

Class:		Week:	Time: 3hrs Total of 5hrs	Maths Topic: Unit 13 / N 4 FDP RP 2 (Part 1 of 2): - Ratio & Proportion Links between FDP RP			
Lesson No.	Mental Starters	Learning Outcomes	Key Vocabulary	Introductory Ideas	Main Activity	Plenary	Resources
L1 1 hr	Counting Stick or Spider Diagram as in Sparks 3, 4 or 5 Fractions, Decimals, %ages review concept that F, D and % are all parts of a total (unlike ratio), and so are all linked.	<ul style="list-style-type: none"> Use equivalence of F, D and % in describing proportions (Proportion compares part with whole and is usually expressed as a F, D or %).	Proportion and notation 3:2, in addition to: Numerator, denominator, mixed number, improper fraction, unit fraction, cancel, simplify, equivalent, convert, decimal fraction, recurring decimal, percentage.	Introduce language of proportion, eg: with OHS N4/1: School Dinners (focusing on F, D, % and P). Eg: 6 in 8 like school stew ... 6 out of 8 like school stew .. 6/8 ...0.75 ...75%	PROPORTION Learning activities which require a focus on <u>comparing part with total</u> . Develop introductory task so that pupils can apply language of proportion interchangeably with that of F, D and %. Eg: Pupils could complete a series of statements from OHS N4/1: School Dinners , such as: 2 in 8 dislike stew ... 1/4 dislike it ... 3/4 like it ... 75% like it ...	Sparks 3, 4 or 5 Fractions, Decimals, %ages - linking F, D, % and Proportion	Pp 10-12 Pp16-17 OHS N4/1: School Dinners Sparks 3, 4 or 5 Fractions, Decimals, %ages
L2 1 hr	Sparks 1: Equivalent Fractions - (as preparation for equivalent ratios)	<ul style="list-style-type: none"> Understand the relationship between <u>ratio</u> and <u>proportion</u>. (Ratio compares part with part) <ul style="list-style-type: none"> Use ratio and proportion to solve problems 	Ratio and notation 3:2, in addition to: proportion, numerator, denominator, mixed number, improper fraction, unit fraction, cancel, simplify, equivalent, convert, decimal fraction, recurring decimal, percentage.	Introduce language of ratio, eg: with OHS N4/1: School Dinners (focusing on F, D, % and R) Eg: '6 like it for every 2 that don't'; OR OHS N4/3: Shades of Grey	RATIO Learning activities which require a focus on <u>comparing part with part</u> . Eg: <ul style="list-style-type: none"> <u>Consolidate language of ratio, eg:</u> Pupils could complete a series of statements from OHS N4/1: School Dinners, such as: 2 in 8 dislike it, but ... 2 dislike it for every 6 who like it <u>Enrich range of ratio and proportion contexts, eg:</u> R and P of wool, cotton, polyester etc in fabrics (clothes labels); of pupils in class with brown eyes, long hair, who are 11, R of blue to yellow in green paint, ratio of flour to eggs in cake recipes, ... 	Use same / new example to highlight similarity in language between: '1 to 5' (a ratio) '1 in 5' (a proportion); and link Qs: 'What proportion are red?' 'What ratio? Fraction? Decimal? %?'	Pp16-17, p30 OHS N4/1: School Dinners Sparks 1: Equivalent Fractions OHS N4/3: Shades of Grey
L3 1 hr	Sparks 2: Ratio & Proportion:				Equivalent Ratios. Eg: OHS N4/2: Equivalent Ratios If form 7S is 1/3 girls and 2/3 boys, then comparing them as fractions looks like : $\frac{1}{3}$ v $\frac{2}{3}$ or as ratios 1 : 2 $\frac{1}{3}$ $\frac{2}{3}$ One approach; Ratios can be thought of as the numerators of fractions and we can therefore have equivalent ratios in just the same way as we have equivalent fractions. Link to equivalent fractions.	Sparks 2: Ratio & Proportion. Using a more demanding figure at centre.	Sparks 2: Ratio & Proportion. OHS N4/2: Equivalent Ratios

