

860/E1

ENTRY LEVEL MATHEMATICS ENTRY 1 Task 1 and Task 2 ASSESSMENT: FRUIT

Assessment window: 3 May 2011 - 27 May 2011 1 hour

### Task 1 and Task 2 – Fruit

### Introduction

### Time allowed 1 hour

These tasks should be assessor mediated and carried out within the assessment window opportunity in a format suitable to engage the candidate.

Practical equipment should be provided where necessary.

The task is designed to allow the candidate to think, use their mathematical skills, make decisions and talk about their work in an informal conversational setting with the assessor.

The assessment tasks are designed so that they can be used as they are or centres can contextualise or adapt them to best-suit their centre-specific circumstances. Centres can adapt the context to best suit the candidate. However, the context must be set within a real-life context and have a given purpose. The Skill Standards should not be changed and all assessments should sample across number, geometry and statistics.

The assessor should familiarise themselves with the Functional Skill standards at Entry 1, the tasks, the requirements for equipment and the marking guidance before initiating the assessment with the candidate.

The candidate may repeat the tasks within the assessment window, or may carry out the tasks in smaller manageable sections.

The marks available (12 marks for Task 1 and 8 marks for Task 2) and the time allowed should be shared with candidates.

Candidates require 15 marks out of a possible 20 (75%) in order to achieve the Entry 1 qualification.

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### Task 1 and Task 2 – Fruit

### **Summary of Assessment**

### During Task 1, candidates will be expected to:

- decide on two different selections of 4 items of fruit;
- find the total weight using the information given of both selections;
- explain which fruits are most like common 3D shapes they know, i.e. sphere, cones, etc.

### During Task 2, candidates will be expected to:

- sort at least 8 items of fruit according to the pre-determined criterion decided on by the assessor;
- cost some fruit which must consist of at least 4 items;
- identify and select the correct coins and notes needed to pay for the fruit.

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## **Preparation for Task 1 – Fruit**

- Provide some items of fruit if possible.
- Copy the information sheet "Task 1 and Task 2 FRUIT" (labelled RESOURCE MATERIAL A) for the candidate.
- Make cards using the cut outs provided (labelled RESOURCE MATERIAL B CUT OUTS) or use actual pieces of fruit if available with the information attached.
- Provide materials for the candidate to use to record, e.g. paper, mini white boards, and a calculator.
- Examples of the dialogue that could be used with the candidate are shaded. These may be adapted to best suit the candidate but direction should not be given on how to complete the tasks themselves. A teacher's comment column is provided on the marking guidance.

# Task 1 – Fruit

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- Explain to the candidate that you want them to help you make two selections of fruit and you will be asking them a series of questions about these selections. This is the first task. There are two tasks to complete.
- Explain that the two tasks will not take more than an hour to complete and that for the first task there is a maximum of 12 marks available.
- Demonstrate how fruit can be selected from a number of items.
- Now give the information sheet "Task 1 and Task 2 FRUIT" (labelled RESOURCE MATERIAL A) to the candidate.
- Have a brief discussion with the candidate to ensure that they understand the information on the sheet and cards. Assessors should ensure that candidates understand abbreviations such as 'p' and 'g' and any unfamiliar words e.g. 'portion'.
- Pass the individual copies of fruit information boxes, or actual pieces of fruit, to the candidate so that they can start to make their choices.
- Explain that you want them to make two different selections both with 4 items in each selection. Explain, for example, that a small bunch of grapes or small bunch of cherries is one item, but that each banana, pear or apple is one item. Perhaps check understanding first by making your own selection of three items.

"An item of fruit maybe a small bunch of grapes, or perhaps one banana."

- Tell the candidate they need to decide on two possible selections of 4 items of fruit. "You need to choose **two** different selections of 4 items of fruit."
- Repeat the introduction as many times as necessary.
- Ask the candidate to make their choices.
  "Show me your two different selections of fruit."
- Allow time for the candidate to settle on their choices and ask them to find the total weight of each selection using the information cards.

"Are you happy with your choices?" "I want you now to work out how much each selection of fruit weighs." "How did you work out the weights of your selections?" "What is the final weight for each selection of fruit?"

Ask the candidate which selection of fruit is the heavier. "Which selection is the heavier?"

• Now ask the candidate to describe the sizes of the pieces of fruit and which of the fruit look similar to some 3D shapes they know.

"What shape is the orange?" "What shape is the pear?" "Which is the largest piece of fruit?"

## **Preparation for Task 2 – Fruit**

- Provide some fruit if possible.
- Copy the information sheet "Task 1 and Task 2 FRUIT" (labelled RESOURCE MATERIAL A) for the candidate.
- Make cards using the cut outs provided (labelled RESOURCE MATERIAL B CUT OUTS) or use actual fruit if available with the information attached.
- Provide materials for candidate to use to record, e.g. paper, mini white boards and a calculator.
- Provide money, real if possible, at least 1 x £20 note, 2 x £10 notes, 6 x £2 coins, 8 X £1 coins, 3 x 50p coins, 2 x 20p coins and 1 x 10p coin.
- Examples of the dialogue that could be used with the candidate are shaded. These may be adapted to best suit the candidate but direction should not be given on how to complete the tasks themselves. A teacher's comment column is provided on the marking guidance.

# Task 2 – Fruit

- Explain that this is the second and last task. For this task there is a maximum of 8 marks available.
- The assessor should place at least 8 items of fruit on a table into two groups based on a criterion that they select (e.g. red and not red, spheres and not spheres, all cost less than 50p and all 50p or more expensive.)
- The assessor explains how the fruit is grouped, then gives the candidate another item of fruit and asks which group it belongs.
  "Look at the two groups I have made by sorting ...... In which group does this belong?"
  "Why have you decided on this group?"
- The assessor should select at least 4 items of fruit making sure that the total cost is a whole number of pounds.
- The prices should be on the information cards, and if possible attached to actual items of fruit.
- Explain to the candidate that you want to buy these items of fruit for yourself. "I want to buy this fruit."

"I want you to work out how much the fruit costs altogether and I want you to give me the correct money."

- On a tray provide the money for the candidate to use.
- Ask the candidate to select the **correct** money to pay for the fruit. Allow the candidate time to calculate and decide how much money to pass to you.

"How much does the fruit cost altogether?"

"Give me the correct money."

END OF TASK 2



**ENTRY LEVEL MATHEMATICS** ENTRY 1 Task 1 and Task 2 - FRUIT **MAY 2011** 

**RESOURCE MATERIAL A** 

	Fruit	
Green Apple Price 30p Weighs 100g	Red Apple Price 30p Weighs 100g	Pear Price 50p Weighs 80g
Banana Price 50p Weighs 200g	Bunch of Red Grapes Price 60p Weighs 100g	Bunch of Black Grapes Price 40p Weighs 100g

Orange Price 30p Weighs 100g	Bunch of Cherries Price 70p Weighs 30g
Portion of Raspberries Price 70p Weighs 50g	Portion of Strawberries Price 60p Weighs 60g
Pineapple Price 70p Weighs 800g	Lemon Price 40p Weighs 100g



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ENTRY LEVEL MATHEMATICS ENTRY 1 Task 1 and Task 2 - FRUIT MAY 2011

## **RESOURCE MATERIAL B – CUT OUTS**

## Functional Skills Mathematics - Entry 1 Task 1 and Task 2 – Fruit

To be cut out and given to candidates to use for Task 1 and Task 2 or use real pieces of fruit and attach the relevant information to them.











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Bunch of Cherries Price 70p Weighs 30g



Candidate Name	Ce Nu	entre mbe	er	Car Nı	ndic umb	late ber	;



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ENTRY LEVEL MATHEMATICS ENTRY 1 Task 1 and Task 2 MARKING SCHEME ASSESSMENT: FRUIT Assessment window: 3 May 2011 - 27 May 2011

### Marking Guidance

The tasks should be internally assessed.

The skill standards for representing, analysing and interpreting are referenced in the marking guidance and the coverage and range is noted in the assessment grid.

The marking guidance does not detail every possible outcome, hence a teacher comment column is provided to briefly describe the candidate's response.

Where a candidate's response differs from the guidance the teacher should determine "the best fit" bearing in mind the marking guidance.

Where possible, evidence should be collated or assessors should confirm that candidates have successfully met the marking criteria.

Details on moderation processes can be found in the "Instructions for Teachers" booklet or Appendix 1 of the Functional Skills Mathematics Entry 1 Specification.

	TASK 1 MARKING GUIDANCE	Possible Mark	Mark Awarded	Teacher's Comments (continue on separate sheet if required)	
R1.1	<ul> <li>2 marks for successfully making two different selections of 4 items of fruit.</li> <li>1 mark for successfully making one selection of 4 items.</li> <li>OR 1 mark for successfully making two different selections of 4 following prompts.</li> </ul>	Ν			
R1.1	<ol> <li>2 marks for finding a strategy for finding the total weight.</li> <li>6.g. candidates know that they need to add the weights together to find the total weight, weights need not be correct for 2 marks.)</li> <li>1 mark for developing a strategy following prompts.</li> </ol>	2			
A1.2	<ul> <li>2 marks for giving two correct weights for the selections of 4 items of fruit.</li> <li>1 mark for one correct weight</li> <li>0R 1 mark for giving two correct weights following prompts.</li> </ul>	5			
A1.3	2 marks for recognising which selection weighs more than the other and therefore which selection is the heavier. 1 mark for recognising which weight is greater but not stating which is heavier. OR 1 mark for recognising which weight is greater but wrongly stating which arrangement is heavier.	7			
11.4	2 marks for talking about some fruit describing the colour and shape (words such as sphere or cone are sufficient). 1 mark - candidates discuss the colour or shape of some fruit with prompts.	2			
11.4	2 marks for comparing the sizes of the pieces of fruit. They understand the term "largest" and "smallest". 1 mark – candidates compare the fruit with prompts.	2			
	Total for Task 1	12			

	TASK 2 MARKING GUIDANCE	Possible Mark	Mark Awarded	Teacher's Comments (continue on separate sheet if required)
11.4	<ol> <li>2 marks for placing the fruit in the correct group and can explain why they have chosen this group.</li> <li>1 mark for placing the fruit in the correct group and gives suitable explanation with prompts.</li> </ol>	5		
R1.1	<ul> <li>2 marks for finding a strategy for costing the fruit correctly.</li> <li>(e.g. candidates know that they need to add the prices together to find the total cost, cost need not be correct for 2 marks).</li> <li>1 mark for developing a strategy following prompts.</li> </ul>	7		
A1.2	<ol> <li>2 marks for calculating and stating the total cost of the items of fruit correctly.</li> <li>1 mark for attempting to calculate the total cost but an error has been made.</li> </ol>	5		
11.4	<ul> <li>2 marks for selecting the correct notes or coins for their total cost.</li> <li>1 mark – with guidance, the candidate has selected the correct notes or coins for their total cost of the items of fruit.</li> <li>The candidate has selected the correct money for at least two of the pieces of fruit.</li> </ul>	5		
	Total for Task 2	8		
	TOTAL	20		

Date:

Teacher's Signature:

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Tasks 1 and 2 - Fruit Coverage and Range

Skills Standards	Coverage and Range (indicative)
Representing	
R1.1 Understand simple mathematical information in familiar contexts and situations	Understand and use numbers with one significant figure in practical contexts
Analysing	Describe the properties of size and measure, including length, width, height and weight, and make simple comparisons
A1.2 Use mathematics to obtain answers to simple given practical problems that are clear and routine	Describe position
A1.3 Generate results that make sense for a specified task	Recognise and select coins and notes
Interpreting	Recognise and name common 2D and 3D shapes
I1.4 Provide solutions to simple given practical problems in familiar contexts and situations	Sort and classify practically using a single criterion
Skill Standard Weightings	

		SKILL STA	ANDARDS		
	R1.1	A1.2	A1.3	11.4	TOTAL
Task 1	4	2	2	4	12
Task 2	2	2		4	8
TOTAL	6 marks (30%)	6 ma (30	arks %)	8 marks (40%)	20 marks (100%)



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ENTRY LEVEL MATHEMATICS ENTRY 1, 2 and 3 CONTROLLED ASSESSMENT INSTRUCTIONS FOR TEACHERS MAY 2011 To be opened on receipt

### Conduct of the Controlled Assessment

The following notes outline arrangements for the conduct of the Controlled Assessment for the May 2011 examination series for Functional Skills Mathematics Entry Levels 1, 2 and 3.

### 1. Timing of the Controlled Assessment

- The Controlled Assessments are timetabled to start on or after May 3<sup>rd</sup> 2011.
- For Entry 1, 2 and 3 the Controlled Assessments should be completed in a time not exceeding 1 hour.
- The Functional Skills Entry Level Controlled Assessments can be timetabled at the discretion of the centre within the assessment window (3/05/11-27/05/11).
- The subject teacher may invigilate the whole of the Controlled Assessment.
- Centres are asked to keep a log of attendance throughout the Controlled Assessment.
- Candidates may not need all the specified time, but special consideration will not normally be given for candidates who do not complete in the full time available to them.
- The candidates may repeat the tasks within the assessment window, or may carry out the tasks in smaller manageable sections.
- Samples of candidates work (details in section 5) must be submitted to the External Moderator by May 27<sup>th</sup> 2011.

### 2. Before the Controlled Assessment

- The assessor should familiarise themselves with the Functional Skill Standards at the appropriate level, the tasks, requirements for equipment and the marking guidance before initiating the assessment with the candidate.
- The assessment tasks are designed so that they can be used as they are or centres can contextualise or adapt them to best-suit their centre-specific circumstances. Centres can adapt the context to best suit the candidate. However, the context must be set within a real-life context and have a given purpose. The Skill Standards should not be changed and all assessments should sample across number, geometry and statistics.
- At Entry 1 and 2, for the fruit tasks, if possible candidates should be provided with real resources (e.g. real pieces of fruit) or alternatively give candidates the provided cards that have been cut out (RESOURCE MATERIAL B CUT OUTS).
- Provide an optional calculator and materials for recording for the candidates to use e.g. paper, mini whiteboards.

#### 3. During the Controlled Assessment

- Candidates should **not** be able to access their work outside the timetabled sessions.
- All of the assessment must be undertaken in controlled, supervised conditions according to current JCQ regulations.
- Candidates must work independently and the work submitted must be their own work.
- Assessors may give support and guidance to learners. This support and guidance should focus on ensuring that learners understand what is expected of them. It is not acceptable for assessors to provide model answers or to work through answers in detail.
- Assessors must declare any assistance given in the comments column on the mark sheets. Marks must not be awarded in these cases. Teachers/assessors may adapt the questions to suit candidates but should not be in such a way that direction is given.
- Assessors should observe the learner during the assessment to be able to complete the mark sheet. The mark sheet with assessor's comments and any evidence produced by the learner should be collated. Such evidence could be 'working outs', written work or witness statements. Candidates' work can be annotated if necessary. Centres can create worksheets to accompany the assessments if necessary.
- The tasks should be assessor mediated and carried out within the assessment window opportunity in a format suitable to engage the candidate. The tasks are designed to allow the candidate to think, use their mathematical skills, make decisions and talk about their work in an informal conversational setting with the assessor. The assessment tasks are designed so that they can be used as they are or centres can contextualise or adapt them to best-suit their centre-specific circumstances. Centres can change or adapt the context to best suit the candidate. However, the context must be set within a real-life context and have a given purpose. Examples of the dialogue that could be used with candidates are included with the tasks. They may be adapted to best suit the candidate but direction should not be given on how to complete the tasks themselves. The Skill Standards should not be changed and all assessments should sample across number, geometry and statistics. Assessors should use the Teacher's comment column on the marking guidance and any intervention should be noted and taken into consideration when marking.
- Calculators may be used.
- The candidates' responses are internally assessed and a sample of the candidates' work is then externally moderated.
- At Entry 3, the assessment should not be seen as an hour long examination candidates may use resources and 'props' if necessary and can talk about their work to their assessor in an informal way.

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#### 4. Marking the Controlled Assessment

- The Controlled Assessment should be marked for all candidates.
- At Entry 1, 2 and 3 marking guidance will be provided, which notes the marks allocated to a range of possible candidate responses. The marking guidance does not detail every possible outcome. Where a candidate's response differs from the guidance, the teacher should determine "the best fit" bearing in mind the marking criteria given. Comments should be made in the teacher comment column to briefly describe the candidate's response.
- If candidates are provided with assistance a note should be made in the Teacher's comment column in the mark schemes as to the nature of the help given. If teacher/tutor intervention is used, this should be noted and taken into consideration when the assessment is made.
- The Controlled Assessment will be externally moderated. Centres will be required to submit samples for external moderation together with the mark sheet by the end of the assessment window in accordance with instructions issued by WJEC.

At Entry 1, candidates require 15 marks out of a possible 20 marks in order to achieve the Entry 1 qualification.

At Entry 2, candidates require 15 marks out of a possible 20 marks in order to achieve the Entry 2 qualification.

At Entry 3, candidates require 30 marks out of a possible 40 marks in order to achieve the Entry 3 qualification.

- The marks for **all** candidates should be inserted on the FM1 form for Entry 1, FM2 form for Entry 2, and FM3 form for Entry 3. The FM1, FM2 and FM3 forms can be downloaded from www.wjec.co.uk/mathematicsfunctionalskills.
- Candidates' marks should be placed in descending rank order on the forms and a tick (*J*) should be placed in the appropriate column to signify the candidates that have been chosen for the sample. Please see opposite for instructions on selecting the sample.
- The total mark for the Controlled Assessments for **all** candidates should be inserted on the Computerised 'C' Form. Instructions on how to complete this form are given within the Functional Skills Admin booklet, section D page 11.

### 5. Sampling Procedures

After the completion of the assessment session, the work will be marked internally according to mark schemes/assessment criteria provided by WJEC. Candidates may see their marked work but it is important that the work is kept securely in the teacher/assessor's possession to prevent any tampering with it.

Moderation/Verification will take place at two levels:

- 1. Within the centre to ensure that a uniform standard has been applied across the teaching groups. There must be opportunities to exchange work/view candidates' performances and discuss the criteria during the assessment window: significant differences in the application of criteria and hence in rank-ordering will be difficult to resolve at the final stage of assessment. One person must take responsibility for the final moderation procedure within a centre, sampling the work of each teaching group.
- 2. Through the inspection of a sample of the work by WJEC moderators/verifiers. For Entry 1, 2 and 3 the sample will be selected according to the table below, based on the centre's overall rank order. Further details can be found in the *Controlled Assessment Manual*, which will be sent to centres. For entries of up to 10 candidates, all controlled assessments will be sent. Further samples of controlled assessment will be sent to the moderator/verifier if required. WJEC reserves the right to call in all of a centre's controlled assessments if this proves necessary.

Total no. of Candidates at <b>each</b> Level	Work to be submitted (Numbers relate to rank order)
1 - 10	All
11 - 19	1st and every second (1, 3, 5, 7 etc.) <b>plus</b> the lowest scoring folder and additional folders as necessary (reflecting a spread of marks) to make a total sample of 10
20 - 45	1st and every fifth (1, 6, 11, 16 etc.) <b>plus</b> the lowest scoring folder and additional folders as necessary (reflecting a spread of marks) to make a total sample of 10
46 - 99	1st and every eleventh (1, 12, 23, 34 etc.) <b>plus</b> the lowest scoring folder and additional folders as necessary (reflecting a spread of marks) to make a total sample of 10
100 - 199	1st and every fourteenth (1, 15, 29, 43 etc.) <b>plus</b> the lowest scoring folder and additional folders as necessary (reflecting a spread of marks) to make a total sample of 15
200 - 299	1st and every fifteenth (1, 16, 31, 46 etc.) <b>plus</b> the lowest scoring folder and additional folders as necessary (reflecting a spread of marks) to make a total sample of 25
Over 300	1st and every twentieth (1, 21, 41, 61 etc.) <b>plus</b> the lowest scoring folder and additional folders as necessary (reflecting a spread of marks) to make a total sample of 25

N.B. In addition, the following points should be considered in selecting the sample:

- (i) Each teaching group should be represented.
- (ii) Where there are several candidates on a particular mark these will count towards the total number in calculating the rank order, but normally only one candidate's work on a particular mark will be submitted.
- (iii) Work submitted should where possible meet the full requirements of the specification; i.e. candidates who have not completed the controlled assessment should not be included, but be replaced by that of the nearest candidate (either higher or lower) with a complete controlled assessment.

Where the moderation process reveals serious problems in any centre, with regards to interpretation and/or implementation of the assessment criteria, WJEC will request further work or take other appropriate action to safeguard candidates' interests.

The marks for the sample must be inserted on the appropriate Sample Form and centres must indicate the **total number of candidates entered** at Entry 1, Entry 2 and Entry 3.

#### 6. Submission of candidates' work to the External Moderator

The following should be sent to the External Moderator by May 27th 2011.

- Selected candidates' work (including the candidates' markscheme sheets and supporting evidence).
- Completed sample form (FM1, FM2, FM3).
- All candidates' declaration sheets.

Please note the completed computerised mark sheets ('C' forms) should be completed and returned to WJEC in the official stiffened envelope by **27th May 2011**.

#### 7. Return of Work

Work for this subject will not be returned to centres unless specifically requested, in which case an addressed label should be included in the sample sent for moderation.



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FUNCTIONAL MATHEMATICS ENTRY LEVEL ENTRY 1, 2 AND 3

**CONTROLLED ASSESSMENT** 

**MAY 2011** 

## **CANDIDATE AND TEACHER DECLARATION**

### NOTICE TO CANDIDATE

The work you submit for assessment must be your own. If you copy from someone else, allow another candidate to copy from you, or if you cheat in any other way, you may be disqualified from at least the subject concerned.

### **Declaration by candidate**

I have read and understood the **Notice to Candidate** (above). I have completed this assignment without assistance other than that which my teacher has explained is acceptable within the specification.

### **Declaration by teacher**

I confirm that the candidate's work was conducted under the conditions laid out by the specification. I have authenticated the candidate's work and am satisfied that to the best of my knowledge the work produced is solely that of the candidate.

Centre Number				Date
Teacher's	s Sign	ature		