

BGE Course: Health & Food Technology

Level 2/3

Numeracy Skills



Name: _____

Class: _____

Teacher: _____

Learning intentions:

We are learning how to apply our numeracy skills to solve a range of problems.

Success criteria:

I can accurately weigh and measure a range of ingredients.

I can select the correct equipment to weigh and measure accurately.

Time:

I can use and interpret electronic and paper-based timetables and schedules to plan events and activities, and make time calculations as part of my planning. MNU 2-10a

Measurement:

I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems. MNU 2-11b

I can read a variety of scales on measuring devices including those with simple fractions.



Numeracy skills:

What numeracy skills do we use in Health & Food Technology?



Using numeracy skills to help us plan and prepare recipes.....

When carrying out practical activities you have to use certain amounts of ingredients to complete the task. To do this you must be able to weigh & measure.

Types of ingredients	Examples of ingredients.....
<p>Solid ingredients: We weigh solids to find out how heavy they are.</p> 	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p>
<p>Liquid ingredients: We measure liquids to find out the volume or space it takes up.</p> 	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p>

To save space when writing recipes and instructions abbreviations of weights and measure are used. Against the abbreviation below write in the full name.

g _____

kg _____

ml _____

l _____

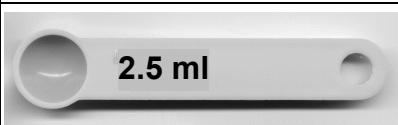

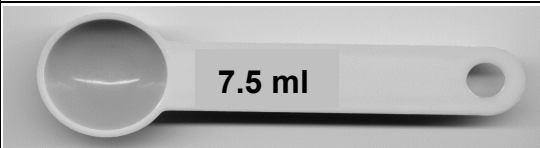



These measurements Weight



These measurements express Volume

Numeracy activity: Measuring small quantities

Types of ingredients	Examples of ingredients.....
	How many 2.5 ml spoons are needed to make 10 ml?
	How many 5 ml spoons are needed to make 15 ml?
	How many 7.5 ml spoons are needed to make 30 ml?
	How many 15 ml spoons are needed to make 75 ml?

Change the following units to kg....

3000g _____

1500g _____

2800g _____

1200g _____



Change the following units to litres.....

1300ml _____

2700ml _____

3000ml _____

5500ml _____



Handy measures

3. Handy measures for blocks of margarine: the total weight for the block of margarine is 250g.

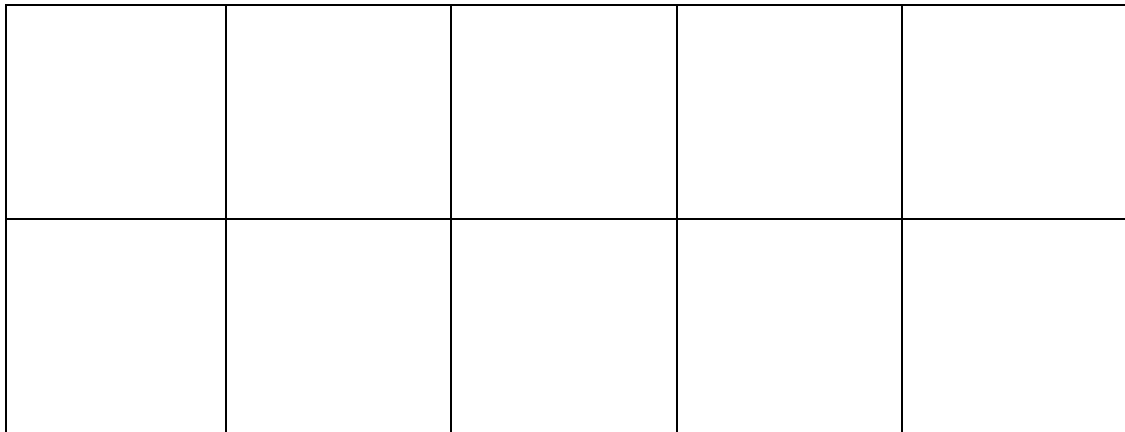
a. On the diagram of a block of margarine shown below, shade in 150g.

b. How many blocks of margarine would you cut off if you needed:

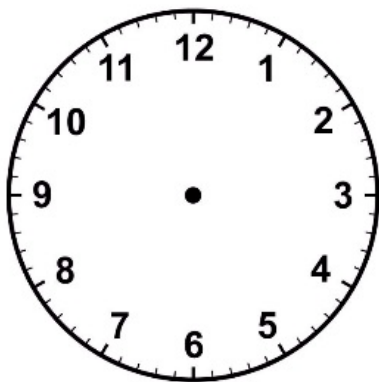
50g _____

200g _____

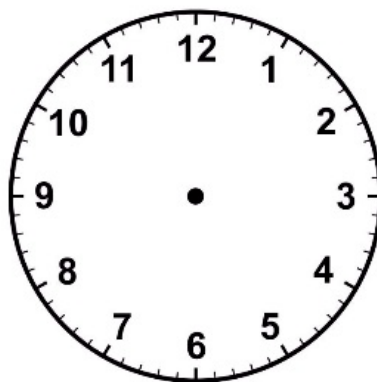
12.5g _____



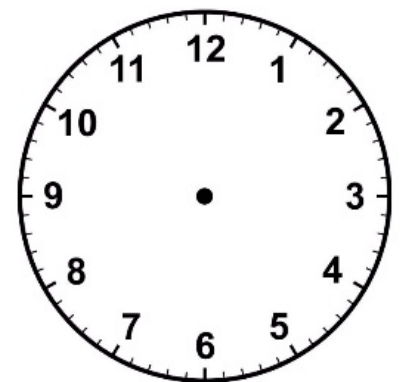
Time management:



Chocolate brownies take 25 minutes to cook. They were placed in the oven at 1300. Indicate the time that they were removed from the oven.



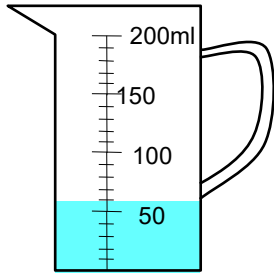
Rice takes 12 minutes to cook. The rice was added to boiling water at 1015. Indicate when the rice will be ready to be drained.



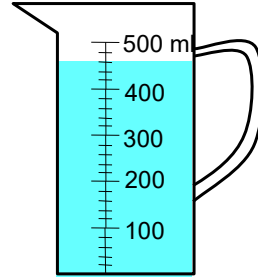
Lunch service starts at 1245. It takes 50 minutes to serve all the customers. Indicate the time that lunch service finishes.

What volume is shown on each jug?

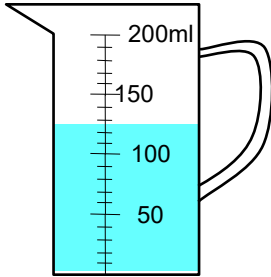
ml



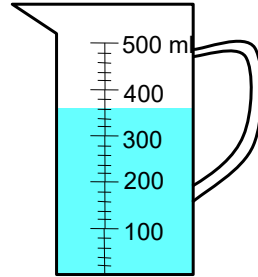
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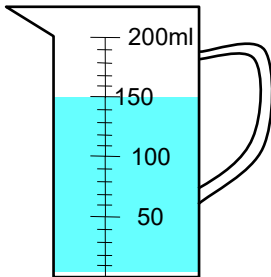
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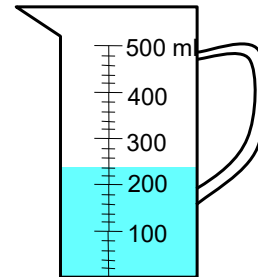
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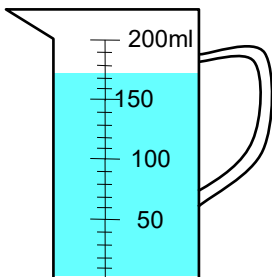
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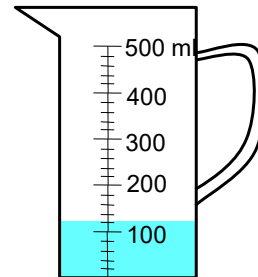
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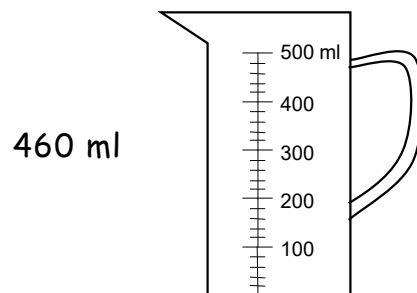
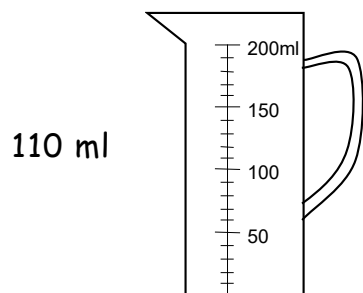
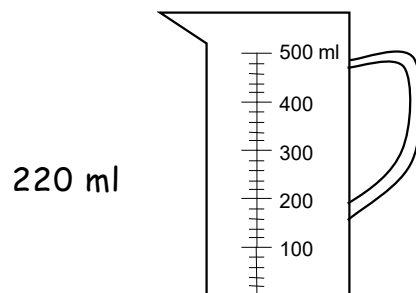
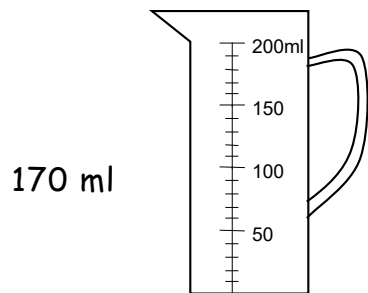
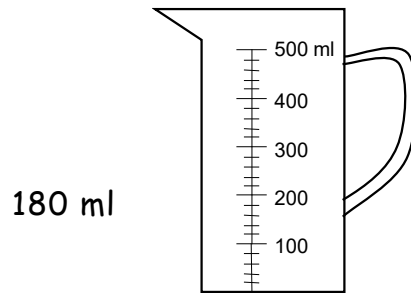
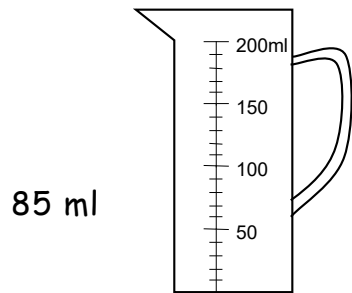
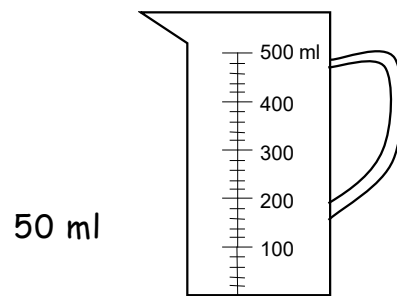
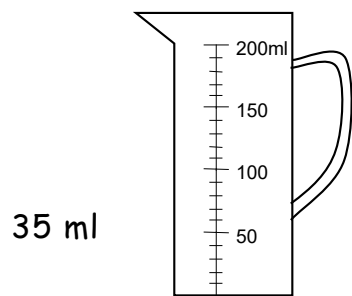
ml



ml



Mark the volume on each jug.



1. The temperature of the freezer was at -18°C . A member of staff has noticed that the power to the freezer has been switched off. It has rose by 20°C .

What is the new temperature of the freezer? _____

2. Describe the impact this would this have on the food inside the freezer?

3. A cake decorating company is offering 20% off all orders placed before September.
How much money would you save on the following order?

- Customer A: £5.00
- Customer B: £12.00
- Customer C: £25.00



4. A bakery is offering wedding cakes with a discount of 10%, 20% and 50% depending on size. How much do you save?

Wedding cake size	Discount	Saving
18 portion at £30.00	10%	
40 portion at £80.00	20%	
150 portion at £250	50%	



5. To keep up with demand for the wedding cakes the bakery is taking a stock take of all the ingredients remaining. Calculate the quantity of ingredients in the bakery.

	Quantity remaining
2/3 of 18kg of flour	
1/4 of 12kg of butter	
2/5 of 500g of baking powder	
1/8 of 80kg of caster sugar	

6. The first order for a wedding cake has been taken. The cake is placed in the oven at 1206 and is ready at 1514.

How long did the cake take to cook? _____

7. The bakery bought all the ingredients for the wedding cakes for £350. The combined sold price for all the wedding cake orders was £1250.

How much profit did the bakery make? _____

8. Weighing and measuring accurately is important. You can only get good results if the instructions are followed and the correct weights and measures are used.

Thinking about the different functions of measuring equipment, fill in the table below to provide different examples of ingredients that you may have to weigh or measure in Home Economics or outside of school.

Measuring Equipment	Items you will have to weigh / measure		
1. Scales	1.	2.	3.
	4.	5.	6.
2. Measuring jugs	1.	2.	3.
3. Measuring spoons	1.	2.	3.
	4.	5.	