

Ratio and proportion, algebra

Note: although formal algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives from Y1/2/3



Objectives	Y1	Y2	Y3	Y4	Y5	Y6
National curriculum objectives	-solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$	-recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems	-solve problems, including missing number problems			-solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts - solve problems involving the calculation/use of percentages for comparison -solve problems involving similar shapes where the scale factor is known or can be found -solve problems involving unequal sharing and grouping using knowledge of fractions and multiples -use simple formulae -generate and describe linear number sequences -express missing number problems algebraically -find pairs of numbers that satisfy an equation with two unknowns - enumerate possibilities of combinations of two variables
Dfe ready to progress criteria						6AS/MD-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). 6AS/MD-2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using

Buckingham Park Cof E Primary School Maths Progression documents

						<p>arithmetic properties, inverse relationships, and place-value understanding.</p> <p>6AS/MD-3 Solve problems involving ratio relationships.</p> <p>6AS/MD-4 Solve problems with 2 unknowns.</p>
Power Maths unit/s and when taught in school						<p>Textbook 6A Taught in Autumn Unit 2: Four operations (1) – lesson 4 and 5 (6AS/MD-1) Unit 3: Four operations (1) lesson 10 and 11 (6AS/MD-1) lesson 12 (6AS/MD-2)</p> <p>Textbook 6B Taught in Spring Unit 7: Ratio and proportion – lesson 1,2,3,7,8,9 (6AS/MD-3) Unit 8: Algebra – lesson 7,10,11 (6AS/MD-4)</p>
Other resources to aid teaching	-Daily Fluent in 5 tasks	-Daily Fluent in 5 tasks	-Daily Fluent in 5 tasks	-Daily Fluent in 5 tasks	-Daily Fluent in 5 tasks	<p>-Daily Fluent in 5 tasks -White Rose – Spring 1, Spring 2 -NCETM ratio & proportion pages 23-25 & Algebra pages 26-29</p> <p>https://www.ncetm.org.uk/media/uitj1x5g/mastery_assessment_y6.pdf</p>

Links to further activities to aid teaching:

White Rose materials link: <https://whiterosemaths.co.uk/resources?year=year-1-new>
 NCETM materials link: <https://www.ncetm.org.uk/classroom-resources/exemplification-of-ready-to-progress-criteria/>
 NCETM activities link: <https://www.ncetm.org.uk/classroom-resources/assessment-materials-primary/>
 NRICH - **PRIMARY CURRICULUM MAP FOR ALL TOPICS**
https://docs.google.com/spreadsheets/d/1blrdv1M9pKzoKrHeyxT5rkHbJUJJWjYug2k4Xe9_es/edit#gid=598691163

Key: Highlighted objectives above link to the topic of place value taught

Red = ratio and proportion

Blue = Algebra