

Name

Class

MATHS TEACHER HUB

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Recipes

(9 – 1) Topic booklet

These questions have been collated from previous years GCSE Mathematics papers.

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser.

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.*
- Diagrams are NOT accurately drawn, unless otherwise indicated.
- You must **show all your working out.**
- If the question is a **1F** question you are not allowed to use a calculator.
- If the question is a **2F** or a **3F** question, you may use a calculator to help you answer.

Information

- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

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.

Answer ALL questions
Write your answers in the space provided.
You must write down all the stages in your working.

15 Here is a list of ingredients for making chocolate mousse for 2 people.

<p>Chocolate mousse for 2 people</p> <p>40 grams sugar 110 grams dark chocolate 2 eggs $\frac{1}{4}$ teaspoon lemon juice</p>

Ellie has 250 grams of sugar and 550 grams of dark chocolate.
She assumes that she has plenty of lemon juice and plenty of eggs.

- (a) What is the greatest number of people Ellie can make chocolate mousse for?
You must justify your answer.

(3)

Ellie only has 6 eggs.

- (b) What effect would this have on the greatest number of people Ellie can make chocolate mousse for?

(1)

17 Heidi wants to make some biscuits using this recipe.

Makes 12 biscuits
125 g butter
200 g flour
50 g sugar

Heidi thinks that she has,

500 g butter
700 g flour
250 g sugar

Assuming that these weights are correct,

- (a) work out the greatest number of biscuits Heidi can make.
You must show all your working.

.....
(4)

Heidi is wrong.

She has more than 250 g of sugar.

- (b) Does this affect the greatest number of biscuits Heidi can make?
Give a reason for your answer.

.....
.....
.....
(1)

17 Here is the list of ingredients for making 30 biscuits.

Ingredients for 30 biscuits

225 g butter
110 g caster sugar
275 g plain flour
75 g chocolate chips

Lucas has the following ingredients.

900 g butter
1000 g caster sugar
1000 g plain flour
225 g chocolate chips

What is the greatest number of biscuits Lucas can make?
You must show your working.

18 Here is a list of ingredients for making 10 scones.

Ingredients for 10 scones

75 g	butter
350 g	self-raising flour
40 g	sugar
150 ml	milk
2	eggs

Mia wants to make 25 scones.

Work out how much sugar she needs.

18 Here is a list of ingredients for making 16 mince pies.

Ingredients for 16 mince pies

240 g of butter
350 g of flour
100 g of sugar
280 g of mincemeat

Elaine wants to make 72 mince pies.

How much of each ingredient will Elaine need?

butter g

flour g

sugar g

mincemeat g

19 Here are the ingredients needed to make 16 biscuits.

Biscuits

Ingredients to make **16** biscuits

175 g of butter

75 g of sugar

250 g of flour

Anna has

500 g of butter

300 g of sugar

625 g of flour

Work out the greatest number of biscuits Anna can make.

19 Here is a list of ingredients for making 16 flapjacks.

Ingredients for 16 flapjacks

120 g butter
140 g brown sugar
250 g oats
2 tablespoons syrup

Jenny wants to make 24 flapjacks.

Work out how much of each of the ingredients she needs.

butter g

brown sugar g

oats g

syrup tablespoons

19 Jane made some almond biscuits which she sold at a fete.

She had:

5 kg of flour

3 kg of butter

2.5 kg of icing sugar

320 g of almonds

Here is the list of ingredients for making 24 almond biscuits.

Ingredients for 24 almond biscuits

150 g flour

100 g butter

75 g icing sugar

10 g almonds

Jane made as many almond biscuits as she could, using the ingredients she had.

Work out how many almond biscuits she made.

20 Here is a list of ingredients for making 10 scones.

Ingredients for 10 scones

80 g butter
350 g self-raising flour
30 g sugar
2 eggs

Martin has

100 g butter
1 kg self-raising flour
50 g sugar
4 eggs

Martin wants to make 25 scones.

He has not got enough of some of the ingredients.

Work out how much more of each of these ingredients he needs.

23 Deon needs 50 g of sugar to make 15 biscuits.

She also needs

three times as much flour as sugar

two times as much butter as sugar

Deon is going to make 60 biscuits.

(a) Work out the amount of flour she needs.

.....
(3)

Deon has to buy all the butter she needs to make 60 biscuits.

She buys the butter in 250 g packs.

(b) How many packs of butter does Deon need to buy?

.....
(2)