S2 skills homework – October – Percentages

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1. To Calculate a percentage first work out the fraction
2. Then multiply the fraction by 100

OR

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1. To calculate a figure from a percentage write the percentage as a fraction of 100
2. Then multiply this fraction by the total number

Write down the following as a percentage

1. 24 out of 48
2. 6 out of 24
3. 5 out of 40
4. 10 out of 1000
5. 19 out of 20

Calculate the following values

6. 20% of 40
7. 1% of 150
8. 15% of 300
9. 25% of 4
10. 50% of 36

11. The table below contains the nutritional information for a can of beans. Copy and complete the table with the missing percentage weights

	Mass in food (g)	Percentage Mass
Carbohydrate	37.5	
Fat	15	
Protein	7.5	
Water	90	
TOTAL	150	

12. A chemistry pupil is studying the reaction between marble chips and Hydrochloric. Each of the chips has a mass of 65g before the starting the experiment.
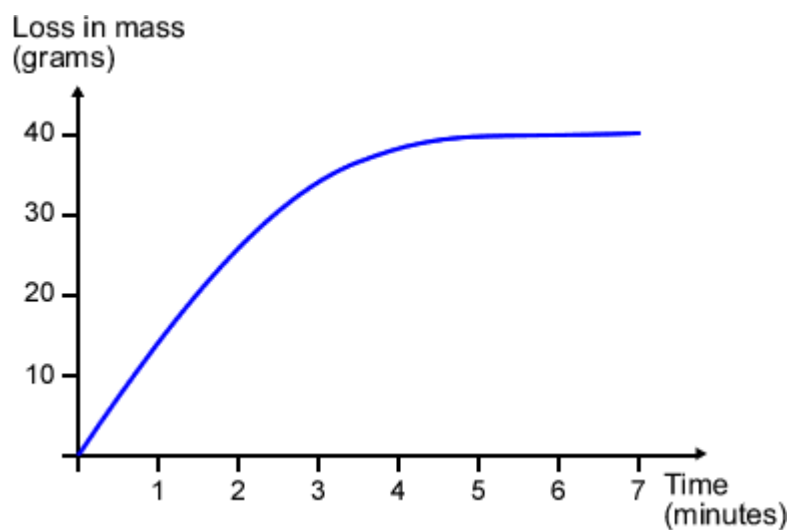

a. How long did it take for the reaction to stop?
b. What was the mass of the chip after 2 minutes?
c. What percentage of the chip was remaining after the reaction had finished?

13. The waste from a local food processing factory is shown in the table below.
    Copy and complete the table with the missing values of mass

	Mass in waste (kg)	Percentage Mass
Potato peelings		2
Fruit pulp		5
Milk whey		25
Paper		45
Sewage		18
Micro – organisms		5
TOTAL	500	

14. Oatmeal and Wheatmeal are two cereal products. The pie chart below gives information about compounds found in **Oatmeal**
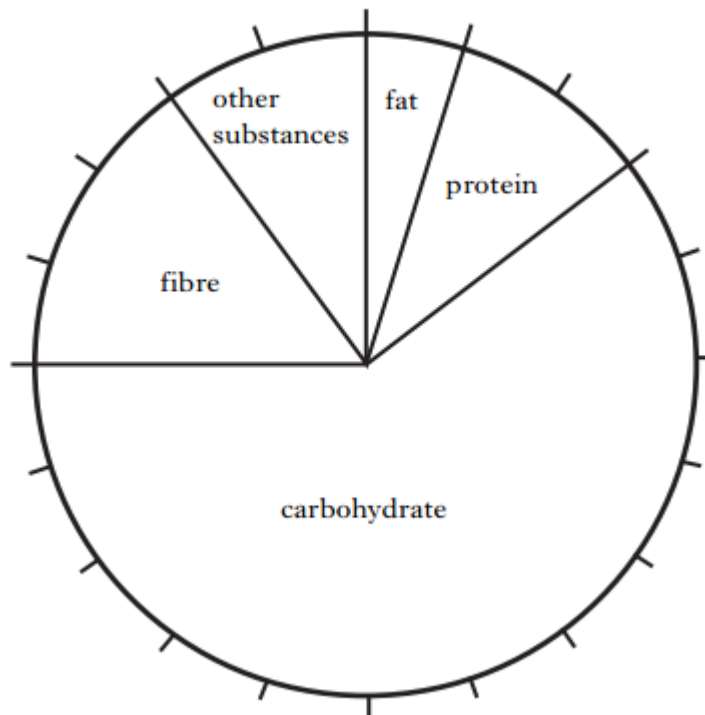
Wheatmeal contains **less fibre** and **more protein** than **oatmeal**. The proportions of all the other components are the **same**.

a. Use all the information provided to copy and complete the following table.

	Component (%)				
	Protein	*Carbohydrate*	*Fat*	*Fibre*	*Other substances*
Oatmeal			5		10
Wheatmeal	15			10	10

b. Calculate the mass of **protein** present in an 80g portion of **Wheatmeal**