

Developing Efficient Numeracy Strategies

Stage 2

Activities sorted by content outcomes
within the three sections

- Counting by ones
 - Forming groups
- Coordinating groups

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DEVELOPING EFFICIENT NUMERACY STRATEGIES – STAGE 2

Counting By Ones

These activities are for Counting On students to help them develop strategies beyond counting by ones

NUMBER ACTIVITIES

Syllabus Reference	Activities
NS 1.1 Counts, orders and represents two and three digit numbers	<ul style="list-style-type: none"> ▪ Copy That p. 42 ▪ Using Random Patterns p.44 ▪ Matching Ten Frames p.46 ▪ Count Off p.62 ▪ Number Line Counting p.64 ▪ Hands Up p.66 ▪ Sticks of Ten p.68
NS2.1 Counts, Orders, reads and records numbers up to 4 digits	<ul style="list-style-type: none"> ▪ Bean Counter p.70 ▪ Dizzy Dots p.72 ▪ Building Numbers with ten Frames p74 ▪ Hundred Chart Windows p. 76 ▪ Money Problems p.78 ▪ Hundred Chart Jigsaw p.88 ▪ Teeny Tiny Ten Frames p. 90
NS1.2 Uses a range of mental strategies and informal recording methods for addition and subtraction involving one and two digit numbers	<ul style="list-style-type: none"> ▪ Domino Friends P.22 ▪ Spin Double and Flip p.24 ▪ Brainy Fish p. 28 ▪ Addition Wheel Pairs p. 30 ▪ Singles or Doubles p. 32 ▪ Bunches of Five p.48 ▪ Make 10 grids p.50 ▪ Couple Cups p.54 ▪ Nine Piles p.56 ▪ Number Chop p.58 ▪ Four Dice Tally p.108 ▪ Number Draughts p.60 ▪ Hands Up p.66 ▪ Sticks of Ten p.68
NS2.2 Uses mental and written strategies for addition and subtraction involving two, three and four digit numbers	<ul style="list-style-type: none"> ▪ Domino Adding Pairs p. 20 ▪ Addition Star p.26 ▪ Even Stevens p. 34 ▪ Engineers Dice p.36 ▪ Fancy Dice p.38 ▪ Counter Play p.40 ▪ Memory of tens p.52 ▪ Money Problems p.78 ▪ Four Turns to 100 p.80 ▪ Eggsactly p. 82 ▪ Cover up Strips p.84 ▪ Tracks p..86 ▪ Teeny Tiny Ten Frames p. 90
NS1.3 Uses a range of mental strategies and concrete materials for multiplication and division	<ul style="list-style-type: none"> ▪ Teddy Tummies p.92 ▪ People Markers p94
NS2.3 Uses mental and informal written strategies for multiplication and division	<ul style="list-style-type: none"> ▪ Engineers Dice p.36 ▪ Counter Grab: Multiplication p.96 ▪ Create an Array p.98 ▪ Colour an Array p.100 ▪ Self Correcting Arrays p.102 ▪ Streamer Design p.116

NS2.5 Describes and compares chance events in social and experimental contexts	<ul style="list-style-type: none"> ▪ Four Dice Tally p108
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PATTERNS AND ALGEBRA

Syllabus Reference	Activities
PAS1.1 Creates, represents and continues a variety of number patterns, supplies missing elements in a pattern and builds number relationships	<ul style="list-style-type: none"> ▪ Couple Cups p.54 ▪ Nine Piles p.56 ▪ Number Chop p.58 ▪ Number Draughts p.60
PAS2.1 Generates, describes and records number patterns using a variety of strategies and completes simple number sentences by calculating missing values	<ul style="list-style-type: none"> ▪ Memory of tens p.52 ▪ Dizzy Dots p.72 ▪ Teddy Tummies p.92 ▪ People Markers p94 ▪ Colour an Array p.100 ▪ Self Correcting Arrays p.102 ▪ Counter Grab: Multiplication p.96 ▪ Create an Array p.98 ▪ Tile Roller p.118 ▪ Using Nets p120

DATA ACTIVITIES

Syllabus Reference	Activities
DS1.1 Gathers and organizes data, displays data using column and picture graphs, and interprets the results	<ul style="list-style-type: none"> ▪ Four Dice Tally p.108 ▪ Hoops and Hats p.112
DS2.1 gathers and organizes data, displays data using tables and graphs, and interprets the results	<ul style="list-style-type: none"> ▪ Traffic Tally p. 104 ▪ High Rollers 1 p.106 ▪ Knotty Problems p. 110

MEASUREMENT ACTIVITIES

Syllabus Reference	Activities
MS1.1 Estimates, measures, compares and records lengths and distances using informal units, metres and centimeters.	<ul style="list-style-type: none"> ▪ Chain Reaction p.114 ▪ Streamer Design p.116
MS1.2 Estimates, measures, compares and records areas using informal units.	<ul style="list-style-type: none"> ▪ Tile Roller p 118 ▪ Using Nets 1 p.120
MS2.1 Estimates, measures, compares and records lengths, distances and perimeters in metres, centimetres and millimetres.	<ul style="list-style-type: none"> ▪ Knotty Problems p.110

SPACE AND GEOMETRY ACTIVITES

Syllabus Reference	Activities
SGS2.2a Manipulates, compares, sketches and names two-dimensional shapes and describes their features	<ul style="list-style-type: none"> ▪ Geoboard Triangles 1 p. 122 ▪ Create a Triangle p.124 ▪ Symmetry Pattern p. 126 ▪ Walking The Dog p. 128 ▪ Woolly Designs p.130
SG2.2b Identifies, compares and describes angles in practical situations	<ul style="list-style-type: none"> ▪ Recognising Angles in Shapes p. 132

DEVELOPING EFFICIENT NUMERACY STRATEGIES – STAGE 2

Forming Groups

These activities are for Facile students, who no longer rely on counting-by-ones strategies.

NUMBER ACTIVITIES

Syllabus Reference	Activities
NS 1.1 Counts, orders and represents two and three digit numbers	<ul style="list-style-type: none">▪ Jelly Bean Pans p.212▪ Fractured Fairy Tales p. 214
NS2.1 Counts, Orders, reads and records numbers up to 4 digits	<ul style="list-style-type: none">▪ Largest Number Wins p.180▪ Start With Four p. 182▪ Bucket Count On 10's and 100's p. 184
NS1.2 Uses a range of mental strategies and informal recording methods for addition and subtraction involving one and two digit numbers	<ul style="list-style-type: none">▪ Memory Domino p.174▪ Domino Challenge p.176▪ Ten Frame Flash p.178
NS2.2 Uses mental and written strategies for addition and subtraction involving two, three and four digit numbers	<ul style="list-style-type: none">▪ Ten Frame Flash p 178▪ I Have I Want I Need p.186▪ The Empty Number Line p. 188▪ Hundred Chart Challenge p. 190▪ Addition Challenge p. 192▪ Friends to 100 p.194▪ Red or Black p.196
NS1.3 Uses a range of mental strategies and concrete materials for multiplication and division	<ul style="list-style-type: none">▪ Graphing with symbols p.208▪ High Rollers 2 p.210
NS2.3 Uses mental and informal written strategies for multiplication and division	<ul style="list-style-type: none">▪ Double Dice Multi p 198▪ Teddy Target p 200▪ Collecting Threes p.202▪ People Markers p. 204▪ Triples plus One p.206▪ How Do I Know? P.216▪ Using Nets 2 p.218▪ How Many More? P.220
NS2.5 Describes and compares chance events in social and experimental contexts	<ul style="list-style-type: none">▪ High Rollers 2 p.210

PATTERNS AND ALGEBRA ACTIVITIES

Syllabus Reference	Activities
PAS2.1 Generates, describes and records number patterns using a variety of strategies and completes simple number sentences by calculating missing values	<ul style="list-style-type: none">▪ Friends to 100 p. 194▪ Collecting Threes p.202▪ Rectangle count up p.232

DATA ACTIVITIES

Syllabus Reference	Activities
DS2.1 gathers and organizes data, displays data using tables and graphs, and interprets the results	<ul style="list-style-type: none">▪ Graphing with symbols p.208▪ High Rollers 2 p.210▪ Jelly Bean Pans p.212▪ Fractured Fairy Tales p. 214

MEASUREMENT ACTIVITIES

Syllabus Reference	Activities
MS1.2 Estimates, measures, compares and records areas using informal units.	<ul style="list-style-type: none">▪ Using Nets 2 p.218▪ How Many More? p.220
MS2.2 Estimates, measures, compares and records the areas of surfaces in square centimeters and square metres	<ul style="list-style-type: none">▪ How Do I Know? p216

SPACE AND GEOMETRY ACTIVITES

Syllabus Reference	Activities
SGS2.1 Makes, compares, describes and names three-dimensional objects, including pyramids, and represents them in drawing.	<ul style="list-style-type: none">▪ What's in The Box p222▪ Moving 3D Objects p.224
SGS2.2a Manipulates, compares, sketches and names two-dimensional shapes and describes their features	<ul style="list-style-type: none">▪ Time to Shape Up p226▪ Rolling Boxes p228▪ Rectangle count up p.232
SGS2.2b Identifies, compares and describes angles in practical situations	<ul style="list-style-type: none">▪ Time to Shape Up p226▪ Pattern Block Angles p.230

DEVELOPING EFFICIENT NUMERACY STRATEGIES – STAGE 2

Coordinating Groups

These activities are intended to develop students' use of collection-based strategies

NUMBER ACTIVITIES

Syllabus Reference	Activities
NS2.1 Counts, Orders, reads and records numbers up to 4 digits	<ul style="list-style-type: none">▪ Digi Squares p.302
NS2.2 Uses mental and written strategies for addition and subtraction involving two, three and four digit numbers	<ul style="list-style-type: none">▪ Race to 1000 p.284▪ How Many more p.286▪ Snakes Eyes p.288▪ Highway Racer p.290
NS2.3 Uses mental and informal written strategies for multiplication and division	<ul style="list-style-type: none">▪ Spin and Multiply p.252▪ Race Around the World p.254▪ Una Pizza Per Favore p.256▪ Chords p.258▪ Multiplication Memory p.260▪ Honey Jumbles p.262▪ Hopscotch p.264▪ Multiplication Game Board p.266▪ Set the Rules p.268▪ Self-Correcting Facts p.270▪ Hand Multiplication p.272▪ Ten Strip Division Challenge p.274▪ Saucy Sixes p.276▪ Remainders Count p.278▪ Safari p.280▪ Froggy p.282
NS2.4 Models, compares and represents commonly used fractions and decimals, adds and subtracts decimals to two decimal places, and interprets everyday percentages	<ul style="list-style-type: none">▪ Shhh! It's a Secret p.292▪ Digi Squares p.302

PATTERNS AND ALGEBRA

Syllabus Reference	Activities
PAS2.1 Generates, describes and records number patterns using a variety of strategies and completes simple number sentences by calculating missing values	<ul style="list-style-type: none">▪ Honey Jumbles p.262▪ Self-Correcting Facts p.270

MEASUREMENT ACTIVITIES

Syllabus Reference	Activities
MS1.2 Estimates, measures, compares and records areas using informal units.	<ul style="list-style-type: none">▪ Large and Small p.294▪ Chessboard p.296
MS2.2 Estimates, measures, compares and records the areas of surfaces in square centimeters and square metres	<ul style="list-style-type: none">▪ Hidden Squares p.298▪ Crazy Skyscrapers p.300▪ Digi Squares p.302▪ Measuring Area with One Tile p.304

SPACE AND GEOMETRY ACTIVITES

Syllabus Reference	Activities
SGS2.1 Makes, compares, describes and names three-dimensional objects including pyramids, and represents them in drawings	<ul style="list-style-type: none">▪ Crazy Skyscrapers p.300▪ Food Rainbow p.310▪ Symmetry Building p.312
SGS2.2a Manipulates, compares, sketches and names two-dimensional shapes and describes their features	<ul style="list-style-type: none">▪ Large and Small p.294▪ Chessboard p.296▪ Geoboard Triangles 2 p.306▪ Silent String Shapes p.308▪ What's my Shape? P.314▪ Guess and Draw p.316