Ratio and Proportion (H)

Pre-Intervention Assessment

Name: _____

Class: _____

Date: _____

Question	Objective	RAG
1	Calculate the best value product	
2	Calculate with recipes	
3	Calculate with exchange rates	
4	Calculate with direct and inverse proportion	

1. Carrots cost £1 for a 1.2 kg bag at Tesco.
The same type of carrots cost 77 pence for a 700 g bag at ASDA.
Where are the Carrots better value? You must show your working.

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2. Here are the ingredients needed to make 16 gingerbread men.

Ingredients to make 16 gingerbread men
180g flour 40g ginger 110g butter 30g sugar

Hamish wants to make 24 gingerbread men.
Work out how much of each of the ingredients he needs.

……………… g flour

……………… g ginger

……………… g butter

……………… g sugar

3. Stephen imports cars from the USA. He sells them in the UK.
He has just bought a car in the USA costing $24 000. It cost him £900 to import the car to the UK.
The exchange rate is £1 = $1.45
Stephen needs to make a profit of 20% on his total costs.
Work out the least amount that Stephen must sell the car for in the UK. Give your answer in pounds.

£ ……………………

4. In a factory, chemical reactions are carried out in spherical containers.
The time, T minutes, the chemical reaction takes is directly proportional to the square of the radius, R cm, of the spherical container.
When R = 120, T = 32
Find the value of T when R = 150

T = ………………………………………………

[Glue here]