



# Understanding Math

## CORRELATIONS THE UNDERSTANDING NUMERATION SERIES of PROGRAMS With Nevada Mathematics Standards and the Investigations Series Grade Five

### PROGRAMS

The Understanding Math Series of Programs consist of 10 programs written for Kindergarten to Tenth grade. The ten programs are:

- |  |   |   |
|--|---|---|
| Understanding Numeration (K-3) English/Spanish |   |   |
| Understanding Fractions (4-10)                 | Understanding Probability (4-10)              | Understanding Exponents (4-10)                  |
| Understanding Algebra (4-10)                   | Understanding Graphing (4-10)                 | Understanding Equations (4-10)                  |
| Understanding Percent (4-10)                   | Understanding Measurement and Geometry (4-10) | Understanding Whole Numbers and Integers (4-10) |

### UNDERSTANDING NUMERATION

The Understanding Numeration program has been developed for levels Kindergarten to Third grade. It is available in both English only and English/Spanish. Navigating through Understanding Numeration will require the user to select the following in the listed order:

1. Select a CONCEPT – There are 5 concepts to choose from e.g. Operations
2. Select a SKILL – Within each Concept there are several Skills to choose from
3. Select a LEVEL and LESSON – Within a Skill the series of Lessons have been organized by Levels A through D

Lessons are sequenced through the levels to build understanding of mathematics concepts from the concrete to the abstract. There are off-computer support sheets available for each lesson and can be selected from within the program.

A detailed Lesson Synopsis is available at [www.neufeldmath.com/synopsis](http://www.neufeldmath.com/synopsis) to assist teachers in lesson planning.

### UNDERSTANDING MATH

Understanding Math consists of 9 highly interactive programs developed for fourth to tenth grade. All concepts are developed from the concrete to the abstract using a variety of approaches. The programs can be implemented in a variety of teaching situations; whole class lessons with one computer and data projector, small group centers, and student centered computer lab settings. The lessons can be used in remediation, intervention and enrichment. All Topics within each program end with randomly generated Practice Questions and Topic Tests. Student results from the Topic Tests can be tracked for analysis and assessment. Resources are available at [www.neufeldmath.com](http://www.neufeldmath.com) which include correlations, support sheets and word banks.



Grade Five

Content Standards

1.0 Numbers, Number Sense, and Computation

**Content Standard 1.0** Students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

*At a minimum, students will maintain previous skills and attain the following:*

	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Place Value	1.5.1 Identify and use place value positions of whole numbers and decimals to hundredths.	Unit 3: 27, 28–31, 33–34, 52–54 Unit 6: 32–36	<u>Understanding Fractions</u> <b>Section 5. Introduction to Decimals</b> Ones, Tenths, Hundredths, Thousandths Decimals to Tenths Examples 1, 2 Decimals to Hundredths Examples 1, 2, 3, 4, 5



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Fractions	1.5.2 Add and subtract fractions with like denominators using models, drawings, and numbers.	Unit 4: 99, 102–103, 104–105, 111, 129–131, 132–133, 136, 140, 141	<p><b>Understanding Fractions</b></p> <p><b>Section 8. Adding Fractions</b></p> <p>Pattern Blocks  Hexagons 1, 2, 3  Summary  Fraction Strips  Concepts 1, 2, 3  Percent Strips  Examples 1, 2  Decimal Strips  Examples 1, 2  The Clock  Examples 1, 2  Adding Fractions on a Number Line  Examples 1, 2, 3</p> <p><b>Section 9. Subtracting Fractions</b></p> <p>Pattern Blocks  Hexagons 1, 2, 3  Summary  The Clock  Examples 1, 2, 3  Fraction Strips  Concepts 1, 2  Percent Strips  Examples 1, 2  Decimal Strips  Examples 1, 2  Subtracting Fractions on a Number Line  Examples 1, 2, 3</p>



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
	Compare fractions with unlike denominators using models and drawings, and by finding common denominators.	Unit 4: 61–62, 64–69, 73–75, 77, 82, 83–84, 86, 117–120, 122–126, 129–134, 136, 140, 145, 152–153	<p><b>Understanding Fractions</b></p> <p><b>Section 8. Adding Fractions</b></p> <p>The Lowest Common Denominator</p> <p>Examples 1, 2</p> <p>Word Problems</p> <p>Alexander’s Friend</p> <p>Eating Candy</p> <p>Goal Scoring</p> <p>Taking a Walk</p> <p>Shapes in a Square</p> <p>Examples 1, 2</p> <p>Fraction Card Game</p> <p>Instructions</p> <p>Levels 1, 2</p> <p><b>Section 9. Subtracting Fractions</b></p> <p>Lowest Common Denominator</p> <p>Examples 1, 2</p>
	Identify, model, and compare improper fractions and mixed numbers.	Unit 4: 11, 119, 137–138, 140	<p><b>Understanding Fractions</b></p> <p><b>Section 13. Improper Fractions and Mixed Numbers</b></p> <p>Improper Fractions and Mixed Numbers – What are they?</p> <p>The Concept... Cubes</p> <p>One Whole</p> <p>Examples 1, 2, 3</p> <p>Representing Mixed Numbers</p>



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Comparing and Ordering	1.5.3 Read, write, compare, and order integers in mathematical and practical situations.	Related content: Unit 3: 37, 73, 99, 106 Unit 9: 25–26, 65–67, 69–70	<b><u>Understanding Whole Numbers and Integers</u></b> <b>Section 4. The Meaning of Integers</b> Number Sentence Factory Control Room – Length of Timer Training Room Factory Floor 5 questions (randomly generated) Integers Around Us Temperature Helicopter Submarine Elevator Integer Line Opposite Integers Example 1, 2



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
<b>Facts</b>	<b>1.5.5 Use multiples of 10 to expand knowledge of basic multiplication and division facts.</b>	<b>Unit 1:</b> 45–47 <b>Unit 3:</b> 44–45 <b>Unit 7:</b> 73, 89, 95	<b><u>Understanding Whole Numbers and Integers</u></b> <b>Section 3. Multiplying and Dividing Whole Numbers</b> The 10 x 10 Multiplication Table User Picks Computer Picks The 12 x 12 Multiplication Table Associative Property Examples 1, 2 Patterns in Multiplication Patterns in Multiplication by 10, 100, 1000 Examples 1, 2, 3
<b>Estimating and Estimation Strategies</b>	<b>1.5.6 Estimate to determine the reasonableness of an answer in mathematical and practical situations involving decimals.</b>	<b>Unit 6:</b> 100, 113–114, 133, 145 See also, Ten-Minute Math.	<b><u>Understanding Fractions</u></b> <b>Section 5. Introduction to Decimals</b> Estimation on the Decimal Line Level 1: 0 to 1 Level 2: 0 to 5 Comparing Decimals Examples 1, 2, 3, 4 Ordering Decimals Introduction Examples 1, 2, 3, 4

	Nevada Mathematics Standards Objective	Learning	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Computation	1.5.7 Add and subtract decimals.		<b>Unit 6:</b> 103–104 <b>Unit 6 Student Activity Book:</b> 54, 62 <b>Unit 8 Student Activity Book:</b> 45, 56	<b><u>Understanding Fractions</u></b> <b>Section 14. Addition and Subtraction of Decimals</b> Adding Decimals Click and Drag 5 questions Tenths –The Pencil Example 1 through 5 Tenths -The Line Example 1 through 4 Hundredths –The Town Example 1 through 4 Method 1 -Partial Sums Examples 1, 2 -With Grids Method 2 -Columns Examples 1, 2 -With Grids Examples 3, 4, 5, 6 -Without Grids Method 3 –Right to Left Examples 1, 2 -With Grids Examples 3, 4, 5, 6 -Without Grids Subtracting Decimals Tenths – The Pencil Examples 1, 2, 3, 4, 5 Hundredths – The Field Examples 1, 2, 3, 4 Method 1 – Right to Left Examples 1, 2 -With Grids Examples 3, 4, 5, 6 -Without Grids Method 2 – Trade First Examples 1, 2 -With Grids Examples 3, 4, 5, 6 -Without Grids Method 3 – Add Up Examples 1, 2, 3, 4 – With Grids Examples 5, 6, 7, 8 -Without Grids



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
	<b>Multiply and divide decimals by whole numbers in problems representing practical situations.</b>	<b>Unit 7:</b> 103–104, 111 <b>Unit 7 Student Activity Book:</b> 46, 53, 63	<b><u>Understanding Fractions</u></b> <b>Section 15. Multiplication and Division of Decimals</b> Recall Basic Facts Multiply by Repeated Addition Examples 1, 2 Special Case: Multiply a Decimal by a Whole Number Examples 1, 2 with Blocks
	<b>Use order of operations to evaluate expressions with whole numbers.</b>	<b>Online Activity:</b> An Online Activity that teaches this objective will be made available.  Related content: <b>Unit 1:</b> 83	<b><u>Understanding Whole Numbers and Integers</u></b> <b>Section 9. Order of Operations</b> Order in Addition – Whole Numbers Trial 1, 2 Conclusion Example 1, 2 Order in Addition – Integers Trials 1, 2 Conclusion Examples 1, 2 Order in Multiplication – Whole Numbers Trials 1, 2 Conclusion Examples 1, 2

	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Number Theory  Solving Problems and	<b>1.5.8 Generate and solve addition, subtraction, multiplication, and division problems using whole numbers and decimals in practical situations.</b>	<p><b>Unit 1:</b> 71–76, 92–93, 95–96, 99, 101–103, 127–128, 144, 148–149</p> <p><b>Unit 2:</b> 79–80, 81–82</p> <p><b>Unit 3:</b> 46–47, 61–62, 66–68, 73–74, 80, 84, 94–96, 100–102, 103, 108</p> <p><b>Unit 5:</b> 96–98, 101</p> <p><b>Unit 6:</b> 10, 12, 87–91, 93–95, 98–101, 103–104, 105–106, 108–111, 113–114, 132–133, 142–144</p> <p><b>Unit 7:</b> 27–28, 42–43, 69–73, 77–78, 86–88, 91–92, 103–105, 107–109, 111–112, 115</p>	<p><b><u>Understanding Fractions</u></b></p> <p><b>Section 14. Addition and Subtraction of Decimals</b></p> <p>Decimals Around Us Length in Metric Units Tools Examples 1, 2, 3, 4, 5 Pencils Examples 1, 2, 3, 4, 5 Money Examples 1, 2, 3, 4, 5</p> <p><b>Section 15. Multiplication and Division of Decimals</b></p> <p>Decimals Around Us – Word Problems Example 1 - Oranges Example 2 - Bananas Example 3 - Cycling Example 4 – Baseball Cards Example 5 - Cookies</p>



## 2.0 Patterns, Functions, and Algebra

**Content Standard 2.0** Students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

*At a minimum, students will maintain previous skills and attain the following:*

	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Patterns	<b>2.5.1 Identify, describe, and represent patterns and relationships in the number system, including triangular numbers and perfect squares.</b>	<b>Unit 1:</b> 37–38, 122–125, 132–135 <b>Unit 5:</b> 72–73 <b>Unit 8 Student Activity Book:</b> 23, 25, 30, 33, 39, 42, 47, 50, 53, 57, 60	<b><u>Understanding Algebra</u></b> <b>Section 2. Tiles and Algebra</b> Area Area... The Concept Area... Examples 1, 2, 3 Introduction to Tiles Tile Representation Like Terms Combinations Square Terms Pictures to Words to Algebraic Expressions Examples 1, 2 Algebraic Expressions to Tiles Examples 1, 2, 3
Variables and Unknowns	<b>2.5.2 Find possible solutions to an inequality involving a variable using whole numbers as a replacement set.</b>	<b>Unit 1:</b> 88–91, 95, 99, 142–144, 145, 148	<b><u>Understanding Equations</u></b> <b>Section 7. Solving Inequalities</b> Comparing Integers The Integer Line Example 1... Greater Than Example 2... Less Than Explanation Example 3... Greater Than Example 4... Less Than Greater Than or Less Than Inequalities What Are They?

	<b>Nevada Mathematics Standards Learning Objective</b>	<b>Investigations in Number, Data, &amp; Space</b>	<b>NEUFELD LEARNING SYSTEMS Understanding Math Lessons</b>
	<b>Solve equations with whole numbers using a variety of methods, including inverse operations, mental math, and guess and check.</b>	<b>Unit 1:</b> 115–117, 122–125 <b>Unit 2 Student Activity Book:</b> 44 <b>Unit 3 Student Activity Book:</b> 1, 11, 16, 22, 23, 33, 56, 57, 65 <b>Unit 4 Student Activity Book:</b> 34, 60, 61, 64 <b>Unit 6 Student Activity Book:</b> 6, 38, 52, 63 <b>Unit 7:</b> 33, 69 <b>Unit 7 Student Activity Book:</b> 2, 3, 4, 5, 8, 11, 18, 19, 23, 29, 46, 50, 55, 62, 66 <b>Unit 8 Student Activity Book:</b> 3, 4, 8, 12, 17, 21, 27, 36, 55 <b>Unit 9 Student Activity Book:</b> 11, 21, 27, 42	<b><u>Understanding Equations</u></b> <b>Section 1. Tiles, Balances, Equations</b> Definitions Introduction Summary 1, 2 The Meaning of “Solving an Equation” Solve by Systematic Trials Recall Tile Concepts Balances... An Introduction Tiles, Balances, Equations Practice Questions 5 questions (randomly generated) Topic Test 10 questions (randomly generated)



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Number Sentences, Expressions, and Polynomials	2.5.3 Complete number sentences with the appropriate words and symbols including $\geq$ , $\leq$ and $\neq$ .	<p><b>Unit 1:</b> 71–76, 92–93, 95–96, 99, 101–103, 127–128, 144, 148</p> <p><b>Unit 3:</b> 46–47, 61–62, 66–68, 73–74, 80, 84, 94–96, 100–102, 103, 108</p> <p><b>Unit 4:</b> 109, 131, 133, 136, 140</p> <p><b>Unit 6:</b> 93–95, 103–104, 110–111</p> <p><b>Unit 7:</b> 27–28, 42–43, 69–73, 77–78, 86–88, 91–92, 103–105, 107–109, 111–112, 115</p> <p><b>Unit 8:</b> 47, 53, 69–74, 77, 78, 79, 83–87, 91, 94–96, 98–99, 103–104</p>	<p><b><u>Understanding Fractions</u></b></p> <p><b>Section 1. The Meaning of Fractions</b></p> <p>Comparison of Fractions</p> <p>The Symbol</p> <p>Greater Than – Ex 1, 2</p> <p>Less Than – Ex 1, 2</p> <p>Greater and Less Than – Ex 1, 2</p>

### **3.0 Measurement**

**Content Standard 3.0** Students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

*At a minimum, students will maintain previous skills and attain the following:*

	<b>Nevada Mathematics Standards Learning Objective</b>	<b>Investigations in Number, Data, &amp; Space</b>	<b>NEUFELD LEARNING SYSTEMS Understanding Math Lessons</b>
<b>Comparison, Estimation, and Conversion</b>	<b>3.5.1 Estimate and convert units of measure for weight and volume/capacity within the same measurement system (customary and metric).</b>	<b>Online Activity:</b> An Online Activity that teaches this objective will be made available.	<b><u>Understanding Measurement and Geometry</u></b> <b>Section 4. Solids... Volume and Surface Area</b> Volume of a Solid Concept Volume of a Prism: Examples 1, 2



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Precision in Measurements	3.5.2 Measure volume and weight to a required degree of accuracy in the customary and metric systems.	<b>Online Activity:</b> An Online Activity that teaches this objective will be made available.	<b><u>Understanding Measurement and Geometry</u></b> <b>Section 4. Solids... Volume and Surface Area</b> Volume of a Solid Concept Volume of a Prism: Examples 1, 2
Formulas	3.5.3 Describe the difference between perimeter and area, including the difference in units of measure.	<b>Unit 5:</b> 72–75, 80–82, 86–88, 92, 93–94, 101–103 <b>Unit 8:</b> 69–74, 76–81, 83–88, 90–93	<b><u>Understanding Measurement and Geometry</u></b> <b>Section 2. Perimeter and Area of Polygons</b> Length of the Metal Strip Find the Perimeter (3 Examples) Introduction to Area Units Estimate Examples 1, 2, 3 Areas of Polygons Area of a Rectangle Concept Examples 1, 2, 3, 4
Money	3.5.4 Determine totals, differences, and change due for monetary amounts in practical situations.	<b>Unit 1 Student Activity Book:</b> 54 <b>Unit 3 Student Activity Book:</b> 23 <b>Unit 7:</b> 103–104, 111 <b>Unit 7 Student Activity Book:</b> 46, 53, 63 <b>Unit 8 Student Activity Book:</b> 45, 56	
Time	3.5.6 Determine equivalent periods of time, including relationships between and among seconds, minutes, hours, days, months, and years.	<b>Unit 9:</b> 24–25 <b>Unit 9 Student Activity Book:</b> 1, 28	

#### 4.0 Spatial Relationships, Geometry, and Logic

**Content Standard 4.0** Students will identify, represent, verify, and apply spatial relationships and geometric properties to solve problems, communicate, and make connections within and beyond the field of mathematics.

*At a minimum, students will maintain previous skills and attain the following:*

	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Two – Dimensional Shapes	4.5.1 Identify, classify, compare, and draw triangles and quadrilaterals based on their properties.	Unit 5: 25–30, 32–33, 43–44, 51–52, 54–56, 60–61, 64, 86, 90–93, 96–99, 101–103, 109–112, 138	<b>Understanding Measurement and Geometry</b> <b>Section 2. Perimeter and Area of Polygons</b> In This Topic Polygons... What are They? Concept A Triangle is A Quadrilateral is A Pentagon is A Hexagon is An Octagon is Classify Polygons
	Identify and draw circles and parts of circles, describing the relationships between the various parts.	<b>Online Activity:</b> An Online Activity that teaches this objective will be made available.	<b>Understanding Measurement and Geometry</b> <b>Section 3. Circles</b> In This Topic Circles All Around Us!
Congruence, Similarity, and Transformations	4.5.2 Represent concepts of congruency, similarity, and/or symmetry using a variety of methods including dilation (enlargement/reduction) and transformational motions.	Unit 1: 32 Unit 5: 109–113, 115–123, 125–128, 130–132	<b>Understanding Graphing</b> <b>Section 4. Transformations</b> Translations – An Introduction Slide #1 #2, #3, #4 Reflections – An Introduction Flip #1 #2, #3 Rotation – An Introduction Turn #1, #2, #3, #4, #5 Transformation Machine Example 1, 2, 3, 4, 5 Dilation Mapping Rule Examples Examples 1, 2



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Coordinate Geometry and Lines Of Symmetry	4.5.3 Graph coordinates representing geometric shapes in the first quadrant.	<p><b>Online Activity:</b> An Online Activity that teaches this objective will be made available.</p> <p>Related content:  <b>Unit 5:</b> 54–56, 79–80, 99, 101, 116–119, 122–123, 127, 132</p>	<p><b>Understanding Graphing</b>  <b>Section 3. Points on a Grid</b>  Number Houses  Grids on Maps Given Coordinates... Find Location  Examples  Given Location... Find Coordinates  Goin' Fishin - Practice  Ordered pairs  Axis  Quadrants and Cartesian Plane  Finding a Point  Order is Important  Examples  Examples 1, 2, 3  Shapes Randomly Generated</p>



	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Three - Dimensional Figures	4.5.4 Predict and describe the effects of combining, dividing, and changing shapes into other shapes.	Unit 2: 37–40, 51, 55, 56–57 Unit 5: 77–78, 84–86, 90–91, 93, 96–99	<b><u>Understanding Measurement and Geometry</u></b> <b>Section 8. Projective Geometry</b> An Introduction Toothpicks on Isometric Dot Toothpick to Cube Paper The Views Using Isometric Grid Paper Solid 1, 2, 3, 4, 5 Orthographic Projections: Introduction
Lines, Angles, and Their Properties	4.5.6 Identify, draw, label, and describe planes, parallel lines, intersecting lines, and perpendicular lines.	Unit 5: 32, 34, 35, 40, 43 Unit 5 Student Activity Book: 15	<b><u>Understanding Measurement and Geometry</u></b> <b>Section 6. Angles and Polygons</b> In This Topic Parallel Lines Examples with Parallel Lines Examples 1 ,2
Triangles	4.5.7 Describe characteristics of right, acute, obtuse, scalene, equilateral, and isosceles triangles.	Unit 5: 25–30, 51–52, 54–56, 60–61, 64	<b><u>Understanding Measurement and Geometry</u></b> <b>Section 5. Angles and their Measure</b> Classify Angles Classification Memory Game
Logic	4.5.9 Represent relationships using Venn diagrams.	Unit 5: 44, 138	<b><u>Understanding Measurement and Geometry</u></b> <b>Section 2. Perimeter and Area of Polygons</b> Classify Polygons with Venn Diagrams

## 5.0 Data Analysis

**Content Standard 5.0** Students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

*At a minimum, students will maintain previous skills and attain the following:*

	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Data Collection and Organization	5.5.1 Pose questions that can be used to guide the collection of categorical and numerical data.	Unit 9: 53–54 See also, Ten-Minute Math.	<b>Understanding Graphing</b> <b>Section 2. Statistics</b> Data... What is it? Examples of Data Example 1... Fast Food Earnings Example 2... Infants Walk Example 3... Canada and U.S.A. Forecast Example 4... King of the Strike Out Example 5... U.S. Stake in India Example 6... Allergy Troubles A Summary: Examples Statistics... What is it? Collecting Data Throw A Die Throw 2 Dice Voting
	Organize and represent data using a variety of graphical representations including stem and leaf plots and histograms.	Unit 2: 96–98, 106–108 Unit 5: 71–73, 84–88, 91, 98–99 Unit 8: 29–32, 36–37, 42–44, 50–51, 57–59, 67–68, 71–74, 78–80, 83, 86–88, 94–96, 99–100, 103–104, 108–109 Unit 9: 23–28, 30–34, 36–40, 42–44, 53–58, 60–62, 63–67, 69–71, 73–74, 77–80, 87–92, 93–97, 98–103, 105–108	<b>Understanding Graphing</b> <b>Section 2. Statistics</b> Stem and Leaf Diagram Example 1... Age of Fans Example 2... Height of Students Bar Graph Example 1... Energy Example 2... Lengths of Rivers Histogram Example 1... Height of Students Example 2... Roll of Die
Central Tendency and Data	5.5.2 Compute range.	Unit 9: 27, 28, 114	<b>Understanding Graphing</b> <b>Section 5. Relations, Equations, and Functions</b> Domain and Range Example 1: Triangle Display the Relation

	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
	Model and compute the measures of central tendency for mean, median, and mode.	Unit 9: 30–32, 33, 34, 38, 39, 42, 44	<u>Understanding Graphing</u> Section 2. Statistics Measures of Central Tendency Introduction The Mean Average The Median Average The Mode Summary Another Example Adding Data Points
of Data Interpretation	5.5.3 Interpret data and make predictions using stem-and-leaf plots and histograms.	<b>Online Activity:</b> An Online Activity that teaches this objective will be made available.  This activity prepares students for this objective. <b>Unit 9:</b> 25–28	<u>Understanding Graphing</u> Section 2. Statistics <u>Understanding Graphing</u> Section 2. Statistics Stem and Leaf Diagram Example 1... Age of Fans Example 2... Height of Students Bar Graph Example 1... Energy Example 2... Lengths of Rivers Histogram Example 1... Height of Students Example 2... Roll of Die

	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
Permutations and Combinations	5.5.4 I/S Represent and solve problems involving combinations using a variety of methods.	<b>Online Activity:</b> An Online Activity that teaches this objective will be made available.	<b><u>Understanding Math</u></b> <b>ALL SECTIONS</b>
Experimental And Theoretical Probability	5.5.5 Conduct simple probability experiments using concrete materials.	<b>Unit 9:</b> 87–92, 94–96	<b><u>Understanding Probability</u></b> <b>Section 1. Introduction to Probability</b> Experiment with Spinners Experiments 1, 2, 3, 4, 5, 6 The Spinner Game Board 1 Single Player 2 player Board 2 Single Player 2 player IT's in the Bag Tree Diagrams Coin and Die Meals Socks Rabbits Forest Problem Solving – Logic and Probability Introduction Demonstration Level 1, 2 Practice Questions 10 questions (randomly generated) Topic Test 10 questions (randomly generated)

	Nevada Mathematics Standards Learning Objective	Investigations in Number, Data, & Space	NEUFELD LEARNING SYSTEMS Understanding Math Lessons
	Represent the results of simple probability experiments as decimals to make predictions about future events.	Unit 9: 87–92, 94–96	<u>Understanding Probability</u> <b>Section 2. What's the Chance?</b> Probability What is it ? Introductions 1, 2 Probability Examples 1. Coin Toss 2. Picking 1 Ball 3. Picking 2 Balls 4. Spinner #1 5. Spinner #2 6. The Bag 7. Travel Example 8. Number Example 9. Rabbit Example 10. Mailing Letters 11. Forest 12. Ahmed's Maze
Statistical Inferences	5.5.6 Select an appropriate type of graph to accurately represent the data and justify the selection.	Unit 5: 71 Unit 8: 29–32, 36–37, 42–44, 50–51, 57–59, 67–68, 83, 94–96, 99–100, 103–104, 108–109 Unit 9: 25–26, 37–39, 42, 66, 67, 69, 70, 71, 77, 78, 79, 91, 96, 97, 101	<u>Understanding Graphing</u> <b>Section 2. Statistics</b> Practice Questions 6 questions (randomly generated) Topic Test 10 questions (randomly generated)