


Write your name here	
Surname	Other names
Edexcel Functional Skills	Centre Number
	Candidate Number
Mathematics	
Level 1	
	
Wednesday 10 March 2010 Time: 1 hour 15 minutes	Paper Reference FM101/01
You must have: Ruler graduated in centimetres and millimetres, protractor, pen, HB pencil, eraser, calculator.	Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 48.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- **Calculators may be used.**

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

H37603A

©2010 Edexcel Limited.
6/6/3



Turn over ►

edexcel 
advancing learning, changing lives

TASK 1: HEALTH AND FITNESS

Answer all questions in this task.

Write your answers in the spaces provided.



Where you see this sign you must show clearly how you get your answers as marks may be awarded for your working out.

1 Rachel is giving up smoking.

She has some information from the Health and Social Care Information Centre. The information was collected from Secondary School pupils in the UK.

Some of their beliefs about smoking are shown in the table.

Beliefs about Smoking, by age

	Age				
	11 years	12 years	13 years	14 years	15 years
	Percentage who thought statement true				
Smoking causes lung cancer	98	98	99	99	98
Smoking makes clothes smell	94	96	98	98	98
Smoking can cause heart disease	95	95	94	91	93
Smoking makes people worse at sports	82	82	83	85	85
Smoking helps people relax when nervous	49	57	69	75	79
Smokers stay slimmer than non-smokers	19	22	22	25	27
Smoking gives people self-confidence	14	17	21	24	27



a) Do all 15 year olds believe smoking causes lung cancer?
Give a reason for your answer.

Use the box below to show clearly how you get your answer.

(2)



b) Are older pupils **more likely** than younger pupils to believe smoking gives people self-confidence? Give a reason for your answer.

Use the box below to show clearly how you get your answer.

(2)



(Total for Question 1 = 4 marks)



2 Rachel made a list of everything she ate and drank last Friday.

This information is shown below.

	Calories	Tally
Breakfast		
Cornflakes with milk	208	
Toast	88	
Butter	50	
Lunch		
Sandwich	275	
Salad	95	
Dinner		
Curry with rice	500	
Vegetables	50	
Ice cream and strawberries	190	
Drinks and Sugar		
Cup of coffee with milk	16	
Cup of tea with milk	16	
Sugar (1 spoonful)	15	
Cola	150	
Water	0	
Snacks		
Bag of crisps	150	
Chocolate biscuit	40	



a) Work out the number of calories Rachel had last Friday.

Use the box below to show clearly how you get your answer.

(4)



Large empty box for showing the calculation.



H 3 7 6 0 3 A 0 5 2 4

Healthy Magazine says that for her weight and age, Rachel needs between 1850 and 1900 calories per day. It also says that she should eat breakfast, lunch and dinner and have some drinks.

b) How could Rachel have changed what she ate and drank last Friday?

Use the box below to show clearly how you get your answer.

(4)



(Total for Question 2 = 8 marks)



BLANK PAGE



7
Turn over ▶

3 Rachel wants to train for a triathlon.

Her weekly training programme will include cycling, swimming and running.
Rachel has been told that each week she should swim 8 km.
She should cycle each week for 75 km.
She should run each week for 24 km.

Rachel estimates that during training she will run 1 km in 5 minutes.
She will cycle 1 km in 2 minutes.
She will swim 1 length (25 m) of her local pool in 30 seconds.

The calories used for each activity are given below.

Calories used per hour	
Running	500
Cycling	300
Swimming	600

Estimate how many calories are used in Rachel's weekly training programme.

Use the box below to show clearly how you get your answer.



Use the box below to show clearly how you get your answer.



A large, empty rectangular box intended for the student to show their work and answer the question.

(Total for Question 3 = 7 marks)



H 3 7 6 0 3 A 0 9 2 4

BLANK PAGE



TASK 2: PET FOOD

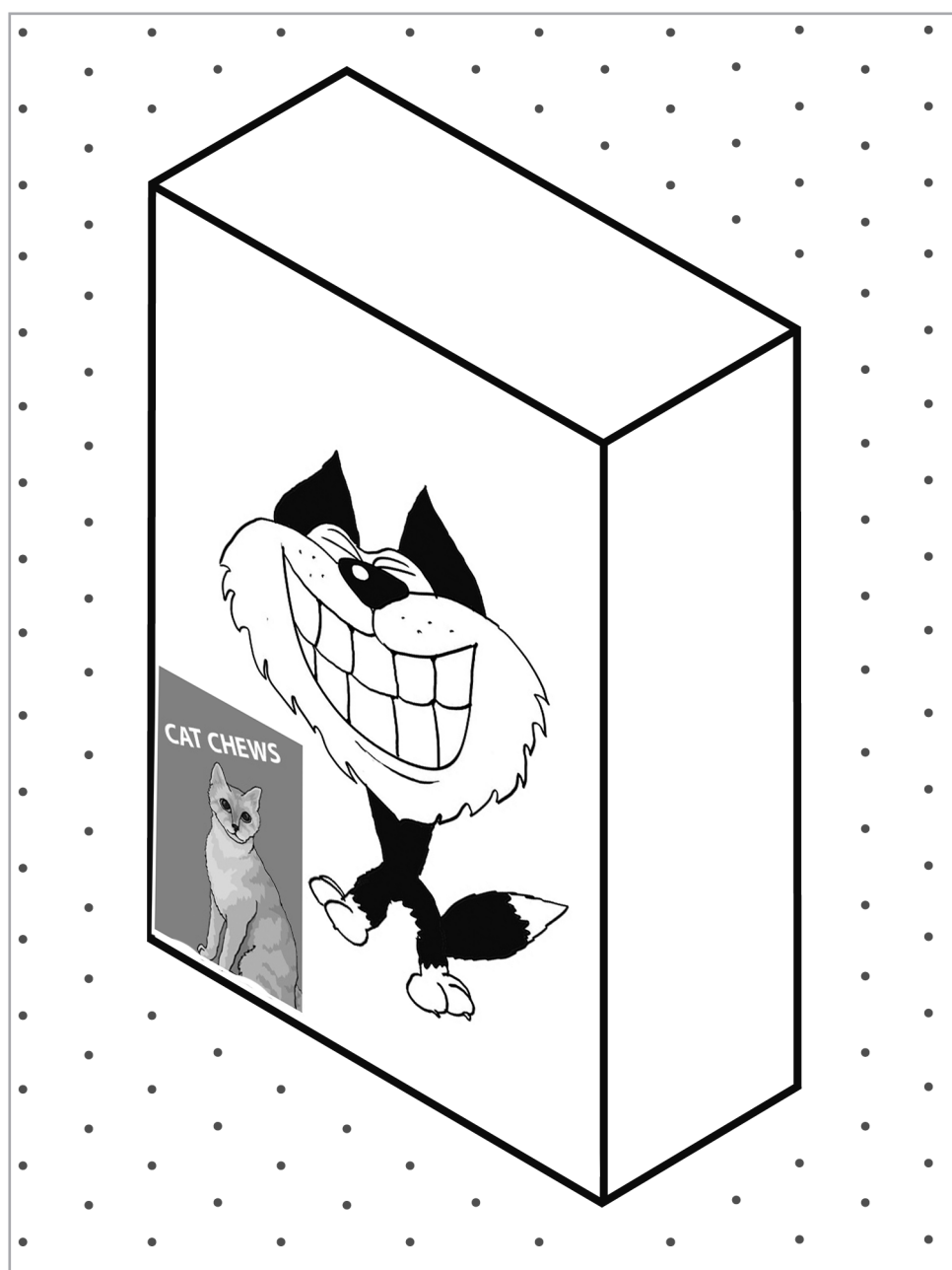
Answer all questions in this task.

Write your answers in the spaces provided.



Where you see this sign you must show clearly how you get your answers as marks may be awarded for your working out.

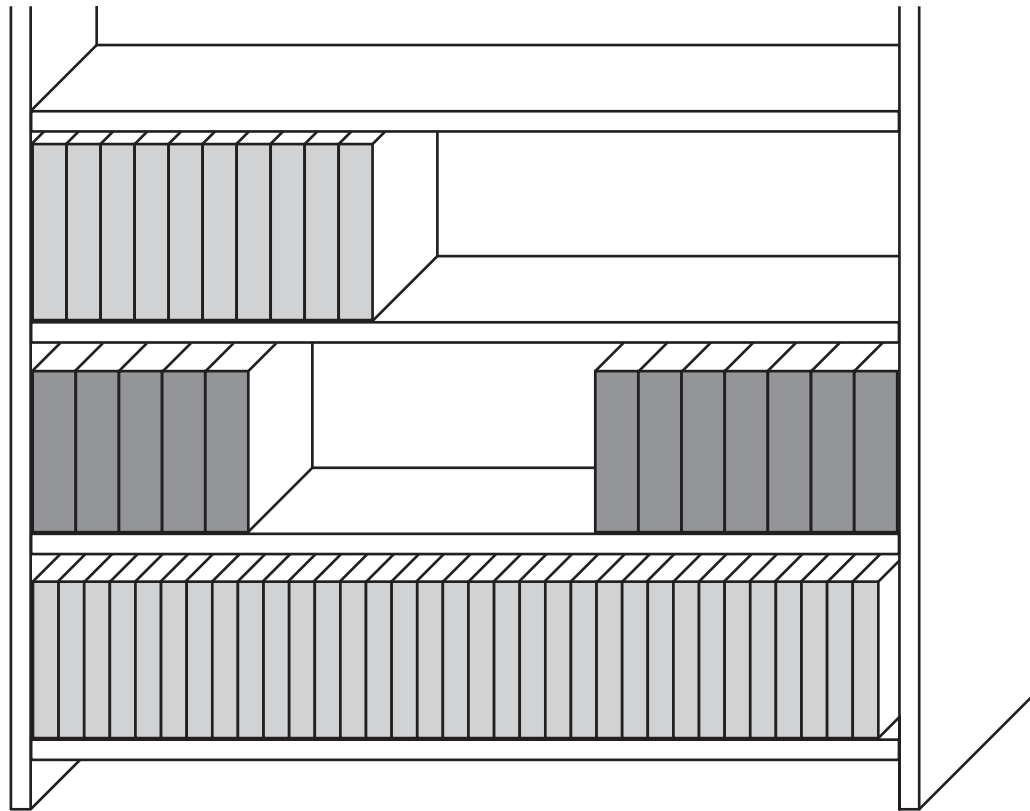
- 4 A supermarket sells boxes of Cat Chews.
The diagram shows the actual size of the box.



The supermarket is going to make a display of 100 boxes of Cat Chews.

The maximum width of the space for the display is 130 cm.

The diagram shows an example of what a display might look like.



Design a display for these 100 boxes.

Use the space below to show clearly how you get your answer.



A large empty rectangular box for drawing or writing.

(Total for Question 4 = 6 marks)



5 The usual price for a box of Cat Chews is **£1.24**

This week there is a special offer.

Special offer: This week only

**2 for
£1.75
£1.18 each**

Modupe buys **three boxes** of Cat Chews each week.

a) How much does Modupe save in the special offer week?

Use the box below to show clearly how you get your answer.

(3)



During the special offer week, Winston has **£10** to spend on Cat Chews.

b) What is the greatest number of boxes of Cat Chews Winston can buy?

Use the box below to show clearly how you get your answer.

(3)



(Total for Question 5 = 6 marks)



6 Modupe looks at the prices of other types of cat food.

Modupe's cat is called Stripes.
Stripes weighs **6 kg**.

TINNED CAT FOOD

10 cans cost £1.80

Recommended daily use for cat weight 5 – 7 kg

2 cans per day

COMPLETE CAT FOOD

Pack Weight	Price
500 g	£2.36
1 kg	£4.55
2 kg	£8.00
4 kg	£15.00

Recommended daily use

Cat Weight in kg	Grams per day
4	55 g
5	65 g
6	80 g
7	95 g



Work out what Modupe should buy to get the best value for money.

Use the box below to show clearly how you get your answer.



A large empty rectangular box for writing the answer.

(Total for Question 6 = 6 marks)



H 3 7 6 0 3 A 0 1 7 2 4

TASK 3: DECORATING

Answer all questions in this task.

Write your answers in the spaces provided.



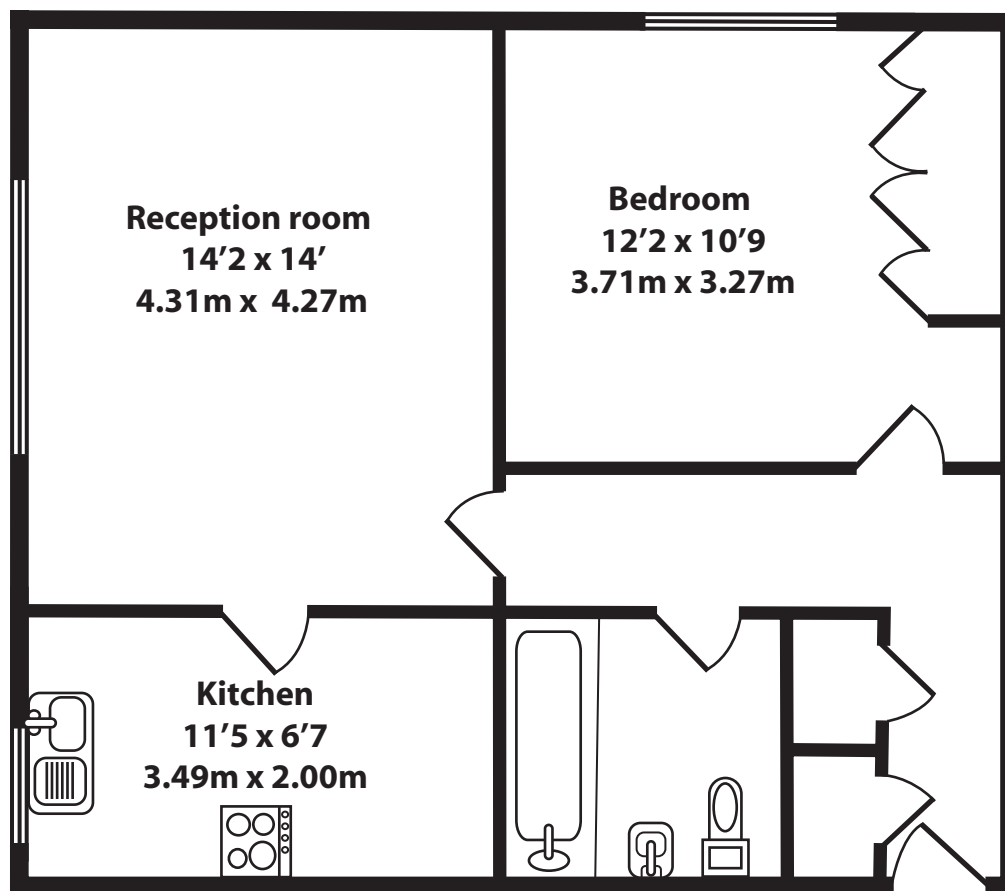
Where you see this sign you must show clearly how you get your answers as marks may be awarded for your working out.

- 7 Alisha has a flat. She is going to wallpaper the walls of her reception room.

The reception room is rectangular.

The length and width of rooms are shown on the floor plan.

PLAN OF THE FLAT



This table is used to find the number of rolls of wallpaper needed for a room.

		Distance around room										
Metres	→	6.7	7.9	9.1	10.4	11.6	12.8	14	15.2	16.5	17.7	18.9
↓	Feet	22	26	30	34	38	42	46	50	54	58	62
Height of walls		Number of rolls needed										
2.15–2.30	7–7.5	3	4	4	5	5	6	6	7	7	8	8
2.30–2.45	7.5–8.0	4	4	5	5	6	6	7	7	8	8	9
2.45–2.60	8.0–8.5	4	4	5	5	6	7	7	8	8	9	9
2.60–2.75	8.5–9.0	4	4	5	5	6	7	7	8	8	9	9
2.75–2.90	9.0–9.5	5	5	6	6	7	7	8	9	9	10	10
2.90–3.05	9.5–10.0	5	5	6	6	7	8	8	9	10	10	11
3.05–3.20	10.0–10.5	5	6	6	7	8	8	9	10	11	11	12

The walls in Alisha's flat are **2.7 m** high.

How many rolls of wallpaper will she need for the reception room?



Use the box below to show clearly how you get your answer.



(Total for Question 7 = 5 marks)



BLANK PAGE



H 3 7 6 0 3 A 0 2 1 2 4

- 8 Alisha wants to cover part of her bathroom wall with tiles.
She needs 100 tiles.
She wants to use only one colour.

Alisha budgets **£30** for the tiles.
She needs to choose the colour of the tiles.

Colour of tile	Cost Each	Cost per pack (44 tiles)
Terracotta	£0.34	£14.88
Victorian Blue	£0.32	£13.52
Raspberry	£0.31	£13.08

Decide which tiles are within Alisha's budget.

Use the box below to show clearly how you get your answer.



Use the box below to show clearly how you get your answer.



A large empty rectangular box for writing the answer.

(Total for Question 8 = 6 marks)

TOTAL FOR PAPER = 48 MARKS



BLANK PAGE

