GRADE 5 Number	Key Understandings	Sample Diagnostic Tasks	Sample Learning Tasks	Math Station Ideas:
Specific Outcomes	underpinning the	and Activities	Selected from FSIM: Number	
	Curriculum Outcomes		Resource Books	
	from FSIM: Number			
	Resource Books			
N5.1 Represent,	Whole and Decimal	Saying The Number	Number Sense: Pages 56 – 59	Mystery Numbers (online
compare, and describe	Numbers KU4:	Sequence By Ones And	Comparing Numbers	interactive)
whole numbers to	The whole numbers	Tens (Course Book, p.	Place Value	
1 000 000 within the	are in a particular order,	174)	Numbers Cards	Place Value Millionnaire
contexts of place value	and there are patterns	Up To & Over 100 and	Writing Large Numbers Case	(online interactive)
and the base ten	in the way we say them	Up To & Through The	Study 4 (Number Sense Book	
system, and quantity.	that help us to	Hundreds (Course Book,	pp 60 – 62)	Place Value Disks (link to
	remember the order.	p. 171)	Did You Know? (Number Sense	manipulatives)
		What's Next (Course	Book p. 63)	
	Whole and Decimal	Book, pp. 178 - 179)		Place Value Matching Game
	Numbers KU5:		Number Sense: Pages 68 – 71	(link to printable)
	There are patterns in		Wipeout	
	the way we write whole		Marbles	
	numbers that help us to		• 800 Game	
	remember their order.	Read, Write And Say	Did You Know? (Number Sense	
		Numbers (Course Book,	Book p. 67)	
	Whole and Decimal	p. 188)		
	Numbers KU6:	Flexible Numbers	Number Sense: Pages 76 – 79	
	 Place value helps us 	(Course Book, pp. 192 -	Backwards and Forwards	
	to think of the same	194)	Grouping Objects	
	whole number in	Dinosaurs (Course	Flexible Numbers	
	different ways and this	Book, p. 180)		
	can be helpful.	43 Candies (Course	Number Sense: Pages 90 – 91	
		Book, p. 184)	Clothesline	
	Whole and Decimal	116 Candies (Course	Correct Order	
	Numbers KU8:	Book, p. 186)	Skip Counting	
	We can compare and	Circle the Biggest	Estimating Case Study 4	
	order the numbers	(Course Book, p. 190)	(Number Sense Book pp. 94 -	
	themselves.		96)	

GRADE 5 Number	Key Understandings	Sample Diagnostic Tasks	Sample Learning Tasks	Math Station Ideas:
Specific Outcomes	underpinning the Curriculum	and Activities	Selected from FSIM:	
	Outcomes from FSIM: Operation		Operation Sense Resource	
	Sense Resource Book		Books	
N5.2 Analyze models	Operations KU3:	Story Problems 2 (Course	Operation Sense: Pages 52	"Classic Games Adapted to
of, develop strategies	Multiplying numbers is useful	Book, pp. 212, 214))	- 55	Basic Fact Mastery" p. 144
for, and carry out	when we:		Multiplication	TS-CM 3-5
multiplication of whole	- Repeat quantities	Calculator Number	Soup for Everyone	
numbers.	- Use rates	Sentences (Course Book,	Think Board	"Bowl A Fact" p. 145 TS-CM
	- Make ratio comparisons or	pp. 217 - 218)	Combination Problems	3-5
	changes (scales)		Calculating Area	
N5.3 Demonstrate, with	- Make arrays and combinations	Find the solutions Sets B		"Salute!" p. 145 TS-CM 3-5
and without concrete	- Need products of measures.	and C (Course Book pp.		
materials, an		223, 225 - 226)	Operation Conso. Dogg. C4	"Build it and Break it" p. 185
understanding of	Operations KU4:		Operation Sense: Pages 64	TS-CM 3-5
division (3-digit by 1-	Dividing numbers is useful when		• Less in a Group	
digit) and interpret	we:		• Relay	Multiplication Games (link to
remainders to solve	- Share or group a quantity into		Multiplication and Division	variety of online interactives)
problems.	a given number of portions		Think Board	
	- Share or group a quantity into		Case Study 2 (Operation	Monkeying Around With
	portions of a given size		Sense Book pp.s 68 – 71)	Multiplication (link to
	- Need products of measures.		Did You Know? (Operation	printable)
			Sense Book p. 71)	
	Operations KU5:			Multiplication Freebie No
	Repeating equal quantities and		Operation Sense: 76 - 80	Prep Games (link to
	partitioning a quantity into		Constructing Arrays	printable)
	equal parts helps us relate		Which Operation?	
	multiplication and division and		Rewriting Number	23 Best Multiplication Apps
	understand their properties.		Sentences Did You Know? (Operation	for Kids (link to information)
			Sense Book p. 81)	
			St. 35 250 k p. 61/	5 th Grade Multiplication
	Operations KU6:		Operation Sense: 84 - 85	Strategies (link to 5 min
	The same operation can be said		Saying Symbols	video on YouTube)
	and written in different ways.		Which Goes with Which?	

Computations KU3: **Operation Sense: Pages** "Divide It Up" p. 119 TS-CM We can think of a number as a 138 - 141 3-5 Divisibility multiplication or division in Doubling Strategy different ways. We can Division Freebie No Prep • Easier Multiplication Case Games (link to printable) rearrange the factors of a Study 1 (Operation Sense multiplication without changing Book pages 150 – 151) Don't Duck Division (link to the quantity. printable) Operation Sense: Pages Computations KU4: 146-149 Place value and basic number **Division Games (link to** • Grid Partitions facts together allow us to printable) Bundling Materials calculate with any whole or • Rewriting Multiplication decimal number. Division Dice, Remainders, Division Number Sentences Multiples (link to printables) Computations KU5: Operation Sense: 156-161 • Choose the Operation 1, 2 Matching Division (online) There are strategies we can Multiply the Parts practice to help us do Constructing Arrays calculations in our head. Division as an Unknown Strategies Factor (link to printable) Case Study 2 (Operation Sense Book pp. 162 - 163) Missing Numbers: Division Computations KU6: There are some special (link to printable) Operation Sense: 168 - 171 calculating methods that we can • Making It Easier Identify the Unknown (link to use for calculations we find hard Multiplication Grids to do in our head. printable) Which is Easier? "Roll and Divide" (document) Computation KU8: Operation Sense: Page Rounding, imagining a number 185-188 line, and using properties of Multiplying by 26 • Does It Make Sense? numbers and operations help us • Upper and Lower Limits to estimate calculations.

Operations Background Notes: (pages 22 – 29, pages 109 – 115)

GRADE 5 Number	Key Understandings	Sample Diagnostic Tasks	Sample Learning Tasks	Math Station Ideas:
Specific Outcomes	underpinning the Curriculum	and Activities	Selected from FSIM:	
	Outcomes from FSIM:		Operation Sense	
	Operation Sense Book		Resource Book	
N5.4 Develop and apply personal strategies for estimation and computation including: • front-end rounding • compensation • compatible numbers.	Outcomes from FSIM:	and Activities	Operation Sense Resource Book Operation Sense: 89 - 93 • Missing Number • Today's Number is • What Do You Know? • Calculating Strategies Operation Sense: 97 - 101 • Best Buy • Related Numbers • Equivalent Sentences • Exploring Word Problems Operation Sense: 156 - 161 • Compensation • Front-end Loading 1, 2, 3 • Compatible Numbers 1,2 • Compensate Operation Sense: Page	"High or Low?" p. 197 TS-CM 3-5 The Quotient Café (online interactive) Estimate or Compute (link to printable)
	and using properties of numbers and operations help us to estimate		185-188Calculator TestShopping Estimates	
	calculations.		Place Value	
			Estimating Collections	
			• Exact or Approximate?	
			• Is it Reasonable?	
			Best Estimates	
			Case Study 4 (Operation	
			Sense Book pp. 189 - 191)	

Computations KU10: f	Operation Sense: Pages
Thinking about what makes sense	205 - 208
helps us to check and interpret the	• Place Value
results of calculations.	Realistic Remainders
	Sensible Answers
	Rounding
Operations Background Notes:	
See "Multiplication Facts" and	
"Techniques for Mental	
Calculation", (Operation Sense, p.	
109-115)	

GRADE 5 Number	Key Understandings	Sample Diagnostic Tasks	Sample Learning Tasks	Math Station Ideas:
Specific Outcomes	underpinning the Curriculum	and Activities	Selected from FSIM:	
	Outcomes from FSIM: Number		Number AND Operation	
	Sense Book		Sense Resource Books	
N5.5 Demonstrate an	Fractions KU2:	Did You Know? ((Number	Number Sense: 114 - 117	"Who is Winning?" p. 209 TS-
understanding of	We can partition objects and	Sense Book, p. 120)	Sharing a Pizza	CM 3-5
fractions by using	collections into two or more		• Equal Portions	
concrete and pictorial	equal-sized parts and the		Chocolate Bars Rettant Blacks	"On The Line" p. 218 TS-CM 3-
representations to:	partitioning can be done in		• Pattern Blocks Case Study 2 (Number Sense	5
 create sets of 	different ways.		Book) pp. 121 – 123)	
equivalent fractions			BOOK, pp. 121 123,	"Zero, One-Half, Or One" p.
 compare fractions 	Fractions KU3:	Three-Quarters ((Number	Number Sense: 128 - 133	219 TS-CM 3-5
with like and unlike	We use fraction words and	Sense Book, p. 132)	Finding Fractions	
denominators.	symbols to describe parts of a		Measuring Metres	" <u>Different Fillers</u> " p. 220 TS-
	whole. The whole can be an	Did You Know? ((Number	 Fractions and Shape 	CM 3-5
	object, a collection or a	Sense Book, p. 139)	• Stars	"
	quantity.			" <u>Missing-Number</u>
			Number Sense: 137 - 141	Equivalencies" p. 223 TS-CM
	Fractions KU4:		Equivalent Fractions	3-5
	The same fractional quantity		• Equivalence • Fractions of a Collection •	Taur de Frantis e Dissa Char
	can be represented with a lot of		Fraction Tapes	Tony's Fraction Pizza Shop
	different fractions. We say		Traction rupes	(online interactive)
	fractions are equivalent when		Number Sense: Pages 145	Oudering Freetiens: Partner
	they represent the same		- 148	Ordering Fractions: Partner
	number or quantity.		Allowance	Game (link to printable)
	Fractions KU 5:	Comparing Fractions	Sharing Chocolate	Fraction Number Line
	We can compare and order	((Number Sense Book, p.	Ordering and Comparing	Concentration (link to
	fractional numbers and place	((Number Sense Book, p. 148)	Fractions	printable)
	them on a number line.	170)	Fraction Cards Southing Fractions	printable)
	them on a namber line.		Sorting FractionsFraction Number Line	
			Case Study 3 (Number Sense	
			1-1	
			Book pp. 149 – 151)	

GRADE 5 Number	Key Understandings	Sample Diagnostic Tasks	Sample Learning Tasks	Math Station Ideas:
Specific Outcomes	underpinning the Curriculum	and Activities	Selected from FSIM:	
	Outcomes from FSIM: Number		Number AND Operation	
	Sense Book		Sense Resource Books	
N5.6 Demonstrate	Whole and Decimal Numbers	800 Game ((Course Book,	Number Sense: Pages 83 -	<u>Treefrog Treasure</u> (online
understanding of	KU7:	pp. 195 - 196)	85	interactive; level 3)
decimals to thousandths	We can extend the patterns in		• Tenths	
by:	the way we write whole	Decimals ((Course Book,	Number Scrolls	"Familiar Fractions to
 describing and 	numbers to write decimals.	pp. 197 - 200)	Place Invaders	Decimals" p. 264 TS-CM 3-5
representing			 Number cycles 	
 relating to fractions 	Whole and Decimal Numbers	Numbers ((Course Book,		"Line 'Em Up" p. 268 TS-CM 3-
 comparing and 	KU8:	pp. 201 - 202)	Number Sense: Pages 90 -	5
ordering.	We can compare and order the		93	
	numbers themselves.	Money ((Course Book, pp.	Skip Counting	Scooter Quest Place Value –
		203 - 204)	Backwards	Decimals (online interactive)
	Fractions KU6:		Biggest Number	
	A fractional number can be	Change Task 2 ((Course	Decimal Sequences	Decimal Place Value with
	written as a division or as a	Book, pp. 205, 207)	 More Than/Less Than 	Playing Cards (link to
	decimal.			instructions)
			Number Sense: Pages 157	
			– 159	
			 Fractions to Decimals 	
			 Decimal Fractions 	

GRADE 5 Number	Key Understandings	Sample Diagnostic Tasks	Sample Learning Tasks	Math Station Ideas:
Specific Outcomes	underpinning the Curriculum	and Activities	Selected from FSIM:	
	Outcomes from FSIM: Number		Number AND Operation	
	Sense Book		Sense Resource Books	
N5.7 Demonstrate an	Computations KU4: (Added) f	800 Game ((Course Book,	Operation Sense: Pages	Wishball: Thousandths (online
understanding of	Place value and basic number	pp. 195 - 196)	170-171 (Added)	interactive)
addition and	facts together allow us to		Total Scores	
subtraction of decimals	calculate with any whole or	Decimals ((Course Book,	Rules Rule!	<u>Decimals Jeopardy</u> (online
(limited to	decimal number	pp. 197 - 200)		interactive)
thousandths).			Operation Sense: Pages	
	Computations KU6: (Added) f	Numbers ((Course Book,	207 - 208	Decimal Addition and
	There are some special	pp. 201 - 202)	Spot the Mistakes	Subtraction Game (link to
	calculating methods that we can			printable)
	use for calculations we find	Money ((Course Book, pp.		
	hard to do in our head.	203 - 204)		Estimate the Sums and
				<u>Differences of Decimals</u>
	Computations KU10: f	Change Task 2 ((Course		(online interactive)
	Thinking about what makes	Book, pp. 205, 207)		
	sense helps us to check and			
	interpret the results of			
	calculations.			