



Lesson Plan for Academic Year 2008 – 2009

Programme and year: LBS Animal Care	Programme Module/Unit: Adult Skills Numeracy L1	Lesson Title: Ratio and Proportion		
Date: 12 th Jan 09	Start time: 1.30pm	Finish time: 3.00pm		
Aims of lesson: Students will use ratio and proportion in everyday situations				
Learning outcomes (By the end of the lesson the learner will be able to): <ol style="list-style-type: none"> 1. All students will write a ratio as a fraction 2. Most students will reduce a ratio to its simplest form 3. Most students will divide a quantity into two or more parts in a given ratio 4. Most students will use direct proportion in increasing ingredients in a recipe 5. Most students will solve worded problems using ratio 				
Pre-lesson notes (impacting on the choice of material, teaching methods, allocated tasks etc):				
Time	Teaching activities*	Learner activities	Resources	Assessment
10 mins	<ul style="list-style-type: none"> Recap on previous lesson Explain objectives Discuss Ratio and Proportion and give examples of where it would be used 	Q and A Discussion	Interactive whiteboard	Q and A
20 mins	<ul style="list-style-type: none"> Show students how a ratio is written(3:1) and $\frac{3}{4}$ and $\frac{1}{4}$ there are 4 parts Ask students what the ratio between boys and girls in the class is Show students how to simplify a ratio (Ask if there were 25 students in a class could the ratio of boys to girls be 3:2 explain) Explain the importance of placing a ratio in the correct order Demonstrate to students how to divide a quantity into 2 or more parts of a ratio Ask students to complete the Spider Ratio 	Q and A Students complete the spider ratio	Interactive whiteboard Spider Ratio (see page 3 or use the blank on page 4 to create your own)	Q and A Observation Outcomes 1, 2 and 3
20 mins	<ul style="list-style-type: none"> Explain Direct Proportion Give examples Divide students into groups and ask them calculate the ingredient in a recipe 	Q and A Discussion Students will amend a recipe to cater for more people	Interactive whiteboard Recipe (see links on page 2)	Q and A Observation Outcomes 4

10 mins	<ul style="list-style-type: none"> Show students some examples of wordy problems Work through 2 questions as a group 	Students to give answers verbally	Interactive whiteboard (see links on page 2)	Q and A Observation Outcomes 5
20 mins	<ul style="list-style-type: none"> Ask students to complete a worksheet containing mixed ratio and proportion problems Mark as a group and discuss results 	Students to complete a worksheet to assess outcomes Students to discuss answers with peers	Worksheet (see links on page 2)	Observation Outcomes 1, 2, 3, 4, and 5
10 mins	<ul style="list-style-type: none"> Bring lesson to an end. Discuss with students what they feel they have learnt. Ask students to leave the classroom tidy Sign EMA's 	Q and A Discussion Students tidy the room	Interactive whiteboard	Q and A

<i>*Teaching methods used (please tick) ✓</i>		<i>*Learner activities (please tick) ✓</i>	
<i>Class discussion</i>	<i>Lecture/Verbal</i>	<i>Class/group/pairwork ✓</i>	<i>Visits</i>
<i>Demonstration</i>	<i>Tutorial</i>	<i>Role play</i>	<i>Research</i>
<i>Question and answer ✓</i>	<i>Individual support</i>	<i>Practical</i>	<i>Simulation</i>
<i>Video/film</i>	<i>Assessing ✓</i>	<i>Notetaking</i>	<i>Presentation ✓</i>
<i>Other (please specify)</i>		<i>Project work</i>	<i>Using computers</i>
		<i>Supported self study ✓</i>	<i>Show and tell ✓</i>
		<i>Other (please specify)</i>	
Adult Skills addressed: N1/L1.7 Work out simple ratio and direct proportion (a) understand simple ratio as the number of parts i.e. three parts to one part (b) understand direct proportion as the same rate of increase or decrease, e.g. double, half (c) understand the relationship between simple ratio and fractions Functional Maths L1 Solve simple problems involving ratio, where one number is a multiple of the other		Differentiation by task, outcome or assessment: Student 1 will need encouraging and will need extra help. Student 2 is a more able student and will support Student 1 Student 3 is a capable student but needs additional time when completing tasks. I will highlight key questions, on the assessment sheet, that she will need to answer in order to meet the outcomes.	
Evaluation of lesson (comments relating to your aims and outcomes):			

Recipes available at:

<http://www.bbc.co.uk/skillswise/numbers/wholenumbers/ratioandproportion/ratio/factsheet3.shtml>

<http://www.skillsworkshop.org/general/e2e3l1pizzafingers.pdf>

or use any recipe of your choice

Ratio and proportion questions available at:

<http://www.skillsworkshop.org/l1num/l1ratiopracticequest.pdf>

<http://www.skillsworkshop.org/n/n11l12friedriceratio.pdf>

<http://www.bbc.co.uk/skillswise/numbers/wholenumbers/ratioandproportion/ratio/worksheet9.shtml>

or use any 'wordy' problems of your choice

To obtain an editable Word version of this resource simply send a resource you would like to share to maggie@skillsworkshop.org

THANK YOU

Ratio and Proportion

Calculate the amounts in the boxes for each of the ratios.



