

INSTRUCTIONS

Fill in all the boxes below. Make sure your personal details are entered correctly. Use **BLOCK LETTERS**.

Your surname or family name

Your first forename (if any)

Your second forename (if any)

Date of birth

Centre name

Centre number

Your OCR candidate number

At the beginning of this booklet you will find tear off Resource Documents. You will need to refer to these documents to complete the tasks.

You will also need:

- a pen with black ink
- a calculator
- a ruler

YOU HAVE 1 HOUR AND 30 MINUTES TO COMPLETE THE THREE TASKS

For each task, make sure that you:

- read the questions carefully before starting
- write your answers in this booklet
- clearly show how your working leads to your answers

2 marks are available in each task when you show you have checked your work.

When you have finished, hand this booklet and all the Resource Documents to the supervisor.

Ofqual Qualification Reference Number: 500/8910/9

FOR EXAMINER USE ONLY		
Question No	Mark	Total
TASK A		
	/	/20
	/	
	/	
	/	
	/	
TASK B		
	/	/20
	/	
	/	
	/	
	/	
TASK C		
	/	/20
	/	
	/	
	/	
	/	
Total	/60	

This document consists of 28 pages. Any blank pages are indicated.

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RESOURCE DOCUMENTS

The Resource Documents on pages 5, 7, 9 and 11 contain information to help you to answer the tasks in this booklet.

- The resource documents are perforated along the left hand side, so they can be removed from the task and answer booklet.
- Your supervisor will instruct you when to remove the resource documents, before you start the assessment.
- Please fold pages 5, 7, 9 and 11 along the perforated strip before removing from the task and answer booklet.

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TASK A – GARDEN TIP**RESOURCE DOCUMENT 1**

Andy's recommended firms.

RON'S RUBBISH

£112.50 per tonne, all in, no other charges at all.

50/50 RUBBISH

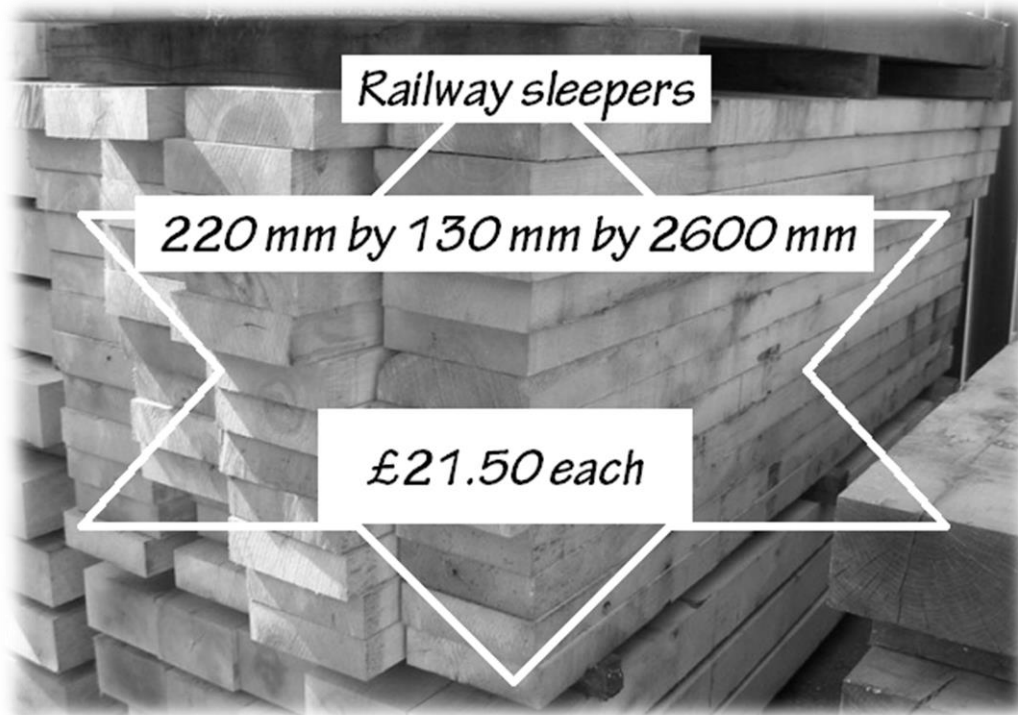
£50 per tonne plus £50 per hour of time.

THE RUBBISH TIPPER LORRY COMPANY

6 cubic metre capacity tipper costs £150 per load with a maximum load of 1½ tonnes.

1½ hours free labour for each load.



Any labour time more than the free time costs £80 per hour



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TASK B – BABIES**RESOURCE DOCUMENT 1**

Rik found this table in an old book on childbirth.

Hour	Number	Number in 6-hourly Period	Number in 12-hourly Period	Total
11pm to 12 Midnight	200		2237	4031
12 Midnight to 1am	138			
1am to 2am	179			
2am to 3am	190			
3am to 4am				
4am to 5am	185			
5am to 6am	197	1127	2237	
6am to 7am	179			
7am to 8am	167			
8am to 9am	189			
9am to 10am	170			
10am to 11am	225			
11am to 12noon	152	891	1794	
12noon to 1pm	152			
1pm to 2pm	136			
2pm to 3pm	149			
3pm to 4pm	153			
4pm to 5pm	149			
5pm to 6pm	142	903	1794	
6pm to 7pm	162			
7pm to 8pm	130			
8pm to 9pm	133			
9pm to 10pm	179			
10pm to 11pm	157			

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TASK B – BABIES

Times of birth, gender and weight of babies born in 24 hours in a large maternity ward 2010.

Time of birth	*Gender	Weight (kg)
00:05	B	3.84
01:04	B	3.33
01:18	G	3.54
01:55	G	3.84
02:57	G	3.63
04:05	B	2.21
04:07	B	1.75
04:22	G	2.85
04:31	G	3.17
07:08	G	3.52
07:35	G	3.38
08:12	G	3.29
08:14	B	2.58
09:09	B	3.21
10:35	G	3.52
10:49	B	3.75
10:53	B	3.52
11:33	G	2.90
12:09	G	2.64
12:56	G	3.92
13:05	G	3.69
14:06	B	3.43

Time of birth	*Gender	Weight (kg)
14:07	B	3.48
14:33	B	3.12
14:46	B	3.43
15:14	G	3.78
16:31	G	3.35
16:57	G	3.03
17:42	B	2.18
18:07	G	3.30
18:25	B	2.38
18:54	G	3.43
19:09	G	4.16
19:47	G	3.63
19:49	G	3.40
19:51	G	3.40
20:10	B	3.50
20:37	G	3.74
20:51	G	3.37
21:04	G	2.12
21:23	G	3.15
22:17	B	3.87
23:27	B	3.54
23:55	B	3.28

*B= boy, G = girl

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TASK C – THE BIRTHDAY CAKE**RESOURCE DOCUMENT 1**

Rich Fruit Cake

	Cake Diameter						
	15cm (6in)	18cm (7in)	20cm (8in)	23cm (9in)	25cm (10in)	28cm (11in)	30cm (12in)
Currants	150g (5oz)	225g (8oz)	350g (12oz)	450g (1lb)	625g (1lb 6oz)	775g (1lb 11oz)	1.2kg (2lb 8oz)
Sultanas	50g (2oz)	90g (3.5oz)	150g (5oz)	200g (7oz)	225g (8oz)	375g (13oz)	400g (14oz)
Raisins	50g (2oz)	90g (3.5oz)	150g (5oz)	200g (7oz)	225g (8oz)	375g (13oz)	400g (14oz)
Glace Cherries (chopped)	40g (1.5oz)	65g (2.5oz)	75g (3oz)	125g (4oz)	150g (5oz)	225g (8oz)	275g (10oz)
Mixed Peel (chopped)	25g (1oz)	50g (2oz)	50g (2oz)	75g (3oz)	125g (4oz)	150g (5oz)	200g (7oz)
Blanched Almonds (chopped)	25g (1oz)	50g (2oz)	50g (2oz)	75g (3oz)	125g (4oz)	150g (5oz)	200g (7oz)
Lemon Rind (grated)	¼ of a lemon	½ a lemon	¾ of a lemon	A whole lemon	A whole lemon	A whole lemon	1½ lemons
Plain Flour	90g (3.5oz)	175g (6oz)	200g (7oz)	350g (12oz)	400g (14oz)	600g (1lb 5oz)	700g (1lb 10oz)
Ground Cinnamon (optional)	2.5ml (Half teaspoon)	2.5ml (Half teaspoon)	5ml (1 teaspoon)	5ml (1 teaspoon)	7.5ml (1.5 teaspoons)	10ml (2 teaspoons)	12.5ml (2.5 teaspoons)
Ground Mixed Spice (optional)	1.5ml (Quarter teaspoon)	1.5ml (Quarter teaspoon)	2.5ml (Half teaspoon)	5ml (1 teaspoon)	5ml (1 teaspoon)	7.5ml (1.5 teaspoons)	7.5ml (1.5 teaspoons)
Butter	75g (3oz)	150g (5oz)	175g (6oz)	275g (10oz)	350g (12oz)	500g (1lb 2oz)	600g (1lb 5oz)
Light Soft Brown Sugar	75g (3oz)	150g (5oz)	175g (6oz)	275g (10oz)	350g (12oz)	500g (1lb 2oz)	600g (1lb 5oz)
Eggs (size 2)	1.5	2.5	3	5	6	9	11
Black Treacle (optional)	5ml (1 teaspoon)	5ml (1 teaspoon)	15ml (1 tablespoon)	15ml (1 tablespoon)	15ml (1 tablespoon)	30ml (2 tablespoons)	30ml (2 tablespoons)
Approx Cooking Time	2 hours	2 hours 30 mins	2 hours 45 mins	3 hours 15 mins	3 hours 45 mins	4 hours 15 mins	5 hours 15 mins
Approx Cooked Weight	625g (1.5lb)	1.25kg (2.5lbs)	1.50kg (3.25lbs)	2kg (4.5lbs)	2.75kg (6lbs)	4kg (9lbs)	5kg (11lbs)

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TASK AND ANSWER PAGES

Do not turn over this page until you are told to do so by your supervisor.

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TASK A – GARDEN TIP**You will need Task A Resource Document 1**

Andy and Paul have moved into a new house.

The builders have left a lot of rubble and bricks to be cleared.

Andy works in the building trade.



What a mess! I reckon there must be
about 5 cubic metres of rubbish to remove.
That will cost us!

Companies which remove rubbish charge by volume or by weight.

A cubic metre of builders' rubbish weighs about 2.2 tonnes.

Q1 (a) (i) About how much will the rubbish in Andy's and Paul's garden weigh?

(2 marks)

At first they plan to bag up the rubbish themselves and take them to the local tip.



They are both reasonably fit.

- (ii) How many bags in total will they need to fill and carry to get rid of all the rubbish?

Jot down any assumptions you make.

(3 marks)

Paul says

I bet I can make a garden bench from railway sleepers to seat two or three people a lot cheaper than £200.



Is Paul right?

- (c) Design **and** cost a garden bench using some railway sleepers. Draw one or two sketches of your design showing the main dimensions.

(8 marks)

Examiner use only (Q1)

Checking (2 marks)

Examiner use only (Checking)

Total marks

Examiner use only (Total)

END OF TASK A

TASK B – BABIES**You will need Task B Resource Document 1**

Rik's friend Carol is expecting a baby.

He looks on the internet for a way to predict if the baby will be a boy or a girl.

He comes across this table. It is supposed to show how the gender of a baby depends on its expected birth month (and the mother's age then.)

Mother's Age	Expected Birth Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
20	Boy	Girl	Girl	Boy	Girl	Boy	Girl	Girl	Boy	Boy	Boy	Boy
21	Girl	Boy	Boy	Girl	Boy	Girl	Boy	Boy	Boy	Boy	Boy	Boy
22	Girl	Girl	Girl	Boy	Girl	Girl	Girl	Girl	Girl	Girl	Girl	Girl
23	Girl	Girl	Girl	Girl	Boy	Boy	Girl	Girl	Girl	Girl	Boy	Girl
24	Boy	Boy	Girl	Boy	Boy	Girl	Boy	Boy	Girl	Boy	Girl	Boy
25	Girl	Girl	Girl	Boy	Girl	Boy	Boy	Girl	Boy	Boy	Girl	Girl
26	Boy	Boy	Boy	Girl	Boy	Boy	Girl	Girl	Boy	Girl	Boy	Boy

On the internet the table extends in a similar way for older and younger women.

Carol's baby is due in May, when she is 20.

Q1 (a) What gender does the table predict the baby will be?

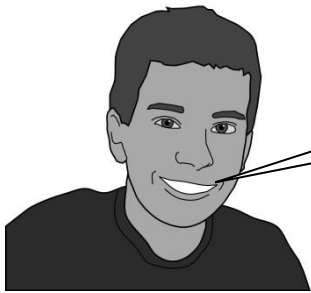
(1 mark)

Look at the row in the table for women who give birth at age 25.

(b) According to the table, what is the probability of a 25 year-old woman giving birth to a boy?

(2 marks)

Rik decides not to use the table.
He becomes interested in other beliefs about babies.



More babies are born at night.

He finds some information about times of birth.

(c) (i) Jot down what the blotted out numbers should be in the table.

(2 marks)

(ii) Use the information in the table to test the claim that:
“Babies have a greater probability of being born at night.”
Show how you used the figures to decide.

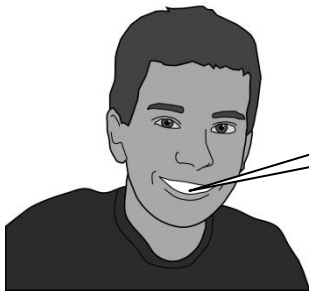
(4 marks)

The table Rik has used is over 50 years old. He finds some more up-to-date information.

- (d)** Does the up-to-date information agree with 1950/51 figures about whether or not babies have a greater probability of being born at night? Support your answer with some evidence.

(4 marks)

(e) Investigate this claim.



Baby boys are heavier than baby girls.

(5 marks)

Examiner use only (Q2)

Checking (2 marks)

Examiner use only (Checking)

Total marks

Examiner use only (Total)

END OF TASK B

TASK C – THE BIRTHDAY CAKE

You will need Task C Resource Document 1

Riley is in his first year at catering college.

He wants to make and ice a 3-tier birthday cake.
It is for his sister Ella's 21st birthday.



Riley's first task is to work out the diameters of the three cakes needed.
He looks back at his cake making notes.

Number of servings depends on diameter of the cake				
Diameter (cm)	15	20	25	30
Servings	15	30	45	60

- Q3 (a) (i)** How many people will a **2-tier** cake with cakes of diameters 15 cm and 20 cm serve?

(1 mark)

- (ii)** Ella expects about 130 people at her 21st.
Riley realises he will need to make a 3-tier cake.

What diameter cakes will Riley need to make?

(2 marks)

Riley decides to make rich fruit cakes.
He will make and ice the cakes at college.

- (b) (i) How much plain flour in total will Riley need to make his three cakes?

(3 marks)

The cake mixture will take about an hour to prepare.
Riley cooks all the cakes together in the same oven.
Each one can be taken out when cooked.
He has to leave the kitchen by 6 pm as the college closes then.

- (ii) Draw up a timetable which Riley can follow for **making** and **cooking** the cakes. Jot down any assumptions Riley might make.
He plans to ice the cakes the next day.

(5 marks)

Each of the cakes is to be iced separately.

Riley found this simple recipe for cake icing on the internet.

Ingredients

600g icing sugar

30g egg white

This recipe is sufficient for a 25 cm diameter cake

Method

He also found this:

Icing a cake to an even thickness can be difficult.

Split the cake icing into two piles.

Make one pile twice the weight of the other.

Spread the lighter pile on the top and the other round the side of the cake.

- (c) According to this rule what weight of icing sugar is needed to ice the top of a 25 cm diameter cake?

(3 marks)

Riley needs to ice all three cakes.

- (d)** Roughly, what weight of each icing ingredient will he need?
Explain how you arrived at your answer.

(4 marks)

Examiner
use only
(Q3)

Checking (2 marks)

Examiner
use only
(Checking)

Q3 (plus checking) marks

Examiner
use only
(Total)

END OF TASK C

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OXFORD CAMBRIDGE AND RSA EXAMINATIONS

LEVEL 2 FUNCTIONAL SKILLS MATHEMATICS

PRACTICE PAPER 5

Mark Scheme

The maximum mark is 60

OCR Level 2 Functional Skills Maths Referencing for Coverage and Range

Our ref	Coverage and Range
N1	understand and use positive and negative numbers of any size in practical contexts
N2	carry out calculations with numbers of any size in practical contexts, to a given number of decimal places
N3	understand, use and calculate ratio and proportion, including problems involving scale
N4	understand and use equivalences between fractions, decimals and percentages
A1	understand and use simple formulae and equations involving one- or two-step operations
G1	recognise and use 2D representations of 3D objects
G2	find area, perimeter and volume of common shapes
G3	use, convert and calculate using metric and, where appropriate, imperial measures
S1	collect and represent discrete and continuous data, using information and communication technology (ICT) where appropriate
S2	use and interpret statistical measures, tables and diagrams, for discrete and continuous data, using information and communication technology (ICT) where appropriate
S3	use statistical methods to investigate situations
S4	use probability to assess the likelihood of an outcome

N – Number
 A – Algebra
 G – Geometry
 S - Statistics

Representing	Our Ref
Understand routine and non-routine problems in familiar and unfamiliar contexts and situations.	R1
Identify the situation or problems and identify the mathematical methods needed to solve them.	R2
Choose from a range of mathematics to find solutions.	R3
Analysing	
Apply a range of mathematics to find solutions.	A1
Use appropriate checking procedures and evaluate their effectiveness at each stage.	A2
Interpreting	
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations.	I1
Draw conclusions and provide mathematical justifications	I2

FS Maths L2 September 2011 Marking Guidance

Task 1 – Garden Tip

Process	Award	On evidence of
Section (a)		
(i) Calculating weight of rubbish [A]	2	1: 11 or 5×2.2 seen 1: tonnes (an independent mark)
(ii) Estimating number of bags of rubble. [B]	3	1: Statement of comfortable load (5 to 60) kg – must have units _____ and _____ 1: $11 \times 1000 = 11000$ kg 1: “11000” \div (“5 to 60 kg”) i.e. follow through on “comfortable load” If clearly working in tonnes the follow through assume the first mark. _____ or _____ 2: 183 to 2200 with working (bags) but 1: without working. Accept double/half the above figures where candidates explicitly mention two men working together carrying a sack. _____ if zero _____ SC1 for explicit statement to the effect “Don’t know but need to know comfortable load.”
Section (b)		
Calculating cost of the different firms [C]	4	Full follow through on “weight of rubbish”. 2: First correct 2: 1 for each subsequent (ie 1 + 1 possible) Ron’s Rubbish (£)1 237.50 (correct answer only ft from (a)i) 50/50 (£) 1 050 (correct answer only ft from (a)i) The Rubbish Tipper (£)1 200 as answer (correct answer only ft from (a)i)
Choosing the cheapest option [D]	1	Statement of the cheapest option from at least two calculated by candidate (not necessarily correct calculations)

Process	Award	On evidence of
Section (c)		
Making an overall plan/costing for the garden bench [E]	3	<p>1: Implied use of (2 to 5) sleepers</p> <p>1: Cost consistent with above ie “number” × £21.50 (£43 / 64.50 / 86 / 107.50 / 129 or follow through from “number of sleepers”)</p> <p>1: Relevant conclusion comparing above with £200 price ie with Paul’s initial statement.</p>
Drawing a sketch of the garden bench [F]	2	<p>2: Sketch(s) broadly consistent with the above with attempt to put in a least one “length” correct units 1: lack of any one “length” shown.</p>
Making and labelling a feasible design [G]	3	<p>Based on dimensions of seating area - possibly embedded in drawing or “written” plan – units may be implied</p> <p>1: Seat depth ≥ 20 cm</p> <p>1: Seat width ≥ 100 cm (upper bound 260 cm)</p> <p>1: Height of seat above ground h, $30 \text{ cm} \leq h \leq 100 \text{ cm}$</p>
Checking [H]	2	<p>2: Clear evidence of a formal checking procedure being carried out at least once (e.g. by reverse calculation or repeating the calculation providing this is clearly a genuine check as opposed to a mere copying exercise).</p> <p>1: Clear recognition and relevant statement at any appropriate point that a particular answer to a calculation is appropriate/expected or inappropriate/not expected _____ or _____</p> <p>Two or more calculations relevant to the task correctly performed, together with the absence of idiosyncratic part answers in the course of the task – these will usually be such that they are clearly at least two orders of magnitude different from the real-life quantity or measure. <i>Possible examples for this task might be benches tens of metres high etc.</i></p> <p>0: No evidence of checking or consideration of reasonableness of answers – including bland statements to the effect that calculations were checked without any convincing relevant evidence.</p>

Task 2 – Babies

Process	Max.	Award ... on evidence of ...	R	A	I
Part (a)					
Using table top predict sex of baby [A]	1	1: Girl /g	R1		
Part (b)					
Using table to count months when boy is predicted [B]	1	1: 5 seen or 12 seen as a denominator	R1		
Calculating probability of 25-year old having a boy [C]	1	1: $\frac{5}{12}$ o.e. isw or 5 in/out of 12 but not odds or 5:12	R2		
Part (c)					
(i) Finding missing numbers [D]	2	1: 1110 seen 1: 218 seen (may have to look for this) Iff total of zero scored award 1 for 892 seen.	R3	A2	
(ii) Investigating claim that greater probability babies being born at night [E]	4	1: Explicit statement of time interval that constitutes night 1: Correct number of births within this period of time (within range of crib sheet) seen 1: Comparing proportion of babies born at night from above (be aware of non-standard approaches, but must be based on a proportional argument) 1: A conclusion consistent with above For comparison condone naive numerical comparison (i.e. comparing number at night with number during day)		A1	I1 I2 I2
Part (d)					
Comparing probabilities of night birth in 1950/1 with that of present time. [F]	4	1: Using same “night time window” for both, must be stated as such 1: Calculating correct number born in this time period (within range of crib sheet) seen – this can also imply the first mark) 1: Calculating proportion born at night at present (as for [E] must be proportion) 1: Consistent comparison made between 1950/1 and present a correct qualitative comparison is acceptable.	R2 R2		I2 I2

Process	Max.	Award ... on evidence of ...	R	A	I									
Part (e)														
Investigating claim that baby boys are heavier than baby girls [G]	5	<p>2: mean or median correctly calculated for boys or 1: attempt to calculate (e.g. “number” ÷ 18 or 56.4 ÷ “number” 1 for ordered list)</p> <p>2: mean or median correctly calculated for girls or 1: attempt to calculate (e.g. “number” ÷ 26 or 87.75 ÷ “number” 1 for ordered list)</p> <p>1: Comparison of above to respond to initial question posed.</p> <table border="1"> <thead> <tr> <th></th> <th>boys</th> <th>girls</th> </tr> </thead> <tbody> <tr> <td>mean</td> <td>3.1(333)</td> <td>3.3(75)</td> </tr> <tr> <td>median</td> <td>3.38</td> <td>3.4</td> </tr> </tbody> </table> <p style="text-align: center;">or</p> <p>If zero scored for mean/median calculation:</p> <p>award 1 for naive totals (b= 56.4 and g: 87.75) and 1 for consistent comparison – allow comparison and working based on one column LHS= 43.89 / 27.62 RHS 43.86 / 28.78 (for both marks)</p> <p style="text-align: center;">or</p> <p>1: Girls heavier than boys made on comparison of correct maximum weights (girls = 4.16 and boys = 3.87) or minimum (girls=2.12 and boys = 1.74),</p> <p>1: comparison, (So using max. or min. and $g > b = 1+1$)</p>		boys	girls	mean	3.1(333)	3.3(75)	median	3.38	3.4	R2 R2	A1 A1	I2
	boys	girls												
mean	3.1(333)	3.3(75)												
median	3.38	3.4												
Evidence of checking [H]	2	<p>2: Clear evidence of a checking procedure being applied</p> <p>1: Any recognition that answers are appropriate/expected or inappropriate/not expected or no obvious errors (3 or more correct calculation or part calculations)</p> <p>0: Obvious incorrect answers or no evidence of checking or considering appropriateness of answer</p>		A2 A2										
			SR=5	8R	6A	6I								

Task 3 – The Birthday Cake

Process	Max.	Award ... on evidence of ...	R	A	1
Part (a)					
(i) Working out number of people served by 15 cm and 20 cm diameter cakes. [A]	1	1: 45 (people)	R2		
(ii) Finding the diameter of cakes in 3-tier arrangement to serve about 130. [B]	2	2: 20 (cm) 25 (cm) and 30 (cm) or 30 / 30 / 15 or 1: 25/25/20 or 15/25/30 or 30+45+60	R2		I1
Part (b)					
(i) Finding amount of flour need for cakes in (ii). [C]	3	3: 1300g / 1.3 kg / 2lb 15oz / 47oz (i.e. units needed) allow follow through from (ii) or 2: 1300 / 1.3 / 37 allow follow through from (ii) or 1: Any two of these numbers seen: 200 400 700	R2	A1	I1
(ii) Constructing timetable for preparation of ingredients and cooking all three cakes. [D]	5	Full follow through from (a)(ii). Accept timeline or itemised list essentially 1 for each activity in the list of 4 below, , but 2 for the first correct. Allow all time formats and all reasonable embellishments such “time to warm oven”, “walk to entrance” etc. providing cooking times correct. Preparation: 11:45 (or 9:45, ambiguity in prep. time) to 12:45 20 cm cake in at 12:45 out at 3:30 25 cm cake in at 12:45 out at 4:30 30 cm cake in at 12:45 out at 6:00 Allow with full credit finishing times back to about 2 pm based on the above. Mark in spirit of above the situation where cakes finish together:	R2 R3	A1	I1 I1

Process	Max.	Award ... on evidence of ...	R	A	1
		Prep. 1 or 3 hours (beginning 11:45 or 9:45) seen or implied by timetable then: 30 cm cake in at 12:45 out at 6pm 25 cm cake in at 2:15 out at 6 pm 20 cm cake in at 3:15 out at 6 pm _____ or _____ 1: Explicitly stated or implied prep. time of 1 hour or 3 hours 1: Three sets of timings (not necessarily correct) imply a ranking in cooking times of 30cm / 25cm / 20cm 1: At least one correct cooking time stated or implied from timetable (2 $\frac{3}{4}$, 3 $\frac{3}{4}$, 5 $\frac{1}{4}$ hours for 20/25/30 cakes)			
Part (c)					
Finding weight of icing sugar needed for top of 25 cm cake. [E]	3	3: 200 (g) or 2: 600 [\div 3] [\times 2] 1 for each operation Allow calculation and answers based on "icing sugar + egg white" i.e. 210 g / 420 g / 630 / 630 \div 3	R2	A1 A1	
Part (d)					
Calculating ingredients needed to make icing sugar for all three cakes. [F]	4	2: Specific mention that the 25 cm is the "in-between" sized cake or similar or argument based on possibly naive proportionality or 1: 3 x 25 cm cake clearly used with no reason given or unclear/wrong scaling method but correct rank order for the three chosen cake sizes. 1: 1800 g to 2 kg of icing sugar 1: 90 to 95 g of egg white	R2	A1	I1 I2
Checking [G]	2	2: Clear evidence of a checking procedure being applied 1: Any recognition that answers are appropriate/expected or inappropriate/not expected or no obvious errors (3 or more correct calculation or part calculations) 0: Obvious incorrect answers or no evidence of checking or considering appropriateness of answer		A1	A1
		SR=6	7 R	7 A	6 I