

Transition: Advanced Counting to Early Additive

Domain: Multiplication and Division

Achievement Objectives	Number: Level 2	Number: Level 3	Algebra: Level 3
	<u>Number Strategies AO1:</u> Use simple additive strategies with whole numbers and fractions. <u>Number Knowledge AO1:</u> Know forward and backward counting sequences with whole numbers to at least 1000.	<u>Number Strategies AO1:</u> Use a range of additive and simple multiplicative strategies with whole numbers, fractions, decimals, and percentages. <u>Number Knowledge AO1:</u> Know basic multiplication and division facts.	<u>Equations and Expressions AO1:</u> Record and interpret additive and simple multiplicative strategies, using words, diagrams, and symbols, with an understanding of equality.

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Strategies being developed	Problem progression	References	Knowledge being developed	Resources
Solve multiplication problems using repeated addition	$2 \times 6 = \square$ so $3 \times 6 = \square$ $4 \times 5 = \square$ so $5 \times 5 = \square$, $6 \times 5 = \square$ $5 \times 8 = \square$ so $6 \times 8 = \square$, $7 \times 8 = \square$ $10 \times 4 = \square$ so $11 \times 4 = \square$, $12 \times 4 = \square$	<i>Teaching Multiplication and Division (Book6)</i> Introduction (11-12) Threes Company (12-14) Animal Arrays (15-16) <i>Figure It Out</i> N 2.1 Multiplying Madness (12) N 2.1 Pig Pen (13) N 2.2 To market (16-17) BF2-3 An apple a day (9) BF 2-3 On Track (10) BF 3 Field of 100 Sheep (16-17)	Say the forwards and backwards skip-counting sequences in the range 0-100 for twos, threes, fives, and tens at least.	<i>Teaching Number Knowledge (Book 4)</i> Counting (11) Skip counting on the number line (11) Using calculators (14) <i>Figure It Out</i> N 2-3 (16) Stepping Out BSM 1-3-12, 11-3-13, 11-3-54, 11-3-55, 11-3-85, 12-3-13
Solve five times tables by doubling and halving (and learn them)	$2 \times 10 = \square$ so $4 \times 5 = \square$ $4 \times 10 = \square$ so $8 \times 5 = \square$, $6 \times 5 = \square$ $3 \times 10 = \square$ so $6 \times 5 = \square$, $7 \times 5 = \square$ $4 \times 5 = \square$ so $5 \times 5 = \square$ $8 \times 5 = \square$ so $9 \times 5 = \square$	<i>Teaching Multiplication and Division (Book6)</i> Twos, Fives, and Tens (21-23) <i>Figure It Out</i> N2.2 Double Trouble (18) NS7/8.1 Flying Feet (9)	Recall groupings of two in numbers to 20, groupings of five in numbers to 50, and groupings of 10 in numbers to 100.	<i>Teaching Number Knowledge (Book 4)</i> Skip counting on a Number Line (11) Beep (12) Fabulous fives (22) Tens in hundreds and more (27) BSM 9-1-7, 9-1-8, 9-1-45, 9-1-46, 9-1-83, 9-1-84, 12-1-5, 12-1-44, 12-1-45, 12-1-84

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Use the commutative property, e.g. $4 \times 6 = 6 \times 4$	$5 \times 6 = \square$ as $6 \times 5 = \square$ $9 \times 2 = \square$ as $2 \times 9 = \square$ $10 \times 7 = \square$ as $7 \times 10 = \square$ $100 \times 6 = \square$ as $6 \times 100 = \square$ $50 \times 2 = \square$ as $2 \times 50 = \square$	<i>Teaching Multiplication and Division (Book6)</i> Introduction (11-12) Animal Arrays (15-16) Turnabouts (34-36) <i>Figure It Out</i> BF 3 Choco-Blocks (10)	Automatically recall the multiplication and division facts for the multiples of 2, 5, and 10.	<i>Teaching Number Knowledge (Book 4)</i> Number mats and number fans (34) Bowl a fact (35) In and out (36) Multiplication flash cards (38)
Dividing by sharing using addition to predict	$10 \div 2 = \square$ so $20 \div 4 = \square$ $12 \div 2 = \square$ so $12 \div 4 = \square$ $16 \div 2 = \square$ so $16 \div 4 = \square$ so $16 \div 8 = \square$ $100 \div 2 = \square$ so $100 \div 4 = \square$	<i>Teaching Multiplication and Division (Book6)</i> Introduction (11-12) Pirate Crews (17-18) <i>Figure It Out</i> N 2.2 Dinosaur Dig (19)	Record the results of mental multiplication calculations using equations and diagrams	<i>Figure It Out</i> BF 2-3 Times up (8) BF 2-3 An apple a day (9)
Dividing by making equal sets	Twos in 20 so fours in 20 Tens in 30 so fives in 30 Twos in 16 so fours in 16 Fives in 30 so fives in 60 Fours in 16 so eights in 16 Fours in 12 so fours in 24	<i>Teaching Multiplication and Division (Book6)</i> Biscuit Boxes (19-20) <i>Figure It Out</i> N 2.2 Dinosaur Dig (19)		

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