	Chinooks & Falcons	Eagles	Liberty
Writing	**Opinion Pieces** -provide reasons that are supported by facts and details -use linking words and phrases -conclusion related to opinion **Explanatory/ Informative Texts** -introduce topic and group related information into sections with headings, include illustrations -include facts, definitions, concrete details, and quotations -use linking words and phrases -conclusion section related to explanation presented **Narratives** -introduce narrator and/or characters -use dialogue and description of actions -use a variety of transitional words and phrases to manage sequence of events -use sensory details to convey experiences -conclusion	**Opinion Pieces** -provide logically groups that are supported by facts and details -link opinions and reasons using words, phrases, and clauses (e.g., consequently, specifically) -conclusion related to opinion **Explanatory/ Informative Texts** -introduce topic, including general observation and focus, and group related information into sections with headings, include illustrations -include facts, definitions, concrete details, and quotations -link ideas within and across categories of information -conclusion section related to explanation presented **Narratives** -introduce narrator and/or characters -use dialogue and description of actions, show the responses of characters to situations -use a variety of transitional words and phrases to manage sequence of events -use sensory details to convey experiences -conclusion	**Argument** -introduce claims -support claims with clear reasons and evidence, using credible sources -clarify relationships among claims and reasons -conclusion section **Explanatory/ Informative Texts** -introduce topic, using strategies like compare/contrast or cause/effect, and group related information into sections with headings, include illustrations -include facts, definitions, concrete details, and quotations -use transitions to clarify ideas -conclusion section related to explanation presented **Narratives** -introduce narrator and/or characters -use dialogue and description of actions, show the responses of characters to situations, signal shifts from one time frame or setting to another -use a variety of transitional words and phrases to manage sequence of events -use sensory details to convey experiences -conclusion

	Research Projects	Research Projects	Research Projects
	-based on focused questions -investigate different aspects of a topic	-based on focused questions -investigate different aspects of a topic -use several sources	-based on focused questions -investigate different aspects of a topic -use several sources

	Chinooks & Falcons	Eagles	Liberty
Language	-relative pronouns (who, whose, whom) and relative adverbs (where, when, why) -progressive verb tenses -auxiliaries (can, may, must) -prepositional phrases -complete sentences, recognizing fragments and run-ons -frequently confused words (to, too, there, their)	-conjunctions, preposition, and interjections and their function in particular sentences -perfect verb tenses (I had walked.) -use verb tense to convey various times, sequences, states, and conditions -recognize shifts in verb tense -correlative conjunctions	-pronouns in the proper case (subjective, objective, possessive) -intensive pronouns (myself, ourselves) -editing own and others work
Conventions	-capitalization -commas in addresses -commas and quotation in dialogue -possessives -suffixes	-commas and quotation marks to direct speech and quotations in text -comma before coordinating conjunction in a compound sentence	-punctuation to separate items in a series -comma to separate an introductory element form the rest of the sentence -comma to set off the words yes and no, to set off a tag question, and to indicate direct address -underlining, quotation marks, or italics for titles

	Chinooks & Falcons	Eagles	Liberty II
Ratios & Proportional Relationships	**Ratios, Proportions, & Percents** -determine the ratio -equivalent ratios -proportions -percent of a number -compare percentages	**Ratios, Proportions, & Percents** -write a ratio to describe objects in a picture -ratio tables -equivalent ratios -proportions -unit rates -scale drawings -convert between percents, fractions, and decimals -compare percents and fractions -percents of numbers and money amounts -find what percent one number is of another	**Ratios & Proportions** -understand ratios -equivalent ratios -compare ratios -unit rates -do the ratios form a proportion -solve proportions -estimate population size using proportion -rate of change -constant rate of change -scale drawings and scale factor **Proportional Relationships** -identify proportional relationships -find the constant of variations -graph a proportional relationships -write an equation for proportional relationships **Percents** -convert between percents, fractions, and decimals -compare percents to fractions and decimals -find what percent one number is of another -estimate percent of numbers -percents of numbers and money amounts -percent of change

	Chinooks & Falcons	Eagles	Liberty
The Number System	**Number Sense** - count within 1000 - skip-count by 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, and 10s - read and write numbers to 1000 using base-ten numerals, number names, and expanded form -Roman Numerals: I-X, L, C, D, M **Place Value** -convert between place values -compare numbers up to billions -word names for numbers -rounding -understanding integers -put integers in order -simple scientific notation **Addition & Subtraction** -add and subtract whole numbers up to billions -add and subtract money amounts -choose numbers with a particular sum or difference -properties of addition -inequalities with addition and subtraction on a number line -estimate sums and differences -add decimals -subtract decimals **Multiplication** -multiply 1-digit numbers -multiplication patterns over increasing place values -multiply numbers ending in zeroes -properties of multiplication -choose numbers with a particular product	**Number Theory** -convert between standard and scientific notation -compare numbers written in scientific notation -prime and composite numbers -identify factors -prime factorization -greatest common factor -least common multiple **Whole Numbers** -place values in whole numbers -word names for numbers -Roman numerals **Decimals** -decimals place values -word names for decimal numbers -convert decimals to mixed numbers -put decimal numbers in order -inequalities with decimals -round decimals -round whole numbers and decimals -decimals number lines -multiply decimals -divide decimals by whole numbers -add and subtract decimals **Integers** -understand integers -absolute value -number lines with integers -compare and order integers -add and subtract integers **Rational Numbers** -compare rational numbers -put rational numbers in order	**Number Theory** -factors -divisibility rules -prime or composite -prime factorization -greatest common factor -least common multiple -classify numbers **Integers** -understand integers -integers on number lines -absolute value and opposite integers -compare and order integers -integer inequalities with absolute values -add/subtract integers -multiply/divide integers -simplify expressions involving integers -evaluate variable expressions with integers and absolute value **Exponents and Square Roots** -evaluate exponents -solve for the variable -exponents with decimal and fractional bases -negative exponents -simplify expressions involving exponents -multiplication with exponents -division with exponents -power rule -square root of perfect squares -estimate square roots -positive and negative square roots -cube roots of perfect cubes

-estimate products
-multiply 2-digit numbers by 2-digit numbers
-multiply 2-digit numbers by 3-digit numbers
-multiply three or more numbers up to 2-digits each
-multiply three numbers up to 3 digits each
-multiplication input/output tables
-input/output tables: find the rule

Division
-facts to 12
-divide multi-digit numbers by 1-digit
-divide by 1-digit numbers with remainders
-estimate quotient
-division patterns over increasing place values
-divide numbers ending in zeroes
-divide 2-digit and 3-digit numbers by 2-digits
-divide larger numbers by 2-digits
-divide money amounts
-choose numbers with a particular quotient

Number Theory
-prime and composite numbers
-prime factorization
-prime factorization with exponents
-divisibility rules
-greatest common factor
-least common multiple

-absolute value of rational numbers
-add and subtract rational numbers
-multiply and divide rational numbers

Exponents & Square Roots
-write multiplication expressions using exponents
-evaluate exponents
-exponents with decimal bases
-exponents with fractional bases
-understanding negative exponents
-square roots of perfect squares
-estimate square roots

Multiplication & Division
-multiply multi-digit whole numbers with three or more digits
-properties of multiplication
-integer multiplication rules
-divisibility rules
-division patterns with zeros
-divide whole numbers: 2-digit divisors
-divide whole numbers: 3-digit divisors
-integer division rules

Scientific Notation
-convert between standard and scientific notation
-compare numbers written in scientific notation
-multiply numbers written in scientific notation
-divide numbers written in scientific notation

	Chinooks & Falcons	Eagles	Liberty
Numbers & Operations: Fractions	**Fractions & Mixed Numbers** -equivalent fractions -reduce fractions to lowest terms -convert between improper fractions and mixed numbers -least common denominator -graph and compare fractions on number lines -compare fractions and mixed numbers -put fractions in order -round mixed numbers -reciprocals **Add & Subtract Fractions** -decompose fractions multiple ways -add and subtract fractions with like denominators using number lines -add and subtract mixed numbers with like denominators -add and subtract fractions with unlike denominators -add up to 4 fractions with denominators of 10 and 100 -add 3 or more fractions with unlike denominators -compare sums and differences of fractions -add/subtract mixed numbers with unlike denominators -add/subtract fraction in recipes **Multiply Fractions** -multiply fractions by whole numbers -multiply two fractions -multiply three or more fractions -multiply a mixed number by a whole number -multiply two mixed numbers **Divide Fractions**	**Fractions & Mixed Numbers** - equivalent fractions -simplify fractions -least common denominator -compare fractions with like and unlike denominators -convert between improper fractions and mixed numbers -convert between decimals and fractions or mixed numbers -put a mix a decimals, fractions, and mixed numbers in order **Add & Subtract Fractions** -add/subtract fractions with like denominators -add/subtract fractions with unlike denominators -inequalities with addition and subtraction of like and unlike fractions mixed numbers -maps with fractional distances **Multiply Fractions** -multiply fractions of whole numbers -estimate products of fractions and whole numbers -multiply two fractions -multiply three or more fractions and whole numbers -multiply mixed numbers and whole numbers -multiply three or more mixed numbers, fractions, and/or whole numbers **Divide Fractions** -reciprocals -divide fractions by whole numbers -estimate quotients -divide fractions with mixed numbers -simplify expressions involving fractions	**Fractions & Mixed Numbers** - equivalent fractions -simplify fractions -least common denominator -compare and order fractions -convert between mixed numbers and improper fractions -round mixed numbers **Add & Subtract Fractions** -add/subtract fractions -add/subtract mixed numbers -inequalities with addition and subtraction of fractions and mixed numbers -estimate sums of differences of mixed numbers -multiply fractions -divide fractions -maps with fractional distances

-divide fractions by whole numbers
-divide whole numbers by fractions
-divide two fractions
-divide fractions by mixed numbers

Decimals
-understand decimals expressed in words
-place values in decimals
-convert decimals between standard and expanded form
-equivalent decimals
-decimals lines
-compare decimals on number lines
-order decimals
-convert fractions to decimals
-convert decimals to fractions
-convert decimals between standard and expanded form using fractions
-compare decimals and fractions on number lines
-repeating decimals
-put assorted decimals, fractions, and mixed numbers in order
-add/subtract decimals
-estimate products of decimals
-multiply decimals by a power of ten
-multiply a decimal by a one-digit number
-multiply money amounts
-multiply three or more numbers, one of which is a decimal
-multiply two decimals
-divide by powers of ten

	Chinooks & Falcons	Eagles	Liberty
Measurement & Data	**Measurement** **-**choose appropriate customary unit of measurement -compare and convert customary units of length, weight, and volume **-**choose appropriate metric unit of measurement -compare and convert metric units of length, weight, and volume -compare customary units by multiplying -convert customary units involving fractions -convert mixed customary units -add and subtract customary units -convert between customary and metric units -temperature: Celsius and Fahrenheit **Consumer Math** -price lists -unit prices -sale price **Time** -convert time units -add and subtract mixed time units -time zones -elapsed time -find start and end times -schedules and time lines -time patters **Data & Graphs** -read a table -interpret/create line graphs -interpret/create bar graphs -interpret/create pictographs -interpret/create histograms -interpret/create line plots	**Measurement** -estimate customary measurements -convert and compare customary measurements -convert, compare, add, and subtract mixed customary units -multiply and divide mixed customary units -convert and compare metric units -convert between customary and metric units -temperatures above and below zero -convert between Celsius and Fahrenheit **Data & Graphs** -interpret/create pictographs -stem-and-leaf plots -interpret/create line plots -create frequency tables -interpret/create bar graphs -create frequency tables -interpret / create double bar graphs -create histograms -interpret/create double line graphs -interpret box-and-whisker plots -choose the best type of graph **Time** -elapsed time -time units -find start and end times **Consumer Math** -which is the better coupon? -unite prices: which is the better buy? -unite prices with fractions and decimals -unit prices with customary unit conversions -sale prices -sale prices: find the original price	**Measurement** -compare and convert customary units -compare and convert metric units -convert between customary and metric systems -precision -convert between Celsius and Fahrenheit temperatures **Data & Graphs** -interpret/create tables -interpret/create stem-and-leaf plots -interpret/create line plots -create frequency tables -interpret/create bar graphs -create frequency tables -interpret / create double bar graphs -create histograms -interpret/create double line graphs -interpret box-and-whisker plots -interpret/create circle graphs -interpret/create scatter plots -choose the best type of graph **Consumer Math** **-**add, subtract, multiply, and divide money amounts -price lists -unit prices -percents of a number: tax, discount, and more -sale price: find the original price -estimate tips -simple interest -compound interest **Statistics** **-**calculate mean, median, mode, and range -interpret charts to find mean, median, mode, and range -changes in mean, median, mode, and range

-frequency charts
-stem-and-leaf plots
-circle graphs
-choose the best type of graph

-percents- calculate tax, tip, mark-up, and more

Statistics
-calculate mean, median, mode, and range
-interpret charts to find mean, median, mode, and range

-identify representative, random, and biased samples

Probability
-combinations
-probability of one event
-make predictions
-probability of opposite, mutually exclusive, and overlapping events
-compound events
-probability of dependent and independent events
-factorials
-permutations

-quartiles
-identify representative, random, and biased samples

Probability
-probability of simple events
-probability of opposite, mutually exclusive, and overlapping events
-experimental probability
-make predictions
-compound events: find the number of outcomes
-identify independent and dependent events
-probability of independent and dependent events
-factorials
-permutations
-counting principle
-combination and permutation notation

	Chinooks & Falcons	Eagles	Liberty
Geometry	**Geometry** - identify 2-dimensional and 3-dimensional shapes - types of triangles -open and closed shapes and qualities of polygons -regular and irregular polygons -number of sides in polygons -which figure is being described? -classify quadrilaterals -reflection, rotation, and translation -similar and congruent -nets of 3-dimensional figures -types of angles -measure angles with protractors -parts of a circle -perimeter -area of squares and rectangles -area of triangles -area of parallelograms and trapezoids -area of compound figures -area between two rectangles -area of perimeter and irregular figures -volume of rectangular prisms made with unit cubes -volume of irregular figures made with unit cubes -volume of cubes -surface area -three-dimensional figures viewed from different perspectives -lines of symmetry -rotational symmetry -lines, line segments, and rays -parallel, perpendicular, intersecting lines -radius, diameter, circumference, and area of a circle -find the unknown angle in triangles	**Geometry** -lines, line segments, and rays -estimate angle measurement -name angles -complementary and supplementary angles -transversal of parallel lines -triangle review -classify quadrilaterals -find missing angle length in triangles and quadrilaterals -sums of angles in polygons -parts of a circle -central angles of circles -similar and congruent figures -find side length of similar figures -reflection, rotation, and translation -translation, reflection, rotation: graph the image -symmetry -find lengths and measures of bisected lines and angles -area of compound figures -area between two rectangles -circles: calculate area, circumference, radius, and diameter -identify polyhedra and count faces, edges, and vertices -front, side, and top view -nets of 3-dimensional figures -volume of cubes and rectangular prisms -surface area of cubes and rectangular prisms -volume and surface area of triangular prisms -volume and surface area of cylinders -semicircles: calculate area, perimeter, radius, and diameter -quarter circle: calculate area, perimeter, radius, and diameter	**Geometry** -identify and measure complementary, supplementary, vertical, adjacent, and congruent angles -transversal of parallel lines -classify triangles -classify quadrilaterals -find missing angles of quadrilaterals -identify and classify polygons -interior angles of polygons -similar and congruent figures -find side length of similar and congruent figures -congruent triangles: SSS, SAS, and ASA -perimeter -area -parts of a circle -circles, semicircles, and quarter circles -front, side, top view -area between two rectangles -identify polyhedra and count faces, edges, and vertices -front, side, and top view -nets of 3-dimensional figures -volume of cubes and rectangular prisms -surface area of prisms, cylinders, pyramids, and cones -volume of prisms, cylinders, pyramids, and cones -volume and surface area of similar solids -perimeter, area, and volume: changes in scale **Transformations** -identify reflections, rotations, and translations -graph images and find coordinates -symmetry **Pythagorean Theorem** -find the length of the hypotenuse -find the missing length -converse of Pythagorean theorem: is it a right triangle?

	Chinooks & Falcons	Eagles	Liberty
Algebra	**Variables** -simplify expressions using order of operations and parentheses -write/evaluate variable expressions -write equations to represent word problems -function tables -convert graphs to input/output tables -write/graph linear functions **Coordinate Graphs** -coordinate graphs with decimals and negative numbers -graph points on a coordinate plane -quadrants **Probability & Statistics** -calculate mean, median, mode, and range -interpret charts -calculate probability -make predictions	**Variable Expressions** -write variable expressions to represent word problems -evaluate variable expressions with whole numbers -evaluate variable expressions involving decimals, fractions, and mixed numbers -does x satisfy the equation? -solve one-step equations with whole numbers, decimals, fractions, and mixed numbers -evaluate multi-variable expressions -solve two-step equations -does (x,y) satisfy an equation? -identify terms, coefficients, and monomials -add and subtract like terms -simplify variable expressions using properties -distributive property -solve equations with like terms -half-life and population doubling -inequalities on number lines -solve one-step linear inequalities **Coordinate Graph** -graph points on a coordinate plane -coordinate graphs as maps -distance between two points -find points on a function graph -write the linear function shown in a graph -graph linear functions -relative coordinates -identify linear and nonlinear functions	**Variable Expressions** -write variable expressions to represent diagrams -identify terms and coefficients -evaluate single-variable expressions -evaluate multi-variable expressions -add/subtract like terms -simplify variable expressions **Single-variable Equations** -does x satisfy the equation? -model and solve equations using algebra tiles -solve one-step linear equations -solve two-step linear equations -solve multi-step equations -identities and equations with no solutions **Inequalities** -on number lines -solutions to variable inequalities -graph inequalities on number lines -solve one-step linear inequalities -graph solutions to one-step linear inequalities -solve two-step linear inequalities -graph solutions to two-step linear inequalities -solve advanced linear inequalities -graph solutions to advanced linear equations **Linear Functions** -does (x,y) satisfy the equation? -evaluate a function -complete a function table -write a rule for a function table -find points on a function graph -graph a line from an equation -linear function word problems -find the slope of a graph -find the slope from two points -find the slope from an equation -graph a line using slope -slopes of parallel and perpendicular lines

Nonlinear Functions
-identify linear and nonlinear functions
-Does (x,y) satisfy a nonlinear equation?
-evaluate a nonlinear function

Coordinate Graphs
-points on coordinate graphs
-quadrants and axes
-coordinate graphs as maps
-distance between two points

System of Linear Equations
-is (x,y) a solution to the system of equations?
-solve a system of equations by graphing
-find the number of solutions to a system of equations by graphing
-classify a system of equations
-solve a system of equations
-solve a system of equations using elimination

Monomials and Polynomials
-identify monomials
-model polynomials with algebra tiles
-add/subtract polynomials
-multiply/divide polynomials
-powers of monomials
-square and cube roots of monomials
-multiply polynomials using algebra tiles
-multiply polynomials
-multiply polynomials to find area