DEPARTMENT OF EDUCATION

CURRICULUM AND INSTRUCTION DIVISION

JUNKANOO INTEGRATION TEMPLATE

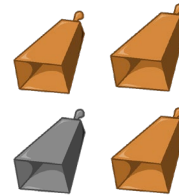**SUBJECT:** _____Mathematics_____

GRADE: _____7_____

Pacing Guide Week #	Topic (As displayed on the Pacing Guide)	Objectives (As outlined in the Curriculum)	Integration Strategy (Activities)	Resources
Week_1___ January 6-9, **2025**	*Alg 7.1* **Algebraic Representation**	*Alg 7.1* *Lesson 1* 1) Define & Identify: Constant, Variable, Term, Like Terms, Numerical Coefficient, Expression & Equation 2) Writing basic expressions: Sums, differences, products, & quotients	Introduction: 1)Brainstorm elements of junkanoo – *When you think of junkanoo, what do you think of?* (Create list) 2) Brainstorm elements of algebra - *When you think of algebra or hear the word algebra, what do you think of?* (Create list)	Visual Aids: Pictures or videos of Junkanoo parades. Collaboration Tools: Whiteboard or flip chart to jot down ideas.
		Alg 7.1 *Lesson 2* 1) Write basic expressions: • Sums • differences	Activity: Write numerical expressions and algebraic expressions given specific images.	Paper pencils Notebooks Junkanoo Images Vocabulary words

		• products • Quotients 2) Create a word problem for single operation algebraic expressions	1) Review the meaning and symbols of sum, difference, product and quotient with the following image Example Sum: 2 + 2 or 3 + 1 Difference: 4 - 3 or 4 - 1 Product: 2 x 2 Quotient: 4/2 2)For algebra, we will use variables to give more detail. Example Sum: 2c + 2c Difference: 4c – 3c Product: 2 x 2c Quotient: 4c/2 3)Show the class a junkanoo image	Whiteboard Whiteboard markers

Discuss possible algebraic expressions using the keywords

Example
2c + d
4p – 3j

Discuss what the expressions could be representative of in the image?

4)create a storyline and word problem based on the image.
Example.
6 valley boy musicians were scheduled for a performance, but only half came to the performance. Write an

			expression to represent this. 5)Divide students into small groups of 2 or 3. Provide each group with a image or picture related to Junkanoo. Each group will create storylines, word problems and single operation algebraic expressions based on their image.	
		Alg 7.1 **Lesson 3** Write simple algebraic equations involving one operation.	Correlate variables with appropriate elements of junkanoo where possible. Example Sara has 12 whistles. She buys some more whistles. If she now has 20 whistles in total, how many whistles did she buy? Equation: $(12 + x = 20)$	Worksheet Visual Aid with operations

		Alg 7.2	Create take it to your	Take it to your seat
		Lesson 1	seat folders for each	folders:
		Operate on terms, each with	operation.	1)worksheets on
		one symbol:		adding and
		• Adding & subtracting	Divide students into	subtracting.
		like terms	small groups and give	
	Alg 7.2	• Multiplying and dividing.	each group a folder.	2) worksheets on
	Basic Algebraic Operation	Eg. 2 x 3a		multiplication and
			Play junkanoo music to	division of terms.
			indicate when groups	
			must trade their folder	3)printable math
			with another group.	puzzles
				4)memory cards with
				matching questions
				and answer cards
Week__2____	**Alg 7.2**	**Alg 7.2**		
January 13-17,	**Basic Algebraic Operation**	**Lesson 2**	Use variables to	Textbooks
2025		Simplify expressions by	represent elements of	Junkanoo elements
		collecting like terms.	junkanoo	
	Alg 7.3			
	Substitution	**Alg 7.3**		
		Lessons 1 & 2		
		Evaluate algebraic		
		expressions and formulae by		
		substituting whole numbers for		
		symbols.		
	Alg 7.4			
	The Distributive Property			
		Alg 7.4		
		Lesson 1		
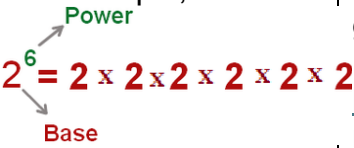
		1) Verify the distributive property using natural numbers. 2) Multiplying a sum by a natural number		
Week_3__ January 20-24, **2025**	***Alg 7.5*** **Factorization** ***Alg 7.6*** **Equations**	***Alg 7.5*** ***Lesson 1*** Rewriting numerical sums and differences as products. ***Alg 7.6*** ***Lessons 1 - 3*** 1) Create one step linear equations from word problems. 2) Solve one-step equations involving: addition, subtraction, multiplication, division using inverse operations, and balancing equations.		Textbooks Junkanoo elements
Week__4__ January 27-31, **2025**	***Alg 7.7*** **Inequalities**	***Alg 7.7*** ***Lesson 1*** Identify the solution sets of simple inequalities. ***Alg 7.7*** ***Lesson 2***	Students will create mini parades showing variable multiplication expressions expanded and in exponent form. This can be done on paper as well as drawings.	Copy paper Pencils Crayons *Optional* Markers Glitter Scissors glue

	EIP 7.1 **Exponents/Indices/Powers**	Represent the solution sets of simple inequalities on the number line. **EIP 7.1** 1) Write variable multiplication expressions (variables) in exponent form and vice versa. Eg. a x a x a = a^3 * Review a) writing numerical multiplication expressions in exponent form and vice versa. b) square numbers c) cube numbers		

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SUBJECT: _____Mathematics_____

GRADE: _____8_____

Pacing Guide Week #	Topic (As displayed on the Pacing Guide)	Objectives (As outlined in the Curriculum)	Integration Strategy (Activities)	Resources
Week_1___ January 6-9, **2025**	Exponents/Indices/Powers	Identify the base and exponent in algebraic expressions. Rewrite expressions involving powers.	Students will design junkanoo pieces representing an algebraic expression written exponentially as well as an expanded product. For example, **Power** $2^6 = 2 \times 2 \times 2 \times 2 \times 2 \times 2$ **Base** Gallery Walk	Copy paper Pencils Crayons *Optional* Markers Glitter Scissors glue https://www.homeschoolmath.net/worksheets/exponents.php

	Algebraic Representation		Use scenarios based on junkanoo themes for the phrases. For example, The parade has 5 dancers and 3 more dancers joined. Ans 5d + 3d	
		Translate English phrases into algebraic expressions and vice versa: up to two operations without brackets. Translate English sentences into algebraic equations.		
Week__2__ January 13-17, **2025**	Basic Algebraic Operation	Operate on terms, involving two or more symbols	Correlate variables with appropriate elements of junkanoo where possible. 3h + 5d + h – 2d	Textbooks Junkanoo elements

		and powers.	Think: (i) 3 horns + 5 drums + 1 horn – 2 drums	
	Substitution	Simplify expressions by collecting like terms including terms with powers.	(ii) if 1 horn cost $120 and 1 drum cost $60, calculate 3h + 5d	
	The Distributive Property		(iii) 2(3h + 5d) 2 groups and each group has 3 horns and 5 drums. What is the total number of horns and total number of drums	
		Evaluate algebraic expressions and formulae by substituting integers for symbols.		
		Multiply sums and differences by integers and variables.		

Week_3___ January 20-24, **2025**	Factorization	Rewrite sums and differences of simple algebraic term as products.	Correlate variables with appropriate elements of junkanoo where possible. Think: For 12 drums and 9 free dancers, how can we divide them into equal groups?	Textbooks Junkanoo elements
	Algebraic Fractions			
	Equations	Multiply and divide simple algebraic fractions. Solve two step equations.	Ans. 3 groups, each with 4 drums and 3 free dancers $3(4d + 3f)$	
Week___4___ January 27-31, **2025**	Equations	Solve simple linear equations involving brackets and equations with variables on both sides.	Correlate variables with appropriate elements of junkanoo where possible. Example $150 - 2f = 40$	Textbooks Junkanoo elements
	Transposition of Formulae		Think aloud Shandray had $150. She purchased 2 large feathers (same price) and now has $40 change. What is the	
	Inequalities			

		Use two-step linear equations to solve word problems. Change the subject of simple formulae with one operation. Describe and interpret sets of integers using inequality symbols.	value of one of those feathers?	

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JUNKANOO INTEGRATION TEMPLATE

SUBJECT: _____Mathematics_____

GRADE: _____9_____

Pacing Guide Week #	Topic (As displayed on the Pacing Guide)	Objectives (As outlined in the Curriculum)	Integration Strategy (Activities)	Resources
Week_1__ January 6-9, **2025**	**Algebra** *Alg 9.1* Basic Algebraic Operations	*Alg 9.1.1* Simplify expressions by collecting like terms. *Alg 9.1.2* Multiply and divide monomials without powers. *Alg 9.1.3* Multiply and divide monomials by expanding powers.	Students will create junkanoo inspired posters with examples of addition, subtraction, multiplication and division of algebraic terms.	Plain computer paper *Options* Crayons colored pencils markers
	Alg 9.2 *Equations*	*Alg 9.2.1* Review solution of simple linear equations involving brackets and		

		equations with variables on both sides. **Alg 9.2.2** Use linear equations to solve word problems		
Week__2___ January 13-17, **2025**	**Alg 9.3** **Algebraic Representation**	**Alg 9.3.1** Translate/write/create algebraic expressions with brackets. **Alg 9.3.2** Translate/write/create algebraic equations with brackets.	Use scenarios based on junkanoo themes for the phrases. For example, The parade has 5 dancers and 3 more dancers joined. Ans 5d + 3d	Pictures (printed or digital) Textbooks or worksheets
	Alg 9.4 **Substitution**	**Alg 9.4.1** Evaluate algebraic expressions and formulae by substituting **rational numbers** for symbols.	Correlate variables with appropriate elements of junkanoo where possible. 3h + 5d + h – 2d Think:	
	Alg 9.5 **The Distributive Property**	**Alg 9.5.1** Expand products and collect like terms to simplify expressions.	(i) 3 horns + 5 drums + 1 horn – 2 drums (ii) if 1 horn cost $120 and 1 drum cost $60, calculate	
	Alg 9.6 **Factorization**	**Alg 9.6.1** Identify factors of monomials to determine the H.C.F.	3h + 5d	

		Alg 9.6.2 Factor simple binomials using the H.C.F.		
Week_3___ January 20-24, **2025**	**Alg 9.7** **Algebraic Fractions**	**Alg 9.7.1** Add and subtract algebraic fractions with constant and variable denominators. **Alg 9.7.2** Multiplication and division of algebraic fractions with monomial numerators and denominators	Junkanoo music will be used to indicate periods of transition.	Junkanoo music
	Alg 9.9 **Transposition of Formulae**	**Alg 9.9.1** Change the subject of simple formulae with no more than two operations and the subject appearing once.		
Week___4___ January 27-31, **2025**	**Alg 9.9** **Inequalities**	**Alg 9.9.1** Translate English phrases to inequalities and vice versa. **Alg 9.9.2** Describe and interpret sets of real numbers using inequality symbols.	Students will translate rules for costume designs into inequalities (e.g., "The total height of the float must be less than 10 feet").	Pictures (printed or digital) Textbooks or worksheets

		Alg 9.9.3 Solve simple linear inequalities involving one operation. ***Alg 9.9.4*** Illustrate the solution set on the number line. ***Alg 9.9.5*** Graph simple inequalities in the Cartesian plane.	Use junkanoo music to indicate transitions between activities.	Junkanoo music

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SUBJECT: _____Mathematics_____

GRADE: _____10 - 12_____

Pacing Guide Week #	Topic (As displayed on the Pacing Guide)	Objectives (As outlined in the Curriculum)	Integration Strategy (Activities)	Resources
Week_1__ January 6-9, **2025**	**Matrices** *Mtx 10.1*	*Mtx 10.1.1* Use matrices to display data and solve problems. *Mtx 10.1.2* Identify and define types of matrices.	Students will use matrices to describe the arrangements of the various sections in a junkanoo parade: dancers, drummers, horns, etc	Junkanoo pictures Information charts
Week__2___ January 13-17, **2025**	**Matrices** *Mtx 10.1*	*Mtx 10.1.3* Use matrices to display data and solve problems. *Mtx 10.1.4*	Students will identify the types of matrices made by the arrangements of the various sections in a junkanoo parade:	Pictures (printed or digital) Textbooks or worksheets

		Determine the compatibility of two matrices for addition and subtraction..	dancers, drummers, horns, etc	
Week_3___ January 20-24, **2025**	**Matrices** *Mtx 10.1*	***Mtx 10.1.5*** Add and subtract matrices ***Mtx 10.1.6*** Multiply by a matrix by a scalar. ces	Junkanoo music will be used to indicate periods of transition.	Junkanoo music
Week___4___ January 27-31, **2025**	**Matrices** *Mtx 10.1*	***Mtx 10.1.7*** Solve simple matrix equations involving addition, subtraction, and scalar multiplication.	Students will create posters with the rules for the operations on matrices .	Copy paper Pencils Crayons *Optional* Markers Glitter Scissors glue