each part of a question and to understand the command words, particularly the words 'explain' and 'discuss'. When questions ask candidates to explain or discuss, simply writing a statement is a low level response, with marks being awarded accordingly.

The newly introduced banded marking questions were on the whole attempted well, although the use of technical terms was limited and there were many examples of poor use of language. The quality of the drawings in the design based question was variable. Those candidates who made use of clear drawings and detailed annotation and who seemed to spend longer on the questions scored notably higher. Candidates need to ensure they show how their design meets each individual specification point.

Comments on individual questions

Question 1

- a) This was generally well answered. The majority of candidates were able to name a vegetable in season. A few named winter vegetables and some a fruit.
- b) Answers to this question were disappointing, with answers such as 'stays fresh'/'lasts longer'/'cheaper'/'quicker'. Many repeated the same answer for both frozen and canned food and very few realised the fact that you could buy the vegetable out of season.
- c) The majority of candidates were able to suggest a correct method of cooking, steaming being the most popular.
- d) i) Too many candidates suggested a thermometer instead of correctly naming a temperature probe or even a food probe.
- d) ii) A good number of candidates were able to correctly state the temperature range of the danger zone.
- d) iii) Even candidates who did not score a mark for the temperature range of the danger zone were able to describe bacteria growing/thriving/multiplying or spreading. It was

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disappointing to see candidates still using the term 'going off' and failing to gain marks.

- e) A lot of candidates were able to get at least one mark for stating high water content even though very few named a high water vegetable such as cucumber or lettuce. We did accept tomatoes.

Question 2

- a) This was well answered with the majority of candidates scoring high marks. Where marks were lost it was usually because they stated 'brown bread' not correctly stating 'wholemeal' or did not name a fruit. The majority of candidates seemed to have a good understanding of suitable healthy eating guidelines for a child's packed lunch.
- b) The answers to this question varied. Those who stated 'advert' /'healthy' without qualification failed to gain a mark. Popular correct answers included reference to media advertising, special offers and free samples.
- c) This was the first of the two banded marking questions. To gain high marks the candidate had to show a good understanding of nutritional information supported by relevant and appropriate responses. Most candidates gained at least one mark but very few had an understanding of metabolic rate or the use of energy for warmth and basic processes. It was disappointing to see so many candidates write about diabetes which did not answer the question. Popular correct responses included energy requirements linked to age, gender and physical activity/occupation.

Question 3

- a) Most answered this correctly but a few candidates thought that Lasagne was from the UK!
- b) It was again pleasing to see that the majority of candidates had a sound understanding of the nutrients found in meat and their function in the body. Popular answers were 'protein' /'fat' and 'iron' with most correctly stating their function.
- c) Most candidates gave 'reduction of fat' as the answer but there were some misguided candidates who thought that you got food poisoning from meat. Another popular response was 'the prevention of coronary heart disease' or 'the reduction of cholesterol'.
- d) The most popular answer for this was Quorn although there were some varied spellings of it. Sadly a few candidates thought that vegetarians ate fish or chicken.
- e) There were a few good responses to this but the majority only referred to protein. Some included calcium but many did not mention iron, vitamin B12, vitamin D or C or considered the high saturated fats in dairy produce. The good responses were able to explain about high biological (HBV) and low biological (LBV) proteins and how a vegetarian could obtain a good mix of these in their diet. Reference to the 'eat well plate' was evident in many of the papers.

Question 4

- a) i) All candidates correctly stated the 'best before date'.
- a) ii) iii) There were some good responses to the Fair Trade question, reflecting the teaching that has been carried out on sustainable design.
- b) Candidates who had been taught the function of ingredients were able to gain full marks using the correct terms. Candidates did not gain marks for single word answers such as : taste/flavour/texture/ hold/ stick. Bulking/ shortening/ raising agent/ sweetening were simple correct answers.
- c) This was not very well answered. The paper had two lines for each response but many candidates gave simple one word answers or repeated themselves. Candidates need to be encouraged to think of different responses when answering these types of questions. Many candidates included vague statements for example 'look the same', 'right size of ingredient', 'cooked properly'.

Question 5

- a) The question asked for two methods, however there was a lot of repetition of using survey and questionnaire instead of suggesting an alternative way of conducting market research. 'Internet' is not a method unless qualified ie online survey/look at existing products on the internet
- b) There was a great variation in the quality of responses with the majority doing a sweet design, ignoring the word savoury in the specification. Generally the quality of the sketches was poor, the explanations were vague, and some were unworkable designs. Most candidates gained a mark for 'hand held' but failed to gain a marks for the other specification points. 'Be nutritious' was ignored on the whole with very few candidates labelling 'high in protein 'or 'rich in calcium' etc. against ingredients. The savoury filling which should have given the candidate an indication of the type of product to design for lunch snack product was ignored. Very few explained why the product was 'new', or showed how it would 'appeal to a teenager'.
- c) This was well answered. Most candidates gained at least one mark.

Level one responses included a basic discussion mainly centred around school meals. There was no reference to the Eatwell plate /media influence or award systems

Level two responses included a wider variety of aspects. As well as school meals, they included PE lessons, after school clubs and sports, removal of vending machines and changes made in Food Technology lessons.

Level three responses gave a thorough discussion and showed a detailed understanding of a wide range of strategies that had been implemented. As well as the above, this included points such as : free fruit for primary children, cycling or walking to school campaigns, healthy school awards and the impact of campaigns such as Jamie Oliver's ministry of food. The information was presented in a structured format demonstrating accurate use of spelling, punctuation and grammar.

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