GRADE 7 Patterns and	Key Concepts in Patterns	Sample Diagnostic	Sample Learning Tasks	Math Station Ideas:
Relations	underpinning Curriculum	Tasks and Activities	Selected from FSIM:	
Specific Outcomes	Outcomes from FSIM: Operations		Operations Resource Book	
	Resource Book and Data		AND	
	Management and Probability		Data Management and	
	Book		Probability Book	
P7.1 Demonstrate an	Summarize and Represent Data		Data Management: 186-189	Kahn Academy: Linear
understanding of the	KU3:		Measuring Lids 1, 2	Equations and Functions
relationships between	We can display data visually; some		Ordered Measurements	(online interactive)
oral and written	graphs and plots show how two			(0
patterns, graphs and	quantities are related.			Save the Zogs (online
linear relations.				interactive)
	Summarize and Represent Data		Data Management: 196-197	
	KU4:		Flight Information	Sink Capn'K (printable)
	 We use tables and diagrams to 		Changing Headings	<u> </u>
	organize and summarize data in a		Totals Tables	Name That Line
	systematic way.			Interactive Bulletin Board
	Datta and Alaskas KU2		Operation Sense: 250-251	(link to instructions)
	Patterns and Algebra KU3:		Everyday Formulas	,
	To describe a number pattern means to provide a precise rule		Hexagon Patterns	
	that produces the pattern.		Graphs	
	that produces the pattern.			
	Patterns and Algebra KU4:		Operation Sense: 259-261	
	• There are strategies that help us		Sticky Instructions	
	become better at recognizing		Classifying	
	common types of patterns.		Graphs	
		l	Ī.	

GRADE 7 Patterns and	Key Concepts in Patterns	Sample Diagnostic	Sample Learning Tasks	Math Station Ideas:
Relations	underpinning Curriculum	Tasks and Activities	Selected from FSIM:	
Specific Outcomes	Outcomes from FSIM: Operations		Operations Resource Book	
	Resource Book			
P7.2 Demonstrate an	Operations KU7:		Operations, pages 91-93	Who Wants To Be a
understanding of	Properties of operations and		The Same As	Hundredaire? Algebraic
equations and	relationships between them can		Equivalent Statements	expressions game (online
expressions by:	help us to decide whether number			interactive)
distinguishing	sentences are true.			
between equations and	0			Noodle: Evaluate Expressions
expressions	Operations KU8:		Operations, pages 99-101	and Solve Equations (online
evaluating	• Thinking of a problem as a number sentence often helps us solve it.		Problem Solving	interactive)
expressions	Sometimes we need to rewrite the		Rewriting Problems	
 verifying solutions to 	number sentence in a different by		How Much? How Many?	Algebra Meltdown (online
equations.	equivalent way.		Matching Charling Calutions	interactive)
	,		Checking SolutionsHow Old?	
P7.3 Demonstrate an			Unknown Quantity	"Algebraic Expressions" from
understanding of one			Solving Problems	Math Makes Sense 7 Student
and two-step linear			5 Solving Froblems	Book, p. 16-19 (Pearson
equations of the form c	Patterns and Algebra KU2:		Operations, pages 238-239	Education Canada, 2007)
d b ax + = (where a, b, c,	Representing aspects of a situation		Picture Frames	
and d are whole	with numbers can make it easier to		River Crossing	"Reading and Writing
numbers, c < d and b ≠	see patterns in the situation.		Triangle Toothpick Design	Equations" from Math Makes
0) by modeling the			• Fibonacci	Sense 7 Student Book, p. 35-37
solution of the				(Pearson Education Canada,
equations concretely,	Patterns and Algebra KU3:		Operations, pages 250-251	2007)
pictorially, physically,	• To describe a number pattern		Triangle Toothpick Design	" 2 1 .
and symbolically and	means to provide a precise rule		• Different Rule, Same Pattern	"Solving Equations Using
explaining the solution	that produces the pattern.		Hexagon Patterns	Algebra Tiles" from Math
in terms of the	Patterns and Algebra KU4:		Everyday Formulas	Makes Sense 7 Student Book,
preservation of	• There are strategies that help us		Magic Calculating Machine	p. 38-42 (Pearson Education
equality.	become better at recognizing			Canada, 2007)
	common types of patterns.			"California Francisco" for
	7 p = 5 p acco			"Solving Equations" from

	Math Makes Sense 7 Student
	<i>Book</i> , p. 220-225 (Pearson
	Education Canada, 2007)
	"Using a Model to Solve
	Equations" from Math Makes
	Sense 7 Student Book, p. 226-
	230 (Pearson Education
	Canada, 2007)
	"Solving Equations Using
	Algebra" from Math Makes
	Sense 7 Student Book, p. 237-
	240 (Pearson Education
	Canada, 2007)
	"Using Different Methods to
	Solve Equations" from Math
	Makes Sense 7 Student Book,
	p. 240-244 (Pearson Educatio
	Canada, 2007)

ey Concepts in Patterns	Sample Diagnostic	Sample Learning Tasks	Math Station Ideas:
nderpinning Curriculum	Tasks and Activities	Selected from FSIM:	(See Outcome N7.6)
utcomes from FSIM: Operations		Operations Resource Book	
esource Book			
hole and Decimal Numbers		Number Sense: Pages 88 - 93	"What Is Her Net Worth?" p.
J8:		9	181 TS-CM 6-8
We can compare and order the			
mbers themselves.			"(American) Football
			Statistics" p. 183 TS-CM 6-8
		-	
			Walk the Plank: Adding and
sttorns and Algabra KII2.		Operations, pages 238-239	Subtracting Integers (online
_		Picture Frames	interactive)
		River Crossing	Integer Feetball (enline
		Triangle Toothpick Design	Integer Football (online interactive)
·		• Fibonacci	interactive
		One wetterns march 350 351	Positive and Negative Integers
atterns and Algebra KU3:			Card Game (link to
To describe a number pattern			instructions)
•		· ·	,
that produces the pattern.			Absolute Value War
ottorns and Algebra KIII:		Magic Calculating Machine	(printable)
_		_	
the second of th	derpinning Curriculum tcomes from FSIM: Operations cource Book tole and Decimal Numbers 8: //e can compare and order the nbers themselves. terns and Algebra KU2: epresenting aspects of a situation ith numbers can make it easier to be patterns in the situation.	derpinning Curriculum toomes from FSIM: Operations source Book tole and Decimal Numbers 8: //e can compare and order the inbers themselves. terns and Algebra KU2: epresenting aspects of a situation ith numbers can make it easier to be patterns in the situation. etterns and Algebra KU3: to describe a number pattern teans to provide a precise rule that produces the pattern. etterns and Algebra KU4: there are strategies that help us there are strategies that help us there are strategies that help us the come better at recognizing	Tasks and Activities Selected from FSIM: Operations source Book Operations Resource Book Number Sense: Pages 88 - 93 Negative Numbers Number Line Correct Order Skip Counting Backwards Temperatures Changing Values Operations, pages 238-239 Picture Frames River Crossing Triangle Toothpick Design Fibonacci Operations, pages 250-251 Triangle Toothpick Design Different Rule, Same Pattern Leans to provide a precise rule Laterns and Algebra KU4: Determinent of the pattern Leans to provide a precise rule Le