Windsor BOE Curriculum Committee Meeting

Wednesday, March 6, 2013 4:30 PM
Curriculum Committee, L.P. Wilson Community Center, Room 17, 601 Matianuck Avenue, Windsor, CT 06095

1. **Call to Order, Pledge of Allegiance, Moment of Silence**
2. **Review of Algebra I Curriculum**
3. **Review of Kindergarten Language Arts Curriculum**
4. **Adjournment**

Windsor Public Schools
Curriculum Map for the Secondary Level
Algebra 1

<table>
<tr><td colspan="2">Purpose of the Course: This is the first course in the high school sequence with a focus on Algebra. The use of real-life applications, graphing calculators, long-term investigations, problem solving strategies and mathematical modeling empowers students to think mathematically and prepares students for continued study in mathematics. Essential topics include: patterns, equations, linear functions, systems, exponential functions and quadratics functions. Integrated topics include: data analysis, geometry, and discrete mathematics.</td></tr>
<tr><td>Name of the Unit: Unit 1 Patterns</td><td>Length of the unit: 4 weeks</td></tr>
<tr><td colspan="2">Purpose of the Unit: This unit builds on the skills developed K-8 on mathematical practice 8 (look for and express regularity in repeated reasoning) and brings it to a sophisticated level with a formal study of patterns. This builds the foundation of using patterns to describe relationships used in Algebra 1 and 2. During this first unit, teachers will have the opportunity to learn about students' mathematical background, ability to work cooperatively, and ability to communicate clearly both orally and in writing. At the same time, teachers will be inviting students to engage in learning mathematical skills within the context of interesting problems that connect to real world issues.</td></tr>
<tr><td colspan="2">Common Core State Standards Addressed in the unit:
F-BF 2. Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.

F-IF 3. Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.

F-BF 1. Write a function that describes a relationship between two quantities.

a. Determine an explicit expression, a recursive process, or steps for calculation from a context.</td></tr>
<tr><td>Big Ideas:
1. Analyzing patterns and generalizing patterns allows you to make predictions.
2. Relationships can be represented as tables, graphs, and equations.</td><td>Essential Questions:
1. How can patterns be generalized?
2. How can patterns help in problem solving?</td></tr>
<tr><td>Students will know:
1. how to identify and write the recursive rule
2. how to identify and write the explicit rule
3. how to identify and write rules for an arithmetic sequence
4. how to identify and write rules for a geometric sequence
5. how to identify linear functions
6. how to identify exponential functions</td><td>Students will be able to:
1. describe and analyze patterns – including arithmetic and geometric sequences from real world contexts
2. identify patterns and functions using tables, graphs, words and symbolic rules.
3. determine the n^{th} term of a sequence with and without technology
4. translate one representation (table, graph, equation) of a pattern into another representation
5. write both an explicit rule and a recursive</td></tr>
</table>

	rule for a sequence 6. make and justify predictions based on patterns

Significant task 1: Representing Patterns

Students will work collaboratively to build models of the molecules of the simple hydrocarbons that are used as fuels using physical models. They will create and analyze different representations of patterns – tables, graphs and symbolic rules. They will write the recursive and explicit rules for arithmetic sequences. Students will discover that there is a relationship between the molecular structure of the fuels and the amount of energy produced when a particular hydrocarbon combusts. During the full class discussion time should be spent on connecting the tables and graphs through the science application.

This is the first task of the year so it will be hard to know which students would have difficulty with the task. However, teachers should have a few physical models already built and have a few investigations pre-populated with the drawings of the models. Teachers can then provide these for students who they struggling with this part of the task. Teachers can also use eChem to model the molecules on the computer or on the students' tablets.

This task directly targets the following standards: F-IF 3

Timeline: 2 days

Key vocabulary: pattern, table, graph

Resources: Activities 1.1.1, 1.1.2, 1.1.3

Materials: molecule sets from Science department/tablets

Significant task 2: Arithmetic Sequences

This investigation fully develops students' skills for writing the explicit rules for a sequence. During this task students analyze many different situations (stacking cups, weight lifting, building bridges, seating at an arena etc.) and develop an explicit rule to model the relationships in context. Students complete these investigations in small groups or pairs and full class discussions are focused on reasoning in the development of the rules.

Within the above investigations integers and order of operations are reviewed through a more formal study of the patterns in the real number system. Students are provided an opportunity to strengthen their skills with positive and negative integers by working with algebra tiles. This is an excellent place to differentiate in terms of content. Students will be challenged and stretched on the difficulty of integer and order of operation skill. Students will be regrouped to work on specific skills that are not fully

developed through analysis of a pre-assessment. Skills of focus include operations on integers, order of operations, evaluating expressions, and combining like terms.

This task directly targets the following standards: B-BF 1.a

Timeline: 3 days

Key vocabulary: Arithmetic sequence, Integers, order of operations, recursive rule, explicit rules, linear

Resources: Activity 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.5, 1.2.6, 1.2.7, 1.3.1, 1.3.2, 1.3.3, 1.3.4

Materials needed: colored pencils, cups & Algebra Tiles

Significant task 3: Geometric Sequences

Students will again collaboratively solve several problems in the context of finance and the famous fractals Sierpinski's Triangle and the Koch Snowflake. Groups or pairs explore using a recursive rule with a calculator and use a spreadsheet to quickly generate geometric sequences. This investigation foreshadows the development of exponential functions and their applications in Unit 7. Full class discussion will again focus on reasoning in the development of the rules.

In the resources there are increasingly more complex fractals to explore. These should be used to stretch students/groups as challenge. Teachers can also provide the first stage for students who have difficulty starting the sequence development. There are several different fractal designs, students may choose which fractal design they would like to complete.

This task directly targets the following standards: F-BF.2

Timeline: 4 days

Key vocabulary: Doubling, geometric sequence, fractals

Resources: Activities 1.4.1, 1.4.2, 1.4.3, 1.5.1, 1.5.2, & 1.5.3

Materials: toothpicks/tablets

Common learning experiences:

- Introduction to IXL and tablets
- Each significant task has exit slips & journal entries which are found in the resource binders.
- Warm-ups should focus on computation with integers, order of operations, evaluating expressions, combining like terms, and two step equations in order to pre-teach to unit 2.
- Teacher computer with Internet access and speakers (if videos are shown)
  - http://www.alicekelley.com/
  - http://www.splashnology.com/article/60-amazing-fractal-designs/393/
  - http://www.incrediblesnaps.com/spiral-fractal-designs

Common assessments including the end of unit summative assessment:

- Course Pre-Assessment
- End-unit Test
- **Performance task: Honeycombs** Students are placed in the role of an engineer working for a plastics company manufacturing honeycomb core products. They have been asked to design round banquet tables using honeycomb cores. Students will work in groups to design the table and determine the manufacturing cost. Each group will be given different dimensions. Groups will complete a report to their boss to explain the pros and cons of the assigned dimensions and provide a marketing strategy for their table. Some of their marketing strategies may include writing a newspaper article, writing a brochure, video/radio commercial or constructing a display board. Then as a class the students have to select the tables that will be manufactured and marketed to customers. For this task the mathematics will be graded using a task specific rubric. During the completion of the task (2 days) students will also be graded using the collaboration rubric (school wide).

Teacher notes:

- Some students may have a difficult time bonding the proper atoms to each other.
- Some students will confuse the difference between recursive and explicit rules.
- Some students will have difficulty filling out the third column of the table, they will instinctively fill out the salary during the finance activity. But this is important for them to fill out the recursive pattern column so they can write their recursive rule.
- Some students will have difficulty writing geometric rules because they have a hard time understanding exponents.
- Process standards to highlight through instruction: reason abstractly and quantitatively, model with mathematics, and look for and express regularity in repeated reasoning.

Windsor Public Schools
Curriculum Map for the Secondary Level
Algebra 1

<table>
<tr><td colspan="2">Purpose of the Course: This is the first course in the high school sequence with a focus on Algebra. The use of real-life applications, graphing calculators, long-term investigations, problem solving strategies and mathematical modeling empowers students to think mathematically and prepares students for continued study in mathematics. Essential topics include: patterns, equations, linear functions, systems, exponential functions and quadratics functions. Integrated topics include: data analysis, geometry, and discrete mathematics.</td></tr>
<tr><td>Name of the Unit: Unit 2 Linear Equations and Inequalities</td><td>Length of the unit: 5 weeks</td></tr>
<tr><td colspan="2">Purpose of the Unit: The material in this unit is the heart of algebraic thinking. Students write, simplify, evaluate, and model situations with linear expressions. Students then examine the concept of equality and use linear equations and linear inequalities to model and solve real-world problems. This unit builds on equation solving starting in grade 6 with one-step equations and inequalities. As students enter in 9th grade with the increased exposure and skill mastery for equation solving in the middle school, this unit will shorten in length leaving more time for exploration of the quadratic at the end of the course.</td></tr>
<tr><td colspan="2">Common Core State Standards Addressed in the unit:

A-CED.1. Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.

A-REI.1. Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

A-CED.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.

A-REI.3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.</td></tr>
<tr><td>Big Ideas:

1. Properties of equality and inverse operations are used to solve equations.
2. Relationships can be represented as tables, graphs, and equations.</td><td>Essential Questions:

1. What’s happening in the equation and how do you “undo” that?
2. How can you represent a relationship in an algebraic rule?</td></tr>
<tr><td>Students will know:

1. the difference between an equation and an expression
2. the definitions of equality, inequality, and their symbols
3. equations can have one solution, no</td><td>Students will be able to:

1. develop linear equations and inequalities that model real world situations
2. simplify and solve equations and inequalities to solve problems
3. judge the reasonableness of answers using</td></tr>
</table>

solutions or many solutions	estimation strategies

Significant task 1: Understanding Algebraic Expressions and Solving One & Two-step Equations

Investigation 1 begins with number puzzles to encourage an understanding of algebraic expressions and the idea of working backwards to find a solution. Activities in this investigation ask students to use flowcharts and verbal descriptions to represent algebraic expressions. These techniques build students' understanding of how the order of operations is used in evaluating an expression and solving an equation. Students can work in small groups, pairs or individually. Vocabulary with a focus on key words is emphasized in this investigation with full class discussions focused on this vocabulary.

In Investigation 2, students will apply their knowledge of solving one- and two-step equations and will write equations that model and solve real world problems such as bank fees, weight loss, and taxi cab charges. There is an emphasis on distinguishing between evaluating an expression and solving an equation. For this investigation students should be paired or in small groups. Reasoning almost to the level of formal proof is a focus of this task and makes it more complex than the equation solving in grade 8.

Students who are struggling can continue to use the flow charts or algebra tiles as a resource. At the end of the unit, students who are still weak will be targeted for additional skill development during targeted learning time. Students who are excelling would be given equations with decimals and fractions to further push their number sense.

This task directly targets the following standards: A-CED.1. & A-REI.1

Activities involving algebra tiles and flow charts are available for differentiation.

Activities 2.1.2, 2.1.3, 2.2.1, 2.2.2

Timeline: 4 days

Key vocabulary: expressions, coefficient, constant, evaluate, & inverse operations

Resources: Activities 2.1.1, 2.1.4, 2.2.3, 2.2.4, 2.2.5, 2.2.6, & 2.2.7

Materials needed:

- algebra tiles

Significant task 2: Multi-Step Equations

Students can work on both investigations in small groups, pairs, or individually. Whole class discussion should focus on analyzing student work using the document camera to highlight student errors and to fix the work.

Investigation 3 focuses on modeling real world scenarios with equations that contain variables on both sides. Students are asked to justify their steps in the equation solving process, recognize the role of the commutative and associative properties, and check the reasonableness of their answers. Teachers may continue to use flow charts or algebra tiles to support student learning. The context within this task involves a skate park, computer technicians, baseball tickets, dog spa, recycling etc. The taxi cab task should be used to push students who are excelling.

In Investigation 4, students solve multi-step equations that require the distributive property and combining like terms. Throughout this investigation, students model situations in different ways, from hands-on to symbolic. Activities involving algebra tiles and pan balances are included to support different learning styles. There are many opportunities for students to write and solve equations to solve problems in contexts. Applications include walk-a-thons, pizza parties, geometry problems, and sports problems.

This task directly targets the following standards: A-CED.1 & A-REI.1

Activities involving algebra tiles and pan balances are available for differentiation.

- Activity 2.3.1, 2.3.5, 2.4.2

Timeline: 5-6 days with a focus on differentiation to build skill to mastery

Key vocabulary: algebraic expression, coefficient, constant, distributive property, evaluate

Resources: Activities 2.3.2, 2.3.3, 2.3.4, 2.3.6, 2.3.7, 2.4.1, 2.4.2, 2.4.3, 2.4.5, 2.4.5a, 2.4.7, & 2.4.8

Materials needed: algebra tiles, pan balance (see resources)

Significant task 3: Formulas and Literal Equations

Investigation 5 expands students' equation solving skills to include the transformation of literal equations through the context formulas from science and geometric figures. Students learn to change the subject of a formula (literal equation) by algebraically solving for a variable. Flowcharts are reintroduced as a method of attack for struggling students. Students can work in small groups, pairs, or individually and teachers will probably have a mix of grouping based on ability level on this task. The level of sophistication called for in manipulating formulas and solving for various variables is a very challenging skill for some students. Others can be challenge and there is an additional activity for them (2.5.3).

This task directly targets the following standards: A-CED.4. & A-REI.3

Timeline: 2-3 days

Key vocabulary: algebraic expression, coefficient, constant, literal equations

Resources: Activities 2.5.1, 2.5.2 & Activity 2.5.3 (challenge)

Significant Task 4: Linear Inequalities

Students write and solve inequalities to solve a variety of contextual problems (banking, budgeting, finance applications) and are asked to represent solutions of inequalities on number lines. Activities focus student attention on the difference between inequalities and equations and on the justification for reversing an inequality symbol when a negative number is multiplied to both sides or divided by both sides. Students will not be at such different levels in skills on this task and should work in heterogeneous small groups with a full class discussion focused on attention detail in the representation of the solutions. Teachers will select student work containing errors or omissions and the class will work to make it a stronger response. Use the document camera to help facilitate these discussions.

This task directly targets the following standards: A-CED.1

Timeline: 2-3 days

Key vocabulary: coefficient, inverse operations, & linear inequality

Resources: 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 2.6.8

Common learning experiences:

- Each significant task has exit slips & journal entries which are found in the resource binders.
- Warm-ups should focus on evaluating expressions, two step equations with decimals and fractions, and solving multi-step step equations.
- WisWeb Algebra Arrows:
  - http://www.fi.uu.nl/wisweb/en/
- Algebra Balance Scales (NLVM) applet
  - http://nlvm.usu.edu/en/NAV/frames_asid_201_g_4_t_2.html?open=instructions&from=category_g_4_t_2.html
- Pan Balance – Expressions applet at NCTM Illuminations.
  - http://illuminations.nctm.org/ActivityDetail.aspx?ID=10
- Link to online practice for solving multi-step linear equations
  - http://www.algebralab.org/lessons/lesson.aspx?file=Algebra_OneVariableMultiStep.xml
- Link to online videos and examples of solving multi-step 1-variable equations
  - http://www.onlinemathlearning.com/solving-multi-step-equations.htmland
  - http://www.yourteacher.com/algebra1/multistepequations.php
- Link to the instructions for writing simple programs for the TI-83 or TI-84 graphing calculators
  - http://education.ti.com/
- Link to power point for solving literal equations
  - http://teachers.henrico.k12.va.us/math/hcpsalgebra1/module3-5.html

Common assessments including the end of unit summative assessment:

- End-Unit Test
- **Performance Task: I-pod Storage** Students work individually with collaboration allowed to decide which apple product they would purchase after winning a $500 prize for their outstanding academic achievement. Students have to research the different apple products and will be allowed to select an alternative if they so choose and present the pros and cons of their purchase, model the storage capacity with equations/inequalities, and provide evidence for their choice communicated through a thank you note to the school. For this task the mathematics will be graded using a task specific rubric. During the completion of the task (3-4 days) students will also be graded using the problem solving rubric (school wide).

Teacher notes:

- Some students do not realize that the first term without a sign is positive.
- Some students forget to combine like terms before solving the equation.
- Some students forget to distribute the negative sign.
- When students go to check their solution for their equations they fail to realize that they are substituting their answers into the original equation.
- Some students forget to flip the inequality symbol when they multiply or divide by a negative number.
- The final investigation, Investigation 6, re-introduces the concept of linear inequalities first introduced in grade 6 now with CCSS. It will be two years before students enter grade 9 with this skill developed to the level called for in CCSS grades 6-8. Starting in 2014-2015, discovery on the effect of multiplying and dividing by a negative coefficient will not be needed and students should come with the basic solving skills intact.
- Process standards to highlight through instruction: construct viable arguments and critique the reasoning of others, attend to precision, and look for and make use of structure.

Windsor Public Schools
Curriculum Map for the Secondary Level
Algebra 1

Purpose of the Course: This is the first course in the high school sequence with a focus on Algebra. The use of real-life applications, graphing calculators, long-term investigations, problem solving strategies and mathematical modeling empowers students to think mathematically and prepares students for continued study in mathematics. Essential topics include: patterns, equations, linear functions, systems, exponential functions and quadratics functions. Integrated topics include: data analysis, geometry, and discrete mathematics.	
Name of the Unit: Unit 3 Relations and Functions	Length of the unit: 3 weeks
Purpose of the Unit: Students are introduced to the concept of a function. They learn how to define the domain and range of a function. Students organize and analyze data in tables and graphs and use the information to describe relationships. Students use function notation in a variety of contextual situations. Finally the students are introduced to a variety of parent functions which gives additional contexts in which students look at multiple representations of functions and consolidate their understanding of independent and dependent variables and function notation. Emphasis is on distinguishing between linear functions (which are studied in greater depth in the next unit) and non-linear functions (which appear later in this course and in subsequent courses).	

Common Core State Standards Addressed in the unit:

A-CED.2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

F-IF.2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

F-IF.4. For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.

A-CED Create equations that describe numbers or relationships.

F-IF.1. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then f(x) denotes the output of f corresponding to the input x. The graph of f is the graph of the equation y = f(x).

F-IF.5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.

F-IF Analyze functions using different representations.

F-IF.9. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

Big Ideas:	Essential Questions:
1. Functions describe relationships between two quantities that vary. 2. Relationships can be represented as tables, graphs, and equations.	1. What defines a function? 2. How can functions be used to model real world situations, make predictions and solve problems?
Students will know: 1. definitions of domain and range 2. definition of a function and the Vertical Line Test 3. representations of functions including: verbal descriptions, tables, graphs, and equations 4. function notation	Students will be able to: 1. describe the independent and dependent variables and how they relate to the domain and range of a function that describes a real world problem 2. illustrate and compare functions using a variety of technologies (graphing calculators, spreadsheets and online recourses) 3. translate one representation of a function into another representation 4. create graphs of functions representing real world situations with appropriate axes and scales 5. use function notation to find y for a given x and to find x for a given y 6. collect real data and create meaningful graphical representations of the data with and without technology

Significant task 1: Defining relations and functions

This task involves two investigations. In the first investigation students will explore and define relations, functions, domain, and range. In the second investigation students will examine relations and functions presented by tables, graphs, and verbal descriptions; identify the input and output variables; classify relations as functions or non-functions; and examine the domains of selected real world functions. Students explore these topics through various contexts including: bottle water sold and amount of plastic in landfills and water precipitation in Hartford.

At the end of the second investigation, students will also perform an experiment and collect data that can be modeled by a function. The experiment illustrates Aesop's fable "The Crow and the Pitcher." Students model the rise in water as marbles are added to the "pitcher" after collecting the data using marbles and graduated cylinder. The investigations should be done in small groups or pairs with a full class discussion at the conclusion of each. The discussion should focus on reasoning and justification for conclusions.

This task directly targets the following standards: F-IF.1, F-IF.4, F-IF.5, F-IF.9

Timeline: 4 days

Key vocabulary: dependent variable, domain, equation of a function, function, graph of a function, independent variable, input, mapping diagram, ordered pair, output, range, relation, table, vertical line test

Materials: marbles, graduated cylinders (from science), water

Resources: Activities 3.1.1a, 3.1.1b, 3.1.2, 3.2.1, 3.2.3, 3.2.4, 3.2.2a, 3.2.2b

Significant task 2: Function Notation and Evaluating Functions

In this task students will accomplish three major things. First, they will formalize the definition of a function, domain and range. This will be more procedural and should include some individual guided practice which the resources below identify. Secondly, students will explore the concept of piecewise functions through the context of a hot air balloon ride in the Berkshire Mountains. For this part of the task students will work in collaborative teams (groups or pairs). Students are now applying their procedural knowledge of functions, domain and range in context through the development of the piecewise function. Lastly, student will develop understanding and procedural knowledge of function notation. For this part of the task, students could work either collaboratively or independently.

This task directly targets the following standards: F-IF.2

Timeline: 2 days

Key vocabulary: dependent variable, domain, evaluating a function, equation of a function, function, function notation, independent variable, input, mapping diagram, ordered pair, output, range, relation

Resources: Activities 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5

Significant task 3: Multiple Representations and Applications of Functions

In this final task students apply their knowledge built over the other two tasks to solve various problems involving functions. This is a time to offer challenge by choice in the problems students explore. Some of the element of choice can also be that students could work independently or choose to work with one to three other students. Problems offered include: basketball throws, travel time, volume of a cube, phone trees, handshakes, geo-board application (see common learning box for on-line resource), and postal rates. Students can present their problems in any way that demonstrates their understanding of the problem and a gallery walk or other presentation can be done after the groups finish. Peer assessment will be included as the task is finalized. Teachers should use the results of the mid-unit assessment to differentiate problem selection for specific students who need to develop more skills or need a challenge.

This task directly targets the following standards: A-CED 2, F-IF 4, F-IF 5

Timeline: 5 days

Key vocabulary: dependent variable, domain, evaluating a function, equation of a function, function, function notation, graph of a function, independent variable, input, linear function, non-linear function,

ordered pair, output, parabola, range, table

Resources: Activities 3.4.1a, 3.4.2, 3.4.3, 3.4.4a, 3.4.5, 3.4.9, 3.4.1.b, 3.4.4b, Unit 3 Parent Functions Reference Sheet, peer feedback rubric

Common learning experiences:

1. Each significant task has exit slips & journal entries which are found in the resource binders.
2. Warm-ups should focus on evaluating expressions, determining if a table, graph or equation is a function, and graphing functions using tables.
3. www.bottledwater.org Beverage Marketing 2008 Market Report Findings
4. www.weather.com for the precipitation data (A search of temperature and precipitation in Hartford CT)
5. Amusing video on consumers preference for bottled water http:www.bofunk.com/video/2402/bottled_water_water_vs_tap_water.ht
6. Environmental video: http://www.thefutureschannel.com/movies/environmental_movies.php
7. Powermills Activity Sheet: http://www.thefutureschannel.com/pdf/algebra/powermills.pdf
8. On-line GEO Boards (interactive) http://www.glencoe.com/sites/common_assets/mathematics/ebook_assets/vmf/VMF-Interface.html

Common assessments including the end of unit summative assessment:

- End-unit Test
- There is no performance assessment unit.

Teacher Notes:

- Students may be confused when two distinct inputs produce the same output.
- Students may be confused with difference between inputs (independent variable) and outputs (dependent variable)
- Some students still have problems squaring negative numbers.
- Process standards to highlight through instruction: model with mathematics and use attending to precision and make sense of problems and persevere in solving them.

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Algebra 1

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Name of the Unit: Unit 4 Linear Functions	Length of the unit: 5 weeks

Purpose of the Unit: Students start Unit 4 by exploring the distinction between linear and nonlinear behavior, and then focus on learning about linear functions. Throughout Unit 4, students derive linear models of real-world situations in order to analyze situations, make predictions or solve problems. Analyzing situations often takes the form of identifying the real world meaning of the slope and the *x*- and *y*-intercepts of a linear model. Making predictions involves evaluating models for a given independent variable (given *x* find *y*), and solving equations for the independent variable given the dependent variable (given *y* find *x*). Problem solving occurs through the use of various representations: algebraic, tabular, graphic and numeric.

Common Core State Standards Addressed in the unit:

F-LE 2. Construct linear ... functions, including arithmetic ... sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).

F-LE 5. Interpret the parameters in a linear ... function in terms of a context.

F-LE 1. Distinguish between situations that can be modeled with linear functions [and with exponential functions].
a. Prove that linear functions grow by equal differences over equal intervals...
b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another....

F-IF 6. Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.*

F-IF 7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.*

a. Graph linear ...functions and show intercepts..

F-IF 8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.

Big Ideas:	Essential Questions:
1. Linear functions are characterized by a constant average rate of change (or	1. What are the advantages and disadvantages of different representations

constant additive change). 2. Functions describe relationships between two quantities that vary. 3. Relationships can be represented as tables, graphs, and equations.	of functions? 2. What does a linear functions slope and intercepts tell you? 3. How do linear functions help us analyze real world situations and solve practical problems?
Students will know: 1. characteristics that result with positive/negative slopes and zero/undefined slopes 2. advantages and disadvantages of various forms of linear functions: standard form, slope-intercept form, and point-slope form 3. how to identify the changing parameters of a linear function and how they affect the graph 4. slope as a constant rate of change 5. representations of functions including: verbal descriptions, tables, graphs, and equations	Students will be able to: 1. interpret functions that arise in applications in terms of the context 2. analyze linear functions using different representations 3. create graphs of linear functions representing real world situations and label with appropriate axes and scales 4. Explain how changes in the parameters m and b affect the graph of a linear function. 5. determine a linear function form two non-vertical ordered pairs or from a single ordered pair and a rate of change 6. explain the meaning and practical significance of the slope and the x and y intercepts as they relate to context, graph, table and/or equation

Significant task 1: Introduction to Linear Functions

In the first investigation students distinguish non-linear functions from linear functions by exploring distance as a function of time in verbal, graphical and tabular form. Students learn that linear functions are characterized by a constant rate of change. Students begin to develop the concept of constant rate of change by examining the data generated by a motion detector as displayed in a time-distance graph. Students will understand that “walking steadily” creates a straight-line graph, whereas “speeding up” or “slowing down” creates a graph that is non-linear. Decreasing the distance from the starting place (the motion detector) will produce a graph that decreases as one reads from left to right. Conversely, increasing the distance from the starting place will create a graph that increases as one reads from left to right.

In the second investigation students recognize linear functions in tabular and graphical forms and represent functions with verbal descriptions, equations, graphs, and tables. Students will develop methods for identifying the characteristics of linear functions and an understanding of rate of change and initial value in a real word context such as pizza attributes, gas consumption, draining a swimming pool, ordering DVDs, etc. Students will identify the characteristics of a linear function, investigate the role of slopes and *y*-intercepts in the graphs of functions and relate this information to the context of various problems. Students create graphs by hand and with the graphing calculator. They engage in

activities that highlight the capability of linear functions to model a wide range of real world relationships.

In the third investigation students discover how to identify the slope of a linear function from a table, two ordered pairs, graph and the verbal description of a linear function. Students also learn how to interpret the slope in the context of real world situations such as bank accounts, temperature, and slopes of roofs/snow slides. Students calculate the slope from data in tables and graphs. They identify and interpret the slope from real-world linear situations as the constant rate of change in the dependent variable compared to the change in the independent variable.

In all three investigations students would be working in small groups or pairs. The motion detector activity is the only time students investigate as a full class. Full class discussion should focus on magnitude of the slope, direction, and the meaning of the slope and y-intercept in context. Teachers should push students to include reasoning with their responses.

This task directly targets the following standards: FLE-1, FIF-7A, F-IF6, F-LE1, F-LE1A, F-IF6, F-LE1a,F-LE1b

Timeline: 6 days

Key vocabulary: constant, dependent variable, independent variable, initial value, linear function, linear models, non-linear function, rate of change, slope, velocity

Resources: Investigation 1 - 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5
Investigation 2 - 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7
Investigation 3 - 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7

Materials needed: motion detector & rulers

Significant task 2: Slope-Intercept Form

Students explore the results of how changing the two parameters *m* and *b* changes the graph of a linear function. They will discover that changing the *y*-intercept causes a vertical shift in the graph, that the sign of the slope determines whether the graph is increasing or decreasing, and that the magnitude of the slope affects the steepness of the graph. Students will be able to graph a function given in slope-intercept form not only by making a table of values, but also by first plotting the *y*-intercept and then one or more additional points using the slope. Students will be able to find the slope-intercept equation of a line from a graph, table or real-world scenario, thus reinforcing the multi-representational approach. As in other investigations, students have opportunities to use what they are learning to solve a variety of contextual problems (snow fall, Teddy Bear sale, bank accounts, scuba diving, etc.). To complete the investigation students will discover the relationships of the slopes of parallel lines and of perpendicular lines. Again, small groups or pairs should complete the investigation and full class discussion should focus on connecting the equation to the tables and graphs with strong reasoning.

This task directly targets the following standards: F-LE2, F-LE5, F-IF7, F-IF7a, G-GPE 5

Timeline: 4 days

Key vocabulary: constant change, dependent variable, independent variable, initial value, linear

function, linear models, parameters, rate of change, slope, slope-intercept form, x-intercept, y-intercept

Resources: Activities 4.4.1, 4.4.2, 4.4.3, 4.4.4, 4.4.5, 4.4.6, 4.4.7

Significant task 3: Standard Form

Students are introduced to the standard form of linear equations, rewrite equations in standard form into slope-intercept form, and use linear models in various forms to explore real world situations (basketball scores, food consumption, candy production, event planning, etc.). Students will graph the standard form of an equation two ways: by finding the *x*- and *y*- intercepts and by transforming the standard equation to slope-intercept form. Full class discussions should focus on the new form with contrasting the slope-intercept form.

This task directly targets the following standards: F-LE5, F-LE2, F-LE1

Timeline: 4 days

Key vocabulary: constant change, dependent variable, independent variable, initial value, linear function, linear models, parameters, rate of change, slope, slope-intercept form, standard form, x-intercept, y-intercept

Resources: Activities 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.5

Significant Task #4: Point-Slope Form

Students learn to use the point-slope form of a linear equation and develop a deeper understanding of functions as they solve a variety of contextual problems including parking tickets, taxi cabs, car washes, and floods. Students discover that the slope-intercept, point-slope and standard forms of a linear equation are equivalent, and students learn to select a form that best fits the data or the question to be answered. Selecting the best method to graph should be the focus of the full class discussion.

This task directly targets the following standards: F-LE5, F-LE2, F-IF8, F-LE1

Timeline: 4 days

Key vocabulary: constant change, dependent variable, independent variable, initial value, linear function, linear models, parameters, point-slope form, rate of change, slope, slope-intercept form, standard form, x-intercept, y-intercept

Resources: Activities 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.6.7

Common learning experiences:

- Each significant task has exit slips & journal entries which are found in the resource binders.
- Warm-ups should focus on solving equations for y, finding slope and interpreting rate of change.

Common assessments including the end of unit summative assessment:

- End-unit Test
- Mid-Term Exam

Teacher notes:

1. Students have a hard time understanding that rate of change and slope are the same thing.
2. Some students do not understand that rise/run is a rate of change.
3. Some students will need support solving literal equations.
4. Some students will struggle to see the link between the three different forms of linear functions.
5. Process standards to highlight through instruction: make sense of problems and persevere in solving them, look for and make use of structure, and look for and express regularity in repeated reasoning.

Windsor Public Schools
Curriculum Map for the Secondary Level
Algebra 1

Purpose of the Course: This is the first course in the high school sequence with a focus on Algebra. The use of real-life applications, graphing calculators, long-term investigations, problem solving strategies and mathematical modeling empowers students to think mathematically and prepares students for continued study in mathematics. Essential topics include: patterns, equations, linear functions, systems, exponential functions and quadratics functions. Integrated topics include: data analysis, geometry, and discrete mathematics.

Name of the Unit: Unit 5 Scatter Plots and Trend Lines	Length of the unit: 6 weeks

Purpose of the Unit: Students will be able to evaluate one and two-variable data using scatter plots with trend lines, histograms, and box plots. They will construct these graphs solely with the use of graphing calculators and other software. Students have already been introduce to the topics in this unit in grades 6-8 with the development of the one-variable graphs starting in grade 6 and two variable graphs starting in grade 8. The focus of the work in grades 6-8 is developing the skills to graph by hand, describe distributions, and compare distributions. Students also began developing various sampling techniques in grade 7 and have experience using simulations as well. Predictions and generalizing to populations was also introduced in grades 7 & 8. The focus of this 9th grade unit is to more fully develop the skills to graph using technology, generalize to populations when appropriate and to make predictions to solve problems.

Common Core State Standards Addressed in the unit:

S-ID.2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.

S-ID.3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).

S-ID.6. Represent data on two quantitative variables on a scatter plot and describe how the variables are related.

S-ID.7. Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data.

S-ID.6a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.

S-ID.6b. Informally assess the fit of a model function by plotting and analyzing residuals.
S-ID.6c. Fit a linear function for scatter plots that suggest a linear association.

S-ID.8. Compute (using technology) and interpret the correlation coefficient of a linear fit.

S-ID.9. Distinguish between correlation and causation.

Big Ideas:	Essential Questions:
1. Correlation does not imply causation when evaluating data. 2. Outliers can greatly skew summary statistics.	1. How do we make predictions and informed decisions based on current numerical information? 2. What are the advantages and disadvantages of analyzing data by hand versus using technology? 3. What is the potential impact of making a decision from data that contains one or more outliers?
Students will know:	Students will be able to:
1. differences between measures of center and spread: mean, median (quartile 2), mode, range, quartile 1, quartile 3, minimum, maximum, percentile and inter-quartile range 2. the attributes and effects of outliers on measures of center and spread 3. the attributes of representations of data: box plots, histograms, dot plots, and scatter plots 4. interpolating vs. extrapolating 5. how to calculate the regression equation and correlation coefficient to interpret the validity of the equation using the graphing calculator 6. the properties of linear functions and their representations	1. explore and define measures of center 2. explore measures of spread and display data in dot plots, histograms, and box-and-whisker plots 3. fit a trend line to data, write an equation for the trend line, and use the equation to interpolate or extrapolate 4. answer a question about the world that can be analyzed with bivariate data 5. use technology to calculate the regression equation and correlation coefficient 6. solve an equation for *y* given *x* and solve for *x* given *y* 7. explain the meaning of slope and intercepts in context 8. identify when correlated data has a causal relationship

Significant task 1: One Variable Data

In the first investigation students will explore measures of central tendency and spread and displays of one-variable data including, dot plots, histograms, and box-and-whisker plots exclusively with the graphing calculator and other technology. Time will be spent so students will be fluent in the steps needed to construct the graphs using technology and build a more formal determination of an outlier

and the effect is has on the summary of the data. Students should work in collaborative groups as they create the graphs. Full class discussion will focus on the effects of outliers on the shape, center and spread of the data. Students will explore these concepts through the context of hurricanes, homeruns, test grades, calories in fast food products, gas prices, etc.

This task directly targets the following standards: S-ID 1; S-ID 2; S-ID 3

Timeline: 6 days

Key vocabulary: bivariate data, boxplot, causation, correlation, data, dependent variable, distribution, domain, graphical representation, histogram, hypothesis, independent variable, inter quartile range (IQR), linear relationship/model, mean (average), median, measures of central tendency, mode, mound shape, nonlinear relationship/model, ordered pair, outlier, prediction, scale, skewed distribution, standard deviation, variable

Resources: Activities 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7

Significant task 2: Scatterplots, Trend Lines, & Linear Regression

In investigation two, students will be introduced to trend lines for scatterplots through the context of NBA height and weight, fuel efficiency, ice cream sales, homework/grades, etc. They will fit a trend line to a scatter plot by hand and find its equation. They will use the equation of the trend line to make predictions by interpolating or extrapolating. The students will develop a deeper understanding about the meaning of the slope and intercepts by describing the rate of change and start point in context.

In investigation three, students will continue to explore trend lines and predictions through the context of telephone development, shark attacks, and Target sales. They will become fluent in using the graphing calculator to construct a scatterplot, find the regression equation and plot it on the graph. Students will also use other technology (Excel, Google docs, Fathom etc.) to apply these same skills. Students will also use technology to find and interpret the correlation coefficient. The students will be able to interpret the meaning of the correlation coefficient and explain the difference between correlation and causation.

In both investigations students should work in small groups or pairs while constructing the graphs and analyzing the data. Full class discussion should focus on correlation vs. causation, the strength of the linear relationship (correlation coefficient), and the appropriateness of predictions.

This task directly targets the following standards: S-ID 6 a, c; S-ID 7, S-ID.8, S-ID.9

Timeline: 6 days

Key vocabulary: causation, correlation, correlation coefficient, data, dependent variable, domain, extrapolation, graphical representation, hypothesis, independent variable, interpolation, line of best fit, linear regression, linear relationship/model, ordered pair, outlier, prediction, regression equation, scale, scatter plot, slope, trend line, variable, *x*-intercept, *y*-intercept, bivariate data

Resources: Activities 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5

Significant task 3: Explorations with Data

In this final task students apply their knowledge built over the other two tasks to represent and analyze data to solve a wide variety of problems. This is a time to offer challenge by choice in the problems students explore. Some of the element of choice can also be that students could work independently or choose to work with one to three other students. Problems offered include: forensic anthropology, stadium wave, population and congress representation, flying rubber bands, balloon fly, sea glass, Barry Bonds homeruns, Chicago Bulls scores, and cricket chirps. Students can present their problems in any way that demonstrates their understanding of the problem and a gallery walk or other presentation can be done after the groups finish. Peer assessment will be included as the task is finalized. Teachers should use the results of the mid-unit assessment to differentiate problem selection for specific students who need to develop more skills or need a challenge.

This task directly targets the following standards: S-ID 1; S-ID 2; S-ID 3, S-ID 6 a, c; S-ID 7, S-ID.8, S-ID.9

Timeline: 8 days in conjunction with the performance assessment (see below)

Key vocabulary: bivariate data, boxplot, causation, correlation, data, dependent variable, distribution, domain, graphical representation, histogram, hypothesis, independent variable, inter quartile range (IQR), linear relationship/model, mean (average), median, measures of central tendency, mode, mound shape, nonlinear relationship/model, ordered pair, outlier, prediction, scale, skewed distribution, standard deviation,

Resources: Activities 5.4.1, 5.4.2, 5.4.3a, 5.4.3b, 5.4.4, 5.4.5, 5.4.6, 5.4.7, 5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.5.5, 5.5.6,

Materials needed: projector, rulers, several yard/meter sticks or several tape measures, rubber bands (400-500), several stopwatches or the ability to project online stopwatch (or use a cell phone), masking tape, several pieces of 2-foot long rope - different diameters, 9-inch balloons for every student in the class, 12-inch balloon for the teacher

Common learning experiences:

- Each significant task has exit slips & journal entries which are found in the resource binders.
- Warm-ups should focus on solving for *y*, writing equations of lines, finding the five number summery and determining positive and negative correlations.

Common assessments including the end of unit summative assessment:

- End-unit Test
- **Performance Assessment: Is it Linear?** In this task students are empowered to gather a set of data that would model a linear relationship. Students have free in choice in the data they choose to gather with the only restrict that it must be linear data. The audience in the task is their school counselor and they are put in the role of chief explainer of linear relationships. Students will generate their own data and final products but some time to collaborate with their peers will be given in class (while working on significant task 3). Students will also have free choice in how they prepare their final product (poster, report, video etc.). The mathematics will

be graded using a task specific rubric. An additional school wide rubric will also be used (communication or problem solving).

Teacher notes:

1. If students have a difficult time fitting a trend line to data, writing an equation for the trend line, and using the equation to interpolate or extrapolate, the upcoming investigations will reinforce these concepts.
2. Process standards to highlight through instruction: construct viable arguments and critique the reasoning of others, model with mathematics, and use appropriate tools strategically.

Windsor Public Schools
Curriculum Map for the Secondary Level
Algebra 1

Purpose of the Course: This is the first course in the high school sequence with a focus on Algebra. The use of real-life applications, graphing calculators, long-term investigations, problem solving strategies and mathematical modeling empowers students to think mathematically and prepares students for continued study in mathematics. Essential topics include: patterns, equations, linear functions, systems, exponential functions and quadratics functions. Integrated topics include: data analysis, geometry, and discrete mathematics.	
Name of the Unit: Unit 6 Systems of Linear Equations	Length of the unit: 4 weeks
Purpose of the Unit: Students will represent, compare and analyze two linear equations, look for common solutions and use this information to make choices between competing situations in real world contexts. Students will solve systems of equations numerically, graphically, and algebraically. They will be able to explain what the solution of a system of linear equations represents in the context of various applications such as those used by business leaders, economists, scientists, engineers, nutritionists, race car drivers, and athletes. They also will explore the special cases of parallel lines (no solution) and identical lines (infinite solutions). Students will recognize when one method of solving a system of linear equations is more advantageous than another. While students have had an introduction to systems of linear equations in grade 8, the work in grade 9 provides students with more experience solving systems algebraically rather than graphically (see A-REI 5).	

Common Core State Standards Addressed in the unit:

A-REI 6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

A-REI 11. Explain why the *x*-coordinates of the points where the graphs of the equations *y* = *f*(*x*) and *y* = *g*(*x*) intersect are the solutions of the equation *f*(*x*) = *g*(*x*); find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where *f*(*x*) and/or *g*(*x*) are linear functions.

A-REI 5. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.

A-CED 3. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.

Big Ideas:	Essential Questions:
1. Relationships can be represented as tables, graphs, and equations. 2. Properties of equality and inverse operations are used to solve equations. 3. Problems involving more than one	1. What does the intersection point of two lines represent? 2. How can you use systems of equations to compare two similar functions? 3. What does it mean when a systems of linear equations has one solution,

constant rate of change can be modeled with systems of linear equations.	infinitely many solutions, or no solutions?
Students will know: 1. strategies to solve and analyze linear equations 2. some equations have one solution, infinitely many solutions, or no solution 3. strategies to compare functions represented differently 4. the most effective strategy (graphing, table, substitution, elimination) for solving a particular system of equations depending on how that system is presented	Students will be able to: 1. graph and analyze linear equations 2. explore patterns among lines with the same slope (parallel lines) 3. explore patterns among lines whose slopes are negative reciprocals of each other (perpendicular lines) 4. solve systems of equations graphically and algebraically using all four strategies 5. model and solve problems using a system of linear equations 6. determine the most effective strategy for solving a particular system of equations depending on how that system is presented

Significant task 1: Solving Systems of Linear Equations

Students will solve systems of linear equations by making tables, solving linear equations in one variable, and graphing lines (both by hand and with the graphing calculator). They will find and interpret solutions of systems of linear equations and use systems of linear equations to solve real world problems. First, students will work in small groups to determine whether or not women's salaries within a specific salary range will ever equal the men's salaries. Students will use their knowledge from Unit 5 to calculate the intersection point of two linear functions using the graphing calculator. Once they have the point of intersection, they will explain what the point of intersection means in the context of the problem. The next application will have the students explore under what conditions one gym membership is more economical than another. Students may solve the problem by working in small groups using different approaches such as making a table, solving an equation, graphing by hand, and graphing on the calculator. Then as a whole class the various strategies can be highlighted.

This task directly targets the following standards: A-REI #6, A-REI #11

Timeline: 3 days

Key vocabulary: breakeven point, systems of linear equations, fixed cost, profit, revenue, solution to a system, total cost, variable cost

Resources: Activities: 6.1.1a, 6.1.1b, 6.1.2, 6.1.3, 6.1.4

Materials needed: rulers, graph paper

Significant task 2: Solving Systems of Linear Equations using Substitution

Students will use the substitution method to solve systems of linear equations. To date, they have experienced substituting a single value for a variable when evaluating algebraic expressions. In this investigation, students substitute algebraic expressions for a variable.

The second investigation uses a non-profit organization as a context to explore solving systems of linear equations by substitution. Through questions posed by the teacher, the students will be guided through the process of how to solve a system of equations by substitution. This strategy builds upon students' skill evaluating expressions given the value of one or more variables. In order to explore the case when two equations are given in slope-intercept form, the students will study car racing where the slower car receives a head start. They also will study another application, the economics of the breakeven point, a situation in which revenue equals cost.

This task directly targets the following standards: A-REI #5, A-REI #6

Timeline: 2 days

Key vocabulary: breakeven point, systems of linear equations, fixed cost, profit, revenue, solution to a system, total cost, variable cost, substitution

Resources: Activities: 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.6, 6.2.7

Significant task 3: Solving Systems of Linear Equations Using Elimination

Students will use the elimination method to solve systems of linear equations, identify the characteristics of a system of linear equations that lend themselves to the elimination method, and interpret the solution of a system of linear equations within the context of the problem.

Students work with linear equations that model situations such as a computer assembly line and designing a fund raiser. These scenarios are not easily solved using the substitution method and therefore motivate the need for solving systems of equations using elimination. Students will use and explain the algebraic principles that support the elimination method. At this point in the unit, discussion on what is the "best" method to use when solving a given system should be the focus of the full class discussion. Students will be pushed to provide reasoning and evidence to support their decision. The discussion should also focus on what method might be "best" for any student and what method would be the most efficient method to use.

This task directly targets the following standards: A-REI #5

Timeline: 3 days

Key vocabulary: breakeven point, systems of linear equations, fixed cost, profit, revenue, solution to a system, total cost, variable cost, elimination

Resources: Activities: 6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5

Common learning experiences:

- Each significant task has exit slips & journal entries which are found in the resource binders.
- Warm-ups should focus on solving systems of equations by graphing, substitution, and elimination, solving multi-step equations.

Common assessments including the end of unit summative assessment:

- End-Unit Test
- **Performance Assessment: Community Park** Students will complete a plan for a community park that contains a basketball court, walkways, and a feature (like a fountain or gazebo) at the intersection of the walkways. The audience will be the construction crew and students have requirements/restrictions they must follow. Students will prepare the construction plan in pairs and while they have some choice in their final product there are specific requirements that are needed for the construction plan. For this task the mathematics will be graded using a task specific rubric. During the completion of the task (3 days) students will also be graded using the problem solving rubric (school wide).

Teacher notes:

1. Students may still have difficulty writing equations in y=mx + b form for substitution.
2. Students may need some guidance in identifying the two variables and writing the two equations.
3. If students understand the algebra that supports the elimination method but have difficulty remembering and/or following the sequence of steps involved, you might have them work in pairs or small groups to develop a note card that describes the sequence of steps in their own words and includes one or more examples of how to implement the elimination method.
4. Students should be encouraged to always add their two equations for the elimination method, this will eliminate sign errors.
5. Process standards to highlight through instruction: construct viable arguments and critique the reasoning of others, model with mathematics, and use appropriate tools strategically.

Windsor Public Schools
Curriculum Map for the Secondary Level
Algebra 1

Purpose of the Course: This is the first course in the high school sequence with a focus on Algebra. The use of real-life applications, graphing calculators, long-term investigations, problem solving strategies and mathematical modeling empowers students to think mathematically and prepares students for continued study in mathematics. Essential topics include: patterns, equations, linear functions, systems, exponential functions and quadratics functions. Integrated topics include: data analysis, geometry, and discrete mathematics.	
Name of the Unit: Unit 7 Introduction to Exponential Functions	Length of the unit: 4 weeks
Purpose of the Unit: While numerical representations (e.g., tables) help to show that exponential functions grow very quickly, students may develop a better conceptual understanding of exponential functions by exploring graphical or symbolic representations through investigations. Because the graph of an exponential function rises or falls very rapidly, it shows pictorially that the value of the function increases or decreases at a swift rate.	

Common Core State Standards Addressed in the unit:

N-RN 2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.

F-BF 2. Write ... geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.

F-LE 2. Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).

F-LE 5. Interpret the parameters in a ... exponential function in terms of a context.

F-LE 1. Distinguish between situations that can be modeled with linear functions and with exponential functions.

a. Prove ... that exponential functions grow by equal factors over equal intervals....

c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

N-RN 1. Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. *For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{(1/3)3}$ to hold, so $(5^{1/3})^3$ must equal 5.*

A-SSE 1b. Interpret complicated expressions by viewing one or more of their parts as a single entity. *For ex., interpret* $P(1+r)^n$ *as the product of P and a factor not depending on P.*

A-SSE 3c. Use the properties of exponents to transform expressions for exponential functions. For example the expression 1.15^t can be rewritten as $[1.15^{(1/12)}]^{(12t)} \approx 1.012^{(12t)}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.

F-IF 7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.

e. Graph exponential ... functions, showing intercepts and end behavior...

F-LE 3. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.

Big Ideas:	Essential Questions:
1. Exponents are used to represent repeated multiplication. 2. Linear functions have a constant difference whereas exponential functions have a constant ratio. 3. Analyzing patterns and generalizing patterns allows you to make predictions.	1. What are the limitations of exponential growth models? 2. How can one differentiate an exponential model from a linear model? 3. How can patterns help in problem solving?
Students will know: 1. the properties of exponents 2. the attributes of exponential functions and their parameters 3. the characteristics of exponential growth and decay 4. the domain and range for exponential functions 5. geometric sequences are exponential functions	Students will be able to: 1. identify the independent and dependent variables and explain how they are related to the domain and range of a function (linear and exponential) describing a real-world problem 2. recognize that exponential functions represent constant multiplicative change, written symbolically as $y = a(b^x)$; a unit increase in the independent variable (x) causes the value of the dependent variable (y) to be multiplied by b 3. compare and contrast linear and exponential growth 4. explain how changes in the parameters *a* and *b* affect the graph of an exponential function and validate the practical significance of the parameters in a real-

	world problem 5. use exponential functions to model and solve problems

Significant task 1: Exponential Growth Family

Students determine whether or not the data (population trend, world agriculture) are linear using prior knowledge about the properties of linear tables, graphs, and equations, and by using linear regression and the correlation coefficient. This will lead to the discovery that sometimes deciding whether or not real data are linear can be complex and should involve more than one tool (graphs, tables and differences, regression equations and correlation coefficients). Full class or small groups would work well with these this investigation.

Students will next develop the properties of exponents (multiplying, dividing, power rule, zero and negative exponents). Students will use number patterns to discover the rules, engage in individual guided practice and then apply the rules to operations on numbers expressed in scientific notation.

This task directly targets the following standards: F-IF 7e, F-BF 2, F-LE 1a, F-LE 3, N-RN 1, N-RN 2, F-LE 1

Timeline: 6 days

Key vocabulary: exponential function, exponential growth, exponential decay, properties of exponents, non-linear functions, multiplier, base, coefficient, zero exponent, monomial, exponent

Resources: Activities: 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.2.1, 7.2.2, 7.2.3, 7.2.4, 7.2.5, 7.2.6

Significant task 2: Exploring Parameters of Exponential Functions

Students will explore the effects of changing the parameters a and b in the general exponential function in small groups or pairs. They will understand that when $b > 0$ the function models exponential growth and that when $0 < b < 1$ the function models exponential decay. They will identify a as the initial value or y-intercept. They will identify exponential functions and distinguish exponential functions from other types of functions, especially linear functions, from tables of values and real-world contexts such as: building walls, weights of puppies, death rates, Starbucks stores, etc. During full class discussion, teachers should focus on connections between the graph and the changing parameters.

This task directly targets the following standards: F LE-1, F LE-2, F LE-3, F LE-5

Timeline: 3 days

Key vocabulary: exponential function, exponential growth, exponential decay, properties of exponents, non-linear functions, multiplier, base, coefficient, zero exponent, monomial, exponent

Resources: Activities: 7.3.1, 7.3.2, 7.3.3, 7.3.4, 7.3.5, 7.3.6

Significant task 3: Exploring and Modeling Exponential Relationships.

Students apply their knowledge of exponential functions to two experiments in which they collect and analyze data with the context of compound interest and half-life. Exponential growth or decay is often described in terms of per cent increase or decrease. In these two investigations students explore the relationship between rates of change and the growth or decay factor they have learned to associate with the parameter *b* in the general form of the exponential function s.

For both investigations students should work in small groups or pairs. Full class discussion should focus on observations, analysis and connections between the data and equation. Reasoning should be include with clear evidence for conclusions.

This task directly targets the following standards: F-LE 2, F-LE 5, A-SSE 1b. A-SSE 3c, F-IF 8b, F LE-1, F LE-1c

Timeline: 6 days

Key vocabulary: exponential function, exponential growth, exponential decay, compound interest, non-linear functions, doubling time, half-life, percent change

Resources: Activities: 7.4.1, 7.4.2, 7.4.3, 7.5.1, 7.5.2, 7.5.3, 7.5.4, 7.5.5, 7.5.6, 7.6.1, 7.6.2

Materials needed: balls of various kinds and materials, yard or meter sticks or tape measures, masking tape

Common learning experiences:

- Each significant task has exit slips & journal entries which are found in the resource binders.
- Warm-ups should focus on exponent properties, writing and solving equations.

Common assessments including the end of unit summative assessment:

- End-Unit Test
- **Performance Assessment: Purchase an I-Pad?** Students will investigate whether purchasing the second generation I-pad is more economical than waiting to purchase a new generation of I-Pads. The students' parents made a deal with them and told their children that if they can mathematically prove that the i-pad 2 will be worth at least $200 in five years, they will buy them one. In order to determine the price of the i-pad 2 in five years students will have to use the data from 2010 on the first generation i-pad. Students will have choice in their presentation medium. Their final product should be addressed to their parents showing and explaining to them the process they used. During the completion of the task (3-4 days) students will also be graded using the problem solving rubric (school wide).

Teacher notes:

1. Students have a difficult time understanding and applying the exponential rules. Consider expanding the exponents out and simplifying the fractions to show the rules with specific

students.

2. The M&M lab that is listed as one of the activities in Significant Task 3 is done in grade 8 for non-honors students. It can be included as an activity/lab for honors Algebra 1 in grade 8 only.
3. Process standards to highlight through instruction: make sense of problems and persevere in solving them, look for and make use of structure, and look for and express regularity in repeated reasoning.

Windsor Public Schools
Curriculum Map for the Secondary Level
Algebra 1

Purpose of the Course: This is the first course in the high school sequence with a focus on Algebra. The use of real-life applications, graphing calculators, long-term investigations, problem solving strategies and mathematical modeling empowers students to think mathematically and prepares students for continued study in mathematics. Essential topics include: patterns, equations, linear functions, systems, exponential functions and quadratics functions. Integrated topics include: data analysis, geometry, and discrete mathematics.	
Name of the Unit: Unit 8 Introduction to Quadratic Functions	Length of the unit: 7 weeks
Purpose of the Unit: The intent of this unit is to introduce students to quadratic functions concretely just as the linear function was developed in grades 7 & 8. Students will make connections between the table, graph, and equation first and then build procedural fluency to solve quadratic equations. Students will apply their factoring and solving skills in Geometry. Students will next do a more formal study of the quadratic functions in Algebra 2. Students will finalize the study of the quadratic through a thorough application of conic sections in Pre-Calculus. Students are developing the concrete understanding of quadratic relationships and they will develop mastery of solving quadratics functions through the next two courses.	

Common Core State Standards Addressed in the unit:

A-SSE 3. a Factor a quadratic expression to reveal the zeros of the function it defines. b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.

A-APR 1. Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

F-IF 4. For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries...

F-IF 7a. Graph ... quadratic functions and show intercepts, maxima, and minima.

F-IF 8a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.

F-BF 3. Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $kf(x)$, $f(kx)$, and $f(x + k)$ for specific

values of *k* (both positive and negative); find the value of *k* given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology...

A-REI 4. a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation.

A-CED 1. Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from ...quadratic functions ...*

A-CED 2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

Big Ideas:	Essential Questions:
1. Functions describe relationships between two quantities that vary. 2. Relationships can be represented as tables, graphs, and equations. 3. Formulas and theorems in mathematics are proven.	1. What does the equation or graph tell you about the other representation? 2. What are the advantages and disadvantages of the various representations? 3. How do you know that a formula or theorem is valid?
Students will know:	Students will be able to:
1. the definitions of a monomial, binomial and trinomial 2. the various representations of quadratic functions: tables, graphs, and equations 3. the characteristics of the quadratic function 4. strategies to solve quadratic equations: graphs, factoring, completing the square, and using the quadratic formula	1. graph and identify important characteristics of the quadratic function 2. identify behavior of a given quadratic function through an understanding of the parent function 3. solve quadratic equations by factoring, completing the square and using the quadratic formula 4. expand product of two binomials 5. derive the quadratic formula

Significant task 1: Another Nonlinear Family: Parabolas everywhere

Students will compare and contrast a quadratic relationship with linear and exponential patterns by looking at two sets of data. The first replicates one of Galileo's experiments and the second models HIV infections in new born babies. As part of the investigations, they will use their graphing calculator to find a quadratic regression in a similar way to the linear regression done in unit 5. Teachers may want to do the first investigation as a full class modeling the steps and then small groups can do the HIV investigation on their own. Full class discussion at this point in developing the quadratic function should highlight observations while comparing and contrasting to other functions developed thus far in their career in mathematics.

This task directly targets the following standards: A-CED 1, A-CED 2, F-IF4

Timeline: 2 days

Key vocabulary: Coefficient, Constant Term, Decreasing, First Differences, Increasing, Leading Coefficient, Line of Symmetry, Linear Term Opens Up, Monomial, Opens Down, Quadratic Function, Quadratic Equation, Second Differences, Parabola, Parameter, Standard Form, Trinomial, Vertex

Resources: Activities 8.1.1, 8.1.2, 8.1.3, 8.1.4, 8.1.5, 8.1.6

Significant task 2: Quadratic Functions in Vertex Form and Solving Using Square Root Property

This is the last task of the course and depending on time not all students will be able to complete the entire task. The first portion of the task the entire class would complete. Working in small groups or partners students will investigate the effects of the parameters *a*, *h* and *k* on the graph of a parabola, identify the vertex and whether the parabola opens up or down. Students will reverse the process and write an equation in vertex form for a parabola given its vertex and one other point. Full class discussion should focus on the reasoning and evidence the groups have to defend their conclusions.

Students will learn to apply the Square Root property and the principle of "undoing" to solve equations of the form They will then apply this skill to finding the x-intercepts of parabolas with functions in vertex form and applications of functions given in vertex form.

This task directly targets the following standards: F-IF4, F-IF7a, F-BF3, A-REI 4

Timeline: 5 days

Key vocabulary: Algorithm, Binomial, Coefficient, Constant Term, Expanded Form, Leading Coefficient, Line of Symmetry, Quadratic Function, Quadratic Equation, Parabola, Parameter, Square Root Property, Standard Form, Vertex, Vertex Form, x-intercepts

Resources: Activities 8.2.2, 8.2.4, 8.2.5, 8.2.6, 8.3.1, 8.3.2, 8.3.3, 8.3.4, 8.3.5, 8.3.6

Significant task 3: Quadratic Functions in Factored Form and Factoring Quadratic Functions

Students will discover that quadratic functions can be expressed in factored form and will multiply

binomials to convert quadratic functions in factored form to quadratic functions in standard form. The focus of this task is to begin to build procedural skill of factoring to arm students with the skills needed to problem solve in Geometry and Algebra 2. Students will mostly be involved in individual guided practice to develop this skill.

Specifically, students will factor quadratic trinomials of various forms and convert quadratic functions in standard form to quadratic functions in factored form. They will learn that factoring polynomials is the inverse operation of multiplying polynomials. They will be able to solve the quadratic equation by using the zero product property. Using formative assessment, challenge specific students to move beyond leading coefficients of one as they are ready. The goal will be that all students will be able to move to this level however, it is more important for students to be proficient with leading coefficients of one.

This task directly targets the following standards: A-APR 1, F-IF 4, F-IF 7a, F-BF-3, A-SSE 3a

Timeline: 5 days

Key vocabulary: Algorithm, Binomial, Coefficient, Constant Term, Expanded Form, Factored Form, Leading Coefficient, Monomial, Quadratic Function, Quadratic Equation, Parabola, Parameter, Standard Form, Trinomial, Vertex Form, Zero Product Property

Resources: Activities 8.4.1, 8.4.2, 8.4.3, 8.4.4, 8.4.5, 8.5.1, 8.5.2, 8.5.3, 8.5.4, 8.5.5, 8.5.6

Materials needed: Algebra Tiles

Significant Task #4: Completing the Square and the Quadratic Formula

In this task students will use algebra tiles to model the method of completing the square and will develop the procedure for this strategy. Students will then use the structure of completing the square with variables to represent the coeffients of a quadratic function in standard form to derive the quadratic formula. Students will then use the two methods along with factoring to practice solving quadratics with all three methods.

Again, the focus of this task is to begin to build procedural skill of factoring and completing the square to arm students with the skills needed to problem solve in Geometry and Algebra 2. Students will mostly be involved in individual guided practice to develop these skills. Specifically, students will need to be able to use completing the square when working with equations for circles in Geometry and when they continue studying the quadratic function in Algebra 2. Again, using formative assessment, challenge specific students to move beyond leading coefficients of one as they are ready. The goal will be that all students will be able to move to this level however, it is more important for students to be proficient with leading coefficients of one.

This task directly targets the following standards: A-REI 4, A-SSE 3b, F-IF 8a

Timeline: 6 days

Key vocabulary: Algorithm, Binomial, Coefficient, Constant Term, Leading Coefficient, Monomial, Quadratic Formula, Quadratic Function, Quadratic Equation, Parabola, Standard Form, x-intercepts,

derive, completing the square

Resources: Activities 8.6.1, 8.6.2, 8.6.3

Common learning experiences:

- Each significant task has exit slips & journal entries which are found in the resource binders.
- Warm-ups should focus on solving systems of equations, evaluating quadratic functions, simplifying expressions, multiplying polynomials and factoring.

Common assessments including the end of unit summative assessment:

- End-Unit Test
- Final Exam

Teacher notes:

1. Students will need to understand a larger set of attributes to work with quadratic functions; the roots, y-intercept, vertex, axis of symmetry, width and direction of a parabola. This extra complexity can be challenging. The key is to help students see the connections between the equation and the graph. Make sure that the students understand which parts of the equation control the various characteristics of the graph.
2. Students will develop at different pace with factoring skill. While tempting to extend time for task 3, resist. Factoring can practiced during task 4 as homework and warm-ups.
3. Process standards to highlight through instruction: reason abstractly and quantitatively, and look for and make use of structure.

Grade: Kindergarten **Time: September/October (6 weeks)**	**Genre: Fiction/Nonfiction** **Theme: Building a Reading and Writing Community**
Big Ideas	**Essential Questions**
▪ We learn, grow and depend on each other in a community ▪ Language communicates ideas and feelings about ourselves, the world and others ▪ Books teach us about our world	▪ What is a Kindergarten community? ▪ How do we use language? ▪ How do we learn from books and information?

Standards addressed in this unit:	**The students will know and be able to do: (Independently)**

1. Participate in small and large group conversations with peers and adults about Kindergarten topics. (K.SL.1)	▪ Generate kindergarten topics for discussion
	  ▪ Follow the topic and add to discussion
	▪ Use polite conversational conventions
	  ▪ Follow agreed upon rules for discussion
	  ▪ Listen with attention
	  ▪ Look at the audience while talking
	  ▪ Take turns
	  ▪ Enter a conversation appropriately
	▪ Use grade level-appropriate specific vocabulary when speaking

2. Ask and answer questions in order to seek help, to clarify or seek additional information. (K.SL.3)	▪ Know and use question words

3. Audibly express thoughts, feelings, and ideas. (K.SL.6)	▪ Audibly express thoughts, feelings, and ideas
	  o Speak at an appropriate volume
	  o Speak clearly enough to be understood by others in conversation
	  o Speak at an appropriate rate to be understood by the audience
	  o Adjust volume as appropriate

4. Use frequently occurring nouns and verbs. (K.L.6)	▪ Use common kindergarten vocabulary
5. Form regular plural nouns orally by adding /s/ or /es/ (K.L.1)	▪ How to form common plurals
6. Use the most frequently occurring prepositions. (K.L.1)	▪ To, from, in, out, on, off, for, of, by, with
7. Produce and expand complete sentences in shared language activities. (K.L.1)	▪ Use complete sentences to express ideas and communicate requests.
Comprehension Standards addressed in this unit: (Reading for Literature/Information Skills)	**The students will know and be able to do:**
1. Actively engage in independent and group reading activities with purpose and understanding. (K.RL.10)	▪ Rituals and routines of Reader's Workshop ▪ Partner reading ▪ Reading is thinking ▪ Look for words/letters you know ▪ Read left to right across one line of print

2. Ask and answer questions about key details in a text. (K.RL.1)	▪ Read with a purpose ▪ Use question words to ask questions about the text
3. Identify characters, settings, and major events in a story. (K.RL.3)	▪ Characters, setting, events ▪ Pictures help tell the story ▪ Study pictures carefully
4. Recognize common types of texts. (K.RL.5)	▪ Recognize various types of texts o Identify fiction versus informational texts o Understand stories versus information o Recognize poems, songs, chants and nursery rhymes
5. Identify the front cover, back cover, and title page of a book. (K.RIT.2)	▪ Use reading strategies – previewing ▪ Use prior knowledge
Foundation/Language Standards addressed in this unit: **phonological awareness, print concepts, phonics, vocabulary and fluency**	**The students will know and be able to do:**
1. Demonstrate understanding of the organization and basic features of print (Print Concepts). (K.RFS.1)	▪ Print has the same basic features – things you can count on ▪ How to hold the book ▪ One word for one group of letters ▪ First and last letters of words in text ▪ Distinguish between print and pictures ▪ Understand the purpose of print in reading and writing
2. Demonstrate understanding of spoken words, syllables, and sounds (Phonological Awareness). (K.RFS.2)	▪ Segment sentences into words ▪ Hear, say, connect and generate rhyming words ▪ Hear and recognize words boundaries
3. Recognize and name all upper- and lowercase letters of the alphabet (Phonics). (K.RFS.1)	▪ Recognize one's name and the names of peers ▪ Understanding the concept of a letter ▪ Produce letter names ▪ Understand alphabetical order ▪ Recognize the sequence of letters in words ▪ Recognize letters in words ▪ Understand that words are made up of letters ▪ Use letters in one's own name to represent it or "write" a message ▪ Uses consistent and efficient motions to form letters
4. Know and apply grade-level phonics and word analysis skills in decoding words. (Phonics) (K.RFS.3)	▪ Understand that there is a relationship between sounds and letters. ▪ Know the letter sounds ▪ Set 1 (s, m, t, b, f) ▪ Set 2 (r, n, p, d, h) ▪ Set 3 (c, g, j, l, k) ▪ Set 4 (v, w, z, qu, y, x)
5. Read high-frequency words by sight (Vocabulary). (K.RFS.3)	▪ Recognize and use high frequency words ▪ Locate and read high frequency words in continuous text <u>List A</u>

	the, I, to, a, is, my, go, me, like, on, in, so, we, it, and, up, at, see, he, do, you, an, can, no, am, said* (*said may also need to be taught in order to aid students in accessing texts.) List B went, are, this, look, for, get, come, got, play, was, had, they, will, too, all, be, as, ball, by, day, did, has, her, him, fun (any 10 from List B)
6. Read emergent-reader texts with purpose and understanding to build fluency (Fluency). (K.RFS.4)	▪ Re-read familiar texts read aloud ▪ Read the pictures ▪ Read the words ▪ Retell the story (partner reading/teacher conference) ▪ Recognize and locate words (names) ▪ Make connections between names and other words
7. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. (K.L.1) ▪ Print many upper- and lowercase letters.	▪ Know how to write the letters ▪ Set 1 (s, m, t, b, f) ▪ Utilize Verbal Path of Formation to form letters

Significant Tasks

Significant Task 1 - Launching Reader's Workshop

Essential Question: What is a Kindergarten community?
Big Idea: We learn grow and depend on each other in a community

Daily participation in the rituals and routines of reading workshop will help students exhibit the behaviors that reflect how to come to the carpet, engage in mini lesson instruction, turn and talk, independent and partner reading, guided practice and literacy work stations. While practicing the reading workshop rituals and routines, students will discuss with peers and adults the understandings that reading is purposeful and active. Exploring both fictional and nonfictional texts readers build on the things they already know by previewing texts, studying the pictures as closely as the words, and activating prior knowledge about texts to figure out what the author is trying to say.

Significant Task 2 - Classroom Reading Community Book

Essential Question: What is a Kindergarten community?
Big Idea: We learn, grow and depend on each other in a community

The students and teacher will collect and utilize information about the class to create a class reading community book. The information that populates the book can be collected in myriad ways throughout the unit and instructional day. The information included in the class book answers questions about the classroom reading community. This shared writing experience for students build upon knowledge about print, directionality in reading and writing, concepts about letters, words, and sentences. It is an informational text about the class that shares facts and opinions about the topic of reading. The text structure is question and answers. The big question answered is:

Who are we as a reading community?
- What do we like to read?

- When is our favorite time to read?
- Where is our favorite place/spot to read? (class or home)
- Why do we read?

Significant Task 3 - Name Inquiry **(Integrated)**

Essential Question: How do we use language?
Big Idea: Language communicates

Each day in whole-class lessons, one child's name is featured, and the class studies the name in many different ways. Through a name study, children learn the concepts of words and of letters, first and last sounds, letter names and features, hearing and saying syllables. For example, if the featured name for the day is Thad, you might help children notice things like: Thad's name starts with the same letter as Tammy's name; Thad's name has four letters; the first part of Thad's name sounds like think and thirsty;

Teach children to use their own names as a resource for learning other letters and word concepts. Use this learning experience to work on letter formation. Teach students how to form letters as each name is studied. Students can make the letter big in the air as you are saying the verbal path for formation. For example, when making the letter h you might say "start at the top, come down, up, over and down." Keep the language you use consistent for each letter so that kids begin to internalize it and use it when they forget how to form the letter on their own. They can also make a rainbow letter where they trace the letter in different colors. If most of the children in your class can't yet recognize and/or write their own names, give them time to practice making their names with magnetic letters and writing on dry-erase boards. (Lucy Calkins Kindergarten Curricular Plan, Pg. 26)

Name Identification Assessment
Students will be given a set of pictures of their classmates and a set of their classmates' names. They will be asked to match the names they recognize with the pictures of their classmates. Students will also be asked a series of questions related to their own name. These questions will review the concepts of first and last, letters and syllables. 1. What name in the set has the same first letter as your name? 2. What other name has the same last letter as your name? 3. How many syllables are there in your name? Is there another student with the same number of syllables? Students who require additional adult support may be given individualized attention. As a challenge, begin to ask students to write their own name.

Grade: Kindergarten **Time: September/October**	**Genre:** **Theme: Launching Writing Workshop**
Big Ideas	**Essential Questions**
Writers Write Writers use what they know about letters and sounds to spell and write words Writers revise their writing Writers use pictures and words to tell stories.	What do writers do? How do writers know what words to write? How do writers make their writing better? How do writers tell stories?

Standards addressed in this unit:	**The students will know and be able to do: (Independently)**
1. Use a combination of drawing, dictating and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. (K.W.1) 2. Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K.W.7) 3. Explore a variety of digital tools to produce and publish writing, including in collaboration with peers. (K.W.6) 4. Spell simple words phonetically, drawing on knowledge of sound-letter relationships. (K.L.2)	▪ Routines of Writing Workshop o Come to carpet o Exhibit appropriate mini lesson behaviors o Choose a topic to write about o Sketch a topic selected (label) o Write a little about a selected topic ▪ Carry on independently o Add details to their drawings/writing (Labels) o Start a new piece of writing ▪ Use supplies independently ▪ Tell Stories through Illustrations o Remember an idea and illustrate it o Adding some words to our illustration o Add details to illustrations ▪ Draw Hard to Make Ideas ▪ Use Pictures and Words ▪ Stretch and Write Words o Stretch words out hear individual letter sounds ▪ Spell Really Hard Words o Apply knowledge of letter sounds to writing ▪ Use Writing Tools ▪ Write-in-Process/Long Term Projects o Work on writing over multiple days o Revise writing o Write story over several pages ▪ Spell words the best way they can ▪ Fix Up Writing o Publish writing pieces o Re-read story to see if it makes sense

Significant Tasks

Significant Task 1 – Launching Writer's Workshop (10-15 days)
Essential Question: What do writers do?
Big Idea: Writers write

Introduce students to the routines of writer's workshop. Explicitly model and practice a few major classroom expectations at this time, more are introduced later in the unit. Develop a class rubric that measures success with the routines and expectations. Emphasize throughout the unit that everyone's a writer, so begin writing on day one. This includes the teacher modeling writing before the class and with the class. Students will need guidance in what they can write about. Develop student understanding that their own life is the best source of ideas. Model how students can write, draw and/or sketch during independent writing. Also, model the concept of "when we're done, we've just begun." This strategy is used to encourage the writer to start a new piece of writing as soon as they finish. Follow this instruction with additional routines like where to store their papers and where to find materials or any additional routines necessary.

Significant Task 2 – Telling our stories through pictures and words (7-10 days)
Essential Question: How do writers tell stories?
Big Idea: Writers use pictures and words to tell stories?

Model for students how a story can be told using pictures. During independent writing, students should tell many stories using pictures except when differentiated by ability. The teacher confers with students to monitor progress. Students should read their stories many times to each other. Use this as an opportunity to inform students that writers also add words to help them remember their stories. Model using pictures and words to tell a story. Start some students with labeling pictures while others will be ready for text beneath the picture. Depending on the class, some small or whole class instruction may be necessary around difficult to draw ideas. De-emphasize the quality of the picture. Remind students that it's the story the pictures tell.

Significant Task 3 – Using words like writers (3-5 days)
Essential Question: How do writers know what words to write?
Big Idea: Writers use what they know about letters and sound

As students are ready to move into adding written texts to their pictures, provide instruction and modeling in how writers stretch words out to spell them. Additional strategies taught are writers use what they know about letters and letter sounds, doing the very best they can, and using tools and resources. The teacher meets with students in conferences and small groups to help support this development.

Significant Task 4 – Turning a page into a book (5-7 days)
Essential Question: What do writers do?
Big Idea: Writers write (a lot)

Model for students how writers start with a page of writing and then continue to add on. Use this time to reinforce how writing is stored so that the writer can return to it on another day. To begin development of adding onto student stories, start with the question, "what happened next?" Start that on a new page with a new picture and words. Introduce students to writing in booklets. This is where they will write their stories over many days. Students practice drawing picture and using words to tell their stories. Teacher confers with students to provide differentiated instruction in this skill set. Additional ways for writers to add on to their stories include: add the narrator's feelings to the story, add how others are feeling in the story, add descriptions to pictures, etc.

Significant Task 5 – Fixing up your writing (3-5 days)
Essential Question: How do writers make their writing better?
Big Idea: Writers revise their writing

Inform students that writers go back to their writing several times. Model for students asking questions about your writing like, “does it make sense?” Students check their writing with their finger and ask peers to read it for suggestions about does it make sense. Students practice fixing up many of their favorite pieces.

Grade: Kindergarten **Time: Unit 2 Reading (October/November)**	**Theme: Readers, Read, Think and Talk About Books**
Big Ideas	**Essential Questions**
▪ Readers use many strategies to read and understand texts? ▪ Readers read lots of different texts many different ways ▪ Readers think about the story elements or information. ▪ Readers talk about the story elements or information.	▪ How am I growing as a reader? ▪ What do readers read? ▪ What can you think about while reading? ▪ What can you talk about based on reading?

Standards addressed in this unit: **(Speaking & Listening/Language)**	**The students will know and be able to do: (Independently)**
1. Participate in small and large group conversations with peers and adults about Kindergarten topics. (K.SL.1)	▪ Report interesting information and background experience ▪ `Provide 1 or 2 details ▪ Build on the statement of others ▪ Continue conversations through multiple exchanges
2. Ask and answer questions in order to seek help, get information, or clarify something heard. (K.SL.3)	▪ Form clear questions to gain information

3. Audibly express thoughts, feelings, and ideas. (K.SL.6)	▪ Audibly express thoughts, feelings, and ideas
	  o Speak at an appropriate volume
	  o Speak clearly enough to be understood by others in conversation
	  o Speak at an appropriate rate to be understood by the audience
	  o Adjust volume as appropriate
	▪ Express and reflect on feelings of self and others

4. Use words and phrases acquired through conversations, reading and being read to, and responding to texts. (K.L.6)	▪ Content as dictated by curriculum
Comprehension Standards addressed in this unit: (Reading for Literature/Information Skills)	**The students will know and be able to do:**

1. Actively engage in independent and group reading activities with purpose and understanding. (K.RL.10)	▪ Reading is thinking
	▪ Figure out how to read the story
	  ▪ Read left to right across two or more lines of print
	  ▪ Search for and use information in texts and pictures
	  ▪ Look for words/letters you know
	  ▪ Use the language structure and meaning to learn about print
	▪ Use everything they know to read the story
	▪ Re-read to search for information

2. Recognize common types of texts. (K.RL.5)	▪ Stories share qualities
	  o Author/illustrator
	  o Beginnings and endings of stories
	  o Story elements (characters, setting, conflict, resolution)
	▪ Informational texts share qualities

	○ Topics and details (informational texts) ▪ Poems, Rhymes, Chants
3. Ask and answer questions about key details in a text. (K.RL.1)	▪ Readers use comprehension strategies ○ Demonstrate curiosity, wonder, and question texts ○ Identify new information in text or pictures ▪ Confirm understandings of texts through answering questions
4. Identify characters, settings, and major events in a story. (K.RL.3)	▪ Study pictures carefully ▪ Describe characters, setting, events, or ending
5. Retell stories including key details. (K.RL.2)	▪ Retell a story to others ▪ Understand, beginning, middle, and end
6. Compare and contrast the adventures and experiences of characters in familiar stories. (K.RL.9)	▪ Identify recurring character experiences and settings.
7. Identify the main topic and retell key details of a text (K.RIT.2)	▪ Figure out what the book is about ○ Identify/preview the front cover, back cover, and title page of a book. ○ Preview the book to get ready for reading ▪ Search for and use information in pictures and language. ○ Learning about the topic ○ What are the key details?
Standards addressed in this unit (Reading Foundational Skills)	**The students will know and be able to do:**
1. Demonstrate understanding of the organization and basic features of print. (K.RFS.1)	▪ Concept of a letter, word and sentence. ▪ Concept of left to right in directionality ▪ Concept of return sweep ▪ Understand the concepts of *first* and *last* in written language ▪ Locate the first and last letters of words in continuous text ▪ Match one spoken to one written word while reading and pointing under the first letter of each word.
2. Demonstrate understanding of spoken words, syllables, and sounds (K.RFS.2)	▪ Understand syllables ▪ Hear and say syllables ▪ Understand words can have two or more syllables ▪ Blend syllables ▪ Delete syllables ▪ Hear and segment onsets and rimes ▪ Hear and say individual phonemes (sounds) in words ▪ Segment words into phonemes ▪ Hear and say two or three phonemes in a word ▪ Hear and say beginning phonemes in words ▪ Hear similar beginning phonemes in words ▪ Isolate and pronounce the initial phoneme in words

3. Recognize and name all upper- and lowercase letters of the alphabet. (K.RFS.1)	▪ Produce letter names ▪ Understand alphabetical order ▪ Distinguish and categorize letters by features (straight lines, circles, no circles, tunnels, tails, no tails, dots, no dots, slant lines, tall and short) ▪ Recognize uppercase and lower case letters ▪ Recognize the sequence of letters in words ▪ Recognize letters in words ▪ Understand that words are made up of letters ▪ Make connections between words by recognizing letters ▪ Recognize letters in words ▪ Make connections between words by recognizing letter placement ▪ Use consistent and efficient motions to form letters ▪ Recognize letters in continuous text

4. Apply grade-level phonics and word analysis skills in decoding (K.RFS.3)	▪ Recognize that letters represent consonant sounds.
	▪ Recognizing and using beginning consonant sounds and the letters that represent them
	▪ Recognizing similar beginning consonant sounds and the letters that represent them
	  ▪ Set 1 (s, m, t, b, f)
	  ▪ Set 2 (r, n, p, d, h)
	  ▪ Set 3 (c, g, j, l, k)
	  ▪ Set 4 (v, w, z, qu, y, x)

5. Read high-frequency words by sight. (K.RFS.3)	• Recognize and use high frequency words • Locate and read high frequency words in continuous text <u>List A</u> the, I, to, a, is, my, go, me, like, on, in, so, we, it, and, up, at, see, he, do, you, an, can, no, am, said* (*said may also need to be taught in order to aid students in accessing texts.) <u>List B</u> went, are, this, look, for, get, come, got, play, was, had, they, will, too, all, be, as, ball, by, day, did, has, her, him, fun (any 10 from List B)
6. Read emergent-reader texts with purpose and understanding to build fluency. (K.RFS.4)	▪ Re-read familiar texts read aloud ▪ Read the pictures ▪ Read the words ▪ Retell the story (partner reading/teacher conference) ▪ Recognize and locate words (names) ▪ Make connections between names and other words

Significant Tasks
Significant Task 1 – Reading grows ideas (6 days) *Essential Question: What do readers read?* *Big Idea: Readers read lots of different texts*

This task begins with an analogy between the way a plant grows with water, sunlight and food, the brain grows when it is watered with reading, discussion, and thinking. Teachers may choose to create a visual for students. The teacher introduces fiction and nonfiction texts as stories and books with information providing many models and examples. Keep a chart or use the Smartboard to capture the various fictional and nonfictional texts and highlighting how fiction tells stories and nonfiction gives information. Create a classroom criteria chart with words and pictures that students will later use to independently identify fiction and nonfiction texts. Remind students that each type of text waters the brain with different types of information. Students are given opportunities to explore many fictional and nonfictional texts, examining the pictures and words carefully. Students identify and explain their thinking around why they have labeled certain books as fiction or nonfiction.

Vocabulary: grow, fiction, nonfiction, information, story, poems, rhymes, author, illustrator
Assessment – Which is it? Teacher will use a few minutes during this unit using a never seen set of texts wit each individual student asking them to separate the fiction from the nonfiction texts.

Significant Task 2 – Reading is thinking (10-12 days)
Essential Question: What do readers think about?
Big Idea: Readers think about the story elements?

Student learning is developed around the idea that reading is more than calling out letters and words. Reading is thinking about what the text says. To begin teachers introduce the comprehension strategy of wondering. Through extensive modeling, teachers make the connection between how readers use wondering to help them understand the text. Teachers model what you can wonder about: the characters, setting, and plot events. Students participate through asking and answering questions about the text that demonstrate their "wonderings."

Vocabulary: wondering, question, characters, setting, events,

Dramatizing Books
Essential Question: How will I understand what I read?
Big Idea: Readers use many strategies to read and understand

Introduce through independent and partner reading that readers invent fun things to do with texts we know well. For example, tell children that some people see the same movie over and over and over (just like they have been reading their favorite books over and over and over) and that those people come to know a movie so well that sometimes they'll act out a scene in the movie they particularly love. "*Readers* can improvise and dramatize our stories, too," you'll say. Children can try this with their partners, picking a scene to act out together and figuring out the reason why they chose it (i.e., importance to the story, drama involved, favorite part, and so on). Model the way careful readers think about how the characters feel in their books, reminding children to make their voices sound just like the characters would sound, and to use facial expressions and body gestures that go along with the actions and feelings of the characters. The Common Core State Standards emphasize how students should be understanding text in many different ways, such as drama. Read-aloud is a perfect time to demonstrate this dramatization of books. After "acting out" the book you are reading, children could do likewise, taking on the voices of characters and using their bodies and facial expression to help them engage in the text and show what they are thinking. This task may begin with introductory/review lessons about the common story elements of characters, setting, conflict, events and point of view.

Vocabulary: act, drama, expressions

Becoming Characters
Essential Question: How will I understand what I read?
Big Idea: Readers use many strategies to read and understand,

To encourage understanding of characters and to increase the amount of time kids are talking about books in partnerships, students take on the characters together.

The teacher may lead by modeling and providing students with lead-in prompts to use during student partnership time. Teachers use shared reading to give children a chance to practice reading with character voices. After reading, rereading, and discussing big books of traditional tales like *The Three Little Pigs*, one strategy is to divide the class among the characters, and they can chime in when each character speaks using voices that reflect the feelings and actions of the character in that part of the story. During this time students will be reflecting on the feelings of the story—and of the characters in the story—by the way they chime in. Teachers can give children tongue depressors, stored in book baggies, to use as low-maintenance puppets as they act out their stories. When they meet with their partners, they take out the tongue depressors and act out the stories.

Character Prompts:

- "Try to read books like storytellers, using storyteller voices."
- "A storyteller reads a story in a way that holds listeners' attention."
- "A storyteller tries to make the story sound interesting or exciting so that everyone pays close attention."
- "Storytellers practice reading this way when they read to themselves, and they have little tricks they use to read in storyteller voices."

Significant Task 3 - Retelling The Story (6 days)
Essential Question: How will I understand what I read?
Big Idea: Readers use many strategies to read and understand,

After teachers have modeled retelling stories through shared reading and direct and explicit mini lesson instruction, students practice retelling stories in a variety of ways to demonstrate understanding of characters, setting and plot. Teachers use whole class, small group and individualized instruction to provide students with both instruction and coaching in identifying the characters, setting and plot events and at least two different ways to retell a story. Instruction always includes an opportunity to discuss the meaning of the text are included.

Vocabulary: retell, characters, setting, plot, ties
Assessment: students retell a "just right" text.

Significant Task 4 – Reading is thinking (3-6 days)
Essential Question: What do readers think about?
Big Idea: Readers think about the story elements?

Student learning is developed around the idea that reading is more than calling out letters and words. Reading is thinking about what the text says. To begin teachers introduce the comprehension strategy of wondering and previewing. Through extensive modeling, teachers make the connection between how readers use wondering to and previewing to help them understand the text. Teachers model what you can wonder about: the topic, main idea and details. Students participate through asking and answering questions about the text that demonstrate their "wonderings." Teachers also model previewing the front cover, back cover, title, pictures, etc.

Assessment: retelling a "just right" text
Vocabulary: main idea, topic, details, previewing, title

Grade: Kindergarten **Time: November**	**Genre: Writing** **Theme: Small Moments**
Big Ideas	**Essential Questions**
Writers use words and pictures to tell stories. Writers add details to their writing Writers write about their lives	How do writers tell stories? How do writers make their stories better? What do writers write about?

Standards addressed in this unit:	**The students will know and be able to do: (Independently)**
1. Use a combination of drawing, dictating and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. (K.W.1) 2. Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K.W.7) 3. Explore a variety of digital tools to produce and publish writing, including in collaboration with peers. (K.W.6) 4. Spell simple words phonetically, drawing on knowledge of sound-letter relationships. (K.L.2)	▪ Take one small moment and stretch it out o Add details to their writing o Understand that details enhance their writing o Stretch Out a Moment Across Pages • Plan a story o Understand that planning a story helps a writer organize their ideas • Tell stories from their lives o Generate ideas from experiences o Understand that writers write about their own lives • Say words slowly and write the sounds they hear o Understand that writers write all the sounds they hear so that others can read their stories. • Go back and reread your stories o Point to and read the pictures o Read the words o Understand that writers go back and read over their stories when they think they are done • Know ways to remember and write stories o Act out each part of their story o Draw detailed pictures and add action words o Understand that writers act out, draw and label actions to remember and write their stories • Make the reader feel as if they are right there o Think about and draw who, what and where o Understand that writers think about and draw who, what

	and where to make the reader feel as if they are right there
	
	• Use words you already know
	• Use the name chart, alphabet chart, or word wall
	  o Understand that writers use the tools around them to help them be more efficient writers
	
	• Plan sentences out loud
	• Write and reread until all the words in a sentence/story are written
	• Understand that planning sentences out loud helps us remember all the words in our sentence/story
	
	• Use Examples to decide if we are done
	• Try and decide if you are done by looking at examples around the classroom
	• Understand that they can look at a finished story and use it to decide if they are done writing
	
	• Create a cover that matches the story
	  o Think of a title and picture for their cover that matches their story
	  o Understand that the cover and story must match

Significant Tasks

Significant Task 1 – Stretching small moments (5-7 days)
Essential Question: How do writers make their writing better?
Big Idea: Writers add details to their writing

Model for students picking one small moment and stretching it out over several pages of the writing booklets. Students need to begin expanding this moment to stretch it out. Start with the question, "what happens next?" Read several mentor texts noticing how authors zoom in on a specific moment and stretch it out. Notice for students that, good writers include itty bitty details in their writing to help their stories come to life. Notice and chart the itty bitty details in mentor texts and encourage students to try the craft moves during independent writing. Additional strategies taught to help students in this area are: good writers touch each page and say their story aloud to help plan their story and good writers draw on each page and go back and write on each page.

Significant Task 2 – Generating ideas (3-5 days)
Essential Question: What do writers write about?
Big Idea: Writers write about their lives

Provide instruction in how to generate the best ideas for stories. One point to make with students is that, good writers think about things they do a lot and write about them. Daily model for students writing about your life. Shared or interactive writing experiences could be about experiences shared by the class. During independent writing students write and share with their peers things that happen to them. As students begin to write more, model how, good writers say their words slowly and write the sounds they hear so others can read their stories. Develop a rubric with students that help determine when a story is done. Complete instruction with the strategy of

rereading the story to decide if it is done.

Significant Task 3 – Adding more (3-5 days)
Essential Question: How do writers make their writing better?
Big Idea: Writers add details to their writing

Through mini lesson instruction use mentor texts to show students how good writers add action to their stories. Students practice this strategy by acting out their stories for peers and then draw/revise detailed pictures to show these actions. Additional differentiated instruction may be in how good writers label the actions drawn to help them remember their stories. To add additional details to their stories, good writers think about and draw the characters, setting and what they did or what happened to make the reader feel as if they are right there. Student fluency in writing will grow rapidly. Use shared/interactive writing to demonstrate how good writers use what they already know, like the name chart, alphabet chart or word wall to help them write words that are around them. Utilize mini lesson instruction to model how good writers say their sentence while pointing to where they want each word to go on the page. They write the 1st word, point to the word, reread, write the next word, reread….and repeat until sentence is written. This helps writers remember all the words in their sentence/story.

Significant Task 4 – Revising our writing (3-5 days)
Essential Question: How do writers make their writing better?
Big Idea: Writers add details to their writing

Students meet in several mixed partnerships, listening to the writing of their peers asking themselves "Did I do that in my story?" Students are encouraged to go back to their own writing and try similar craft moves. As students borrow from each other's craft, share before and after revisions with peers and adults. Before consider their writing finished, provide instruction in good writers think "What is my story about?" and add a title and picture to match."

Grade: Kindergarten **Time: November/December (7 weeks)**	**Theme: Kindergarten Reading Superpowers**
Big Ideas	**Essential Questions**
• Readers use everything they know to read. • Reading is thinking • Readers tell others about their reading	▪ What are your Kindergarten Reading Superpowers? ▪ How do we use our KRSP to read? Readers use everything they know to read. (See Superpowers under Instructional Strategies) ▪ What is reading? ▪ What do readers do?

Standards addressed in this unit: **(Speaking & Listening/Language)**	**The students will know and be able to do: (Independently)**
1. Participate in small and large group conversations with peers and adults about Kindergarten topics. (K.SL. 1)	▪ Sustain a conversation with a variety of audiences ▪ Use grade level-appropriate specific vocabulary when speaking ▪ Describe similarities and differences among people, places, events, and objects
2. Ask and answer questions in order to seek help, get information, or clarify something heard. (K.SL. 2)	▪ Ask many questions demonstrating curiosity
3. Add drawings or other visual displays to descriptions as desired to provide additional detail. (K.SL. 5)	▪ Use props or illustrations to extend the meaning.
4. Audibly express thoughts, feelings, and ideas. (K.SL. 6)	▪ Express and reflect on feelings of self and others.
5. Use frequently occurring nouns and verbs. (K.L.1)	▪ People, place, things, and ideas ▪ Action words
6. Form regular plural nouns by adding, /s/ or /es/. (K.L.1)	▪ More than one
7. Understand and use question words. (K.L.1)	▪ Who, what, where, when, why, how
8. Use the most frequently occurring prepositions. (K.L.1)	▪ To, from, in, out, on, off, for, of, by, with
9. Produce and expand complete sentences in shared language activities. (K.L.1)	▪ Add details to ideas
10. Recognize and name end punctuation (K.L.2)	▪ Period, question and exclamation marks
11. Use words and phrases acquired through conversations, reading and being read to, and responding to texts. (K.L.6)	▪ Content as dictated by curriculum
Standards addressed in this unit: **(Reading Foundational Skills)**	**The students will *know* and be able to *do*:**
1. Demonstrate understanding of the organization and basic features of print. (K.RFS.1)	▪ Use one's name to learn about words and make connections to words ▪ Understand that words are separated by spaces in print ▪ Match one spoken word to one written word while reading and point
2. Demonstrate understanding of spoken words and sounds (phonemic awareness). (K.RFS.2)	▪ Adding phonemes to the beginning of words (add /s/ to park=spark) ▪ Manipulating phonemes at the beginning of words ▪ Manipulating phonemes at the ending of words ▪ Blending two or three phonemes in words ▪ Isolate and pronounce final phonemes ***This does not include words that end in /l/, /r/, /x/***

3. Recognize and name all upper- and lowercase letters of the alphabet (phonics). (K.RFS.1)	▪ Recognizing uppercase and lower case letters ▪ Recognizing the sequence of letters in words ▪ Recognizing letters in words ▪ Understanding that words are made up of letters ▪ Making connections between words by recognizing letters ▪ Recognize letters that are embedded in words and in text ▪ Making connections between words by recognizing letter placement ▪ Identify a word that begins with the sound of each letter

4. Know and apply grade-level phonics and word analysis skills in decoding words. (K.RFS.3)	▪ Recognize and use ending consonant sounds and the letters that represent them to read
	▪ Recognize simple CVC words
	▪ Use known words to monitor reading
	  ▪ Set 1 (s, m, t, b, f)
	  ▪ Set 2 (r, n, p, d, h)
	  ▪ Set 3 (c, g, j, l, k)
	  ▪ Set 4 (v, w, z, qu, y, x)

5. Read high-frequency words by sight. (K.RFS.3)	▪ Recognizing high frequency words <u>List A</u> the, I, to, a, is, my, go, me, like, on, in, so, we, it, and, up, at, see, he, do, you, an, can, no, am, said* (*said may also need to be taught in order to aid students in accessing texts.) <u>List B</u> went, are, this, look, for, get, come, got, play, was, had, they, will, too, all, be, as, ball, by, day, did, has, her, him, fun (any 10 from List B)
6. Read emergent-reader texts with purpose and understanding. (K.RFS.4)	▪ Use Star books/Shared Reading experiences ▪ Re-read familiar texts read aloud ▪ You can read the pictures ▪ You can read the words ▪ You can retell the story ▪ Getting your mouth ready ▪ Reading to make sense ▪ Noticing high frequency words ▪ Locate words through the first letter, last letter and meaning ▪ Point crisply and read at a steady rate ▪ Match voice to print without long pauses
Standards addressed in this unit: **(Reading Literature/Informational Texts)**	**The students will *know* and be able to *do*:**

1. Actively engage in independent and group reading activities with purpose and understanding. (K.RL.10)	▪ Partner reading/independent reading/shared reading
	▪ Introducing your superpowers
	  ▪ Using our finger to point to a word
	  ▪ Matching the words the reader says with the words on the

	page ▪ Reading snap words ▪ What to do with tricky words ▪ Using the pattern to read smoothly ▪ Looking for things you know ▪ Creating a movie in your mind ▪ Combining all your superpowers
2. Ask and answer questions about key details in a text. (K.RL.1)	▪ Readers use strategies – questioning ▪ Ask many questions, demonstrating curiosity. ▪ Using the front cover, back cover, and title page ▪ Asking questions about characters, setting, and events ▪ Asking questions about the topic and details
3. Retell stories including key details. (K.RL.2)	▪ Partner sharing/teacher conferences ▪ Using the pictures and the words to tell others about the story ▪ Telling about the beginning, middle, and end ▪ Telling others about the topic and details ▪ Describe characters, setting, events, or ending
4. Recognize common types of texts. (K.RL.5)	• Beginnings, middle parts and endings of stories • Story elements – characters, setting, events • Topics and details • Poems
5. Compare and contrast the adventures and experiences of characters in familiar stories. (K.RL.9)	▪ Identifying recurring character experiences and settings.
6. Identify the main idea and key details. (K.RL.3)	▪ Search for and use information in pictures and language.

Significant Tasks

Significant Task 1 – Kindergarten Reading Superpowers (10-15 days)
Essential Question: What are our reading superpowers?
Big Idea: Readers use everything they know to read and understand texts.

Begin by introducing the idea that reading is hard work and that good readers use all of their powers to read and understand what they are reading. Introduce kindergarten superpowers: using our finger to point to a word, matching the words the reader says with the words on the page, reading snap words, what to do with tricky words, using the pattern to read smoothly, looking for things you know, creating a movie in your mind. Through shared reading students practice applying superpowers with teacher support and guidance. Students also receive opportunities to demonstrate their superpower individually in instructional reading conferences.

Significant Task 2 – Reading is thinking (6 days)
Essential Question: What is reading?
Big Idea: Reading is thinking?

Make connections between last month's focus on wondering and previewing texts, to this month's addition of questioning. The comprehension strategies are taught as

tools a reader uses. Keeping a growing record of these comprehension strategies, it will come in handy in future units. Students are encouraged to ask many important questions about story elements or topic, main ideas and/or key details with informational texts. Teacher models this type of questioning with interactive read aloud and shared reading experiences when appropriate.

Vocabulary: previewing, wondering, questioning

Significant Task 3 – Retelling the story/information to others (3 days)
Essential Question – What do readers do?
Big Idea: - Readers tell others about their reading

Based on independent reading levels students, continue to practice retelling their stories to partners and adults. Students are encouraged to use the pictures and the words to tell the story for both stories and informational texts. Teacher should conduct a conference with individual students to assess progress.

Grade: Kindergarten **Time: December**	**Genre: Writing - nonfiction** **Theme: Write like writers and scientist**
Big Ideas	**Essential Questions**
• Scientist observe the world • Writers revise their writing	• How do we write like scientists? • How do writers make their writing better?

Standards addressed in this unit:	**The students will know and be able to do: (Independently)**
1. Use a combination of drawing, dictating and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (K.W.2 2. Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K.W.7) 3. Explore a variety of digital tools to produce and publish writing, including in collaboration with peers. (K.W.6) 4. Spell simple words phonetically, drawing on knowledge of sound-letter relationships. (K.L.2)	▪ Record observations and thoughts ▪ Writers observe the world ▪ Label observations ▪ Write exact details as they are observed ▪ Spell words the best they can ▪ Stretch words out slowly ▪ Plan how they want their writing to go ▪ Plan their writing across their fingers ▪ Discuss their writing plan ▪ Go back to writing and add details ▪ Use drawings and labels to remind of writing ▪ Scientist are exact ▪ Use authors as mentors for writing ▪ Add information based on what they know ▪ Sort information ▪ Ask why about what they're observing ▪ Compare their observations (same & different) ▪ Describe what they notice ▪ Compare what they are writing to what they already know ▪ Writers look back over their work ▪ Ask questions about what we're learning ▪ Evaluate their own writing

Significant Tasks
Significant Task 1 – Observing the world (3-5 days) *Essential Question: How do we write like scientist?* *Big Idea: Scientist write about the world* Mini lesson instruction occurs around the idea that writers pay attention to the world they are living. Model for students writing down the things they observe about a scientific topic. Students can be taken outside to observe the world we live in or make observations through various texts about a selected topic. Model label observations and creating drawings that look exactly like what was observed. Through shared/interactive writing, model for students using specific language and pictures to write about observations. Continue instruction with the concept that writers write a lot. Review other science-related texts to compare how much writers include in their books. Students are encouraged to write as many details about their observations and plan what they will write before writing. These plans are discussed in student partnership and teacher conferences. To assist with planning provide instruction in planning across their fingers and discussing their plans with others.

Significant Task 2 – Adding more details (3-5 days)
Essential Question: How do writers make their writing better?
Big Idea: Writers revise their writing

Mini lesson instruction informs students that scientist go back and add more details to their writing. Model adding more details to writing completed as a whole class or previously written. Use science tests to see how authors of these materials add details to their writing. Students are encouraged to add similar details to their writing during independent writing. Instruction informs students that scientists are exact and therefore their pictures and words also need to be exact. Read aloud several scientific texts and examining the details included in the text. Students go back and revise their previously written science booklet to add more details and to examine if they were exact in their writing.

Significant Task 3 – Think, Make Connections, Predict (3-5 days)
Essential Question: How do we write like scientist?
Big Idea: Scientist write about the world

Instruction informs students that writers add what they know to what they are learning and observing. Model for the class how if they are learning about living things they can add what they already know. Students need to be certain what they add is accurate so discourage adding what you think or feel or think you know. Model for students how resources are sometimes necessary to check information. Demonstrate through mini lesson instruction and the use of mentor texts how scientists sort their observations in various ways. With partners students need to take observations and decide how they might sort the information also looking for how things are the same and how they are different. Students can write up these observations in the form of lists or sentences grouped together.

Significant Task 4 – Finishing up our stories (3-5 days)
Essential Question: How do writers make their writing better?
Big Idea: Writers revise their writing

As the unit comes to a completion inform students that writers always look back over their work. Use class writing to examine writing to determine if it's finished. Create a class criteria chart that will help students evaluate whether or not their work is ready to be published. Determine what are the qualities of finished writing. Students practice evaluating their work and the work of their peers.

Grade: Kindergarten **Time: January (4 weeks)**	**Theme: Pattern of Reading**
Big Ideas	**Essential Questions**
▪ Readers use everything they know to read ▪ Reading is thinking	▪ How do we recognize and use patterns to help us read? ▪ What is reading?
Standards addressed in this unit: **(Speaking & Listening/Language)**	**The students will know and be able to do: (Independently)**
1. Participate in small and large group conversations with peers and adults about Kindergarten topics. (K.SL.1)	▪ Tell about personal experiences in a logical sequence ▪ Have a clear purpose ▪ Present ideas and information in a logical sequence
2. Ask and answer questions in order to seek help, get information, or clarify something heard. (K. SL.3)	▪ Know and use question words (5WsH) ▪ Form clear questions to gain information or clarify ▪ Ask many questions, demonstrating curiosity
3. Add drawings or other visual displays to descriptions as desired to provide additional detail. (K. SL.5)	***These skills have been previously introduced. They are now expectations.*** ▪ Use props or illustrations to extend the meaning.
4. Audibly express thoughts, feelings, and ideas. (K. SL.6)	***These skills have been previously introduced. They are now expectations.*** ▪ Express and reflect on feelings of self and others.
5. Understand and use question words. (K.L.1)	▪ Who, what, where, when, why, how
6. Use the most frequently occurring prepositions. (K.L.1)	▪ To, from, in, out, on, off, for, of, by, with
7. Produce and expand complete sentences in shared language activities. (K.L.1)	▪ Add details to ideas
8. Recognize and name end punctuation(K.L.2)	▪ Recognize period, question and exclamation marks
9. Identify new meanings for familiar words and apply them accurately (multiple meaning words) (K.L.4)	▪ Some words have more than one meaning ▪ Use the context to determine meaning
10. Use the most frequently occurring inflections and affixes as a clue to the meaning of an unknown word. (K.L.4)	▪ -s, -ed
11. Use words and phrases acquired through conversations, reading and being read to, and responding to texts. (K.L.6)	▪ Content as dictated by curriculum ▪ Use nouns

	▪ Use verbs
Foundations Standards Addressed in this unit:	
1. Demonstrate understanding of spoken words, syllables, and sounds. (K. RFS.2)	• Isolate and pronounce the initial, medial and final sounds in three-phoneme (CVC) words. *This does not include words that end in /l/, /r/, /x/ ▪ Hearing and saying middle phonemes in words (s-u-n) ▪ Hearing similar middle phonemes in words (cat, ran)
2. Recognize and name all upper- and lowercase letters of the alphabet. (K. RFS.1)	• Recognize uppercase and lower case letters • Recognize the sequence of letters in words • Recognize letters in words • Understand that words are made up of letters • Make connections between words by recognizing letters • Recognize letters in words • Make connections between words by recognizing letter placement • Use consistent and efficient motions to form letters • Recognize letters in continuous text motions to form letters
3. Know and apply grade-level phonics and word analysis skills in decoding words. (K. RFS.3)	▪ Recognize and use ending consonant sounds and the letters that represent them to read (b,m,t,d,g,n,p,f,l,r,s,z,ff,ss,ll,tt,ck) ▪ Recognize similar ending consonant sounds and the letters that represent them ▪ Recognize consonants and vowels
4. Read high-frequency words by sight. (K. RFS.3)	***Lists are differentiated based on individual student need.*** • Recognize and use high frequency words • Locate and read high frequency words in continuous text List A the, I, to, a, is, my, go, me, like, on, in, so, we, it, and, up, at, see, he, do, you, an, can, no, am, said* (*said may also need to be taught in order to aid students in accessing texts.) List B went, are, this, look, for, get, come, got, play, was, had, they, will, too, all, be, as, ball, by, day, did, has, her, him, fun (any 10 from List B)
5. Read emergent-reader texts with purpose and understanding. (K. RFS.4)	▪ Re-read familiar texts read aloud ▪ Read the pictures ▪ Read the words ▪ Retell the story (partner reading/teacher conference) ▪ Recognize and locate words (names) ▪ Make connections between names and other words ▪ Use the letters in names to read and write words: *Chuck, chair* ▪ Use know words to monitor reading and spelling

	▪ Use first and **last names** to read and write words
	▪ Recognize and spell known words quickly
	▪ Use Superpowers
	  ▪ Use our finger to point to a word
	  ▪ Match the words the reader says with the words on the page
	  ▪ Read *snap words* (high-frequency words)
	  ▪ What to do with tricky words:
	  1. Check the picture
	  2. Go back and read it again
	  3. Get your mouth ready
	  4. Find chunks you know
	  ▪ Use the pattern to read smoothly
	  ▪ Look for things you know

Standards addressed in this unit: **(Reading Literature/Information Skills)**	**The students will *know* and be able to *do*:**
1. Actively engage in independent and group reading activities with purpose and understanding. (K.RL.10)	▪ Get ready for reading – how will this book go? (using the structure of the language/pattern) ▪ Let the pattern sweep along ▪ Use the pictures to discover the pattern (pictures repeat so will the words) ▪ the object doesn't change the action changes – this will occur ▪ Does it repeat? Does it rhyme? Does it have a rhythm? ▪ Once you know the pattern you can figure out what's next ▪ Readers use the pattern (or what the book is mainly about) to figure out the last page ▪ Get a running start with the pattern by re-reading
2. Retell stories including key details. (K.RL.2)	▪ Use the pictures and the words to tell others about the story ▪ Tell about the beginning, middle, and end ▪ Tell others about the topic and details ▪ Describe characters, setting, events, or ending ▪ Use the pattern to tell others about the story
3. Ask and answer questions about key details in a text. (K.RL.1)	▪ Readers use comprehension strategies (predicting) ▪ Using the front cover, back cover, and title page ▪ Ask questions about the pattern ▪ Ask questions about the words
4. Recognize common types of texts. (K.RL.5)	▪ Every story has a beginning, middle parts and ending ▪ Story elements – characters, setting, events ▪ Informational text elements - topics and details ▪ Poems – recognize as a form of writing
5. Compare and contrast the adventures and experiences of characters in familiar stories. (K.RL.9)	▪ Identify recurring character experiences and settings. ▪ Compare patterns in books

6. Identify the main idea and key details. (K.RIT.2)	▪ Search for and use information in pictures and language. ▪ Identify topic of text ▪ Create questions about details in text

Significant Tasks

Significant Task 1 – Looking For Patterns (5-7 days)
Essential Question: How do we recognize and use patterns?
Big Idea: Readers use everything they know to read

Using leveled texts the teacher models how looking for and noticing the pattern helps read the book. Introduce and record the basic patterns in the texts being read. Rhyming, repeating and rhythm are the three most prevalent. Read many texts that reflect one of these patterns. Notice the pattern for students during shared reading and allow students to help identify the pattern that occurs in your shared reading texts. Point out for students how sometimes the pattern can be tricky pieces with patterns including the last page could be different and when the subject versus the object changes. "The cat was eating. The cat was sleeping…….It was a busy day." In student partnerships have read aloud to each other, identifying the pattern.

Vocabulary: patterns, rhyme, rhythm, repeat
Assessment: student identifies the pattern of a particular text in a teacher conference

Significant Task 2 – Reading is thinking (3-5 days)
Essential Question: What is reading?
Big Idea: Reading is thinking

Build on the comprehension strategies previously taught of wondering and questioning and introduce predicting. Teachers model for students how noticing the pattern can help you make predictions about what will happen next in the text. Students should be encouraged to continue to wonder what's happening in the text and questioning the story elements and main ideas and details. Begin to demonstrate how readers use various strategies throughout the reading to help understand what the text is saying.

Grade: Kindergarten **Time: January**	**Genre: Writing** **Theme: Writing Pattern Books to Read, Write, and Teach**
Big Ideas	**Essential Questions**
• Writers use patterns to communicate meaning?	How do writers **convey meaning** in a pattern book? How do writers **convey their feelings and thoughts** about a topic?

Standards addressed in this unit:	**The students will know and be able to do: (Independently)**
1. Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of a book they are writing about and state an opinion or preference about the topic or book. (K.W.1) 2. Use a combination of drawing, dictating, and writing to compose informational/explanatory texts in which they name what they are writing about and supply some information. (K.W.2) 3. Use a combination of drawing, dictating and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. (K.W.3) 4. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (K.W.5) 5. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. (K.W.8)	• Generate a list of topics including favorite things, activities you enjoy with certain family members and friends. (to be kept in writing folders) • Understand that writers brainstorm ideas to write about • Pattern books have high-frequency words • Pattern books have repeated sentence structure. • Pattern books are about a main idea/topic and the **title** holds all the pages together. (For example: <u>Dad</u> is about things a dad does. <u>At the</u> <u>Zoo</u> is about different animals seen at the zoo. • The last page of a Pattern Book may repeat the title, have a surprise ending or change the story meaning. • Pattern books can have a **seesaw pattern**, one page goes one way and the next page goes another. For example: "I like ice cream. My mom does too. I like pizza. My dad does too." • Pattern books can have an **ask and answer pattern**, a question is asked and then the writers spends pages answering that question. • Pattern books with an opinion can be stated in the title, as a beginning or as an ending. • Pattern books with an opinion tell about a topic they like or dislike. • Pattern books with an opinion tell about a topic you feel strongly about. "I want ice cream for dinner." ▪ Pattern books with an opinion include the drawing progress to help students to clearly state ideas/ opinions.

Significant Tasks

To support this ***entire*** unit read aloud pattern books Levels A-4.

Significant Task 1 – Pattern books (7-10 days)
Essential question: How do writes convey meaning through patterns?
Big Ideas: Writers use patterns to help convey meaning

Review the types of patterns commonly found in texts. Use information from Reader's Workshop to transfer understandings. During mini lesson instruction inform students that good writers write books about their favorite things, families, and friends to make their classroom library their own. We can use what we already know about each other to write just right pattern books. Using the pattern books from the reading unit as a guide, use shared/interactive writing to write whole class pattern books. Students are encouraged to write pattern books about their classmates and themselves. Continued mini lesson instruction in pattern books includes good writers write stories using their high frequency words and good writers repeat these words over and over to help tell their story in a book. To complete student and whole class pattern books, model how good writers think about what their book is about and come up with a title for their book and when writing the last page of their book good writers can repeat the title, add a surprise ending or change the word pattern. Extending pattern work the teacher models instruction in two fancy patterns. These patterns include the see saw pattern and ask and answer format.

Significant Task 2 (3-5 days)
Through whole class modeling demonstrate how writers can write opinion pattern books. For example, good writers can write how they feel in the title." (I Like Balloons and I Like to Play) Additional mini lesson instruction in how good writers can write how they feel at the beginning or at the end of their story, good writers write about things they like, and dislike, good writers use pictures to add more to their words, and good writers write about things they want to have or want to do establish the foundation for opinion pattern books.

Grade: Kindergarten **Time: February/March (6 weeks)**	**Theme: We Can Be Reading Teachers**
Big Ideas	**Essential Questions**
▪ Readers teach themselves and others about the book. ▪ Readers use pre-reading strategies to learn about the book. ▪ Readers share what they learn from their reading. ▪ Readers tell others about their books.	▪ How can we be reading teachers? ▪ How do we warm-up before reading? ▪ Why do we reread our books? ▪ What can we discuss with the community about our reading? ▪ What do readers do?

Standards addressed in this unit: **(Speaking & Listening/Language)**	**The students will know and be able to do: (Independently)**
1. Participate in small and large group conversations with peers and adults about Kindergarten topics. (K.SL.1)	▪ Listen actively to others read or talk about stories, poems, or informational texts ▪ Engage in the turn-taking of conversation ▪ Enter a conversation appropriately ▪ Participate actively in whole-class discussion or with peers as partners, or in a small group
2. Ask and answer questions in order to seek help, get information, or clarify something heard. (K. SL.3)	***These skills have been previously introduced. They are now expectations.*** ▪ Know and use question words ▪ Form clear questions to gain information or clarify ▪ Ask many questions, demonstrating curiosity
3. Add drawings or other visual displays to descriptions as desired to provide additional detail. (K. SL.5)	• Engage in imaginary play ***These skills have been previously introduced. They are now expectations.*** ▪ Use props or illustrations to extend the meaning.
4. Audibly express thoughts, feelings, and ideas. (K. SL.6)	• Express opinions and explain reasoning (because…) • Speak about a topic with enthusiasm ***These skills have been previously introduced. They are now expectations.*** ▪ Express and reflect on feelings of self and others.
5. Produce and expand complete sentences in shared language activities.(K.L.1)	▪ Add details to ideas
6. Use the most frequently occurring inflections and affixes as a clue to the meaning of an unknown word. (K.L.4)	▪ -s, -ed
7. Use words and phrases acquired through conversations, reading and being read to, and responding to texts. (K.L.6)	▪ Content as dictated by curriculum ▪ Use nouns ▪ Use verbs
Standards addressed in this unit: **(Reading Literature/Information Texts)**	**The students will *know* and be able to *do*:**

1. Actively engage in independent and group reading activities with purpose and understanding. (K.RL.10)	▪ Readers teach themselves about the book ▪ Readers examine the pictures and the title. ▪ Readers make their reading sound right. ▪ Readers reread by reading the word, checking the picture and making another guess. ▪ Readers teach each other to use the letters in the word. ▪ Readers think about how the story might go. ▪ Reading partners cheer each other on. ▪ Reading partners tell us when it doesn't sound right.
2. Retell stories including key details. (K.RL.2)	▪ Readers share what they've learned from their books ▪ Readers tell about interesting parts of the book. ▪ Readers tell about funny parts of the book. ▪ Readers reread parts of the story to remember.
3. Ask and answer questions about key details in a text. (K.RL.1)	▪ Readers ask what the book is about. ▪ Reading communities ask questions when they don't understand. ▪ Readers ask questions about the story or information to remember the big parts of the story.
4. Recognize common types of texts. (K.RL.5)	▪ Readers learn different things from different types of books.
5. Compare and contrast the adventures and experiences of characters in familiar stories. (K.RL.9)	▪ Readers look at how stories are the same. ▪ Readers notice characters behaviors. ▪ Readers notice big parts of stories.
6. Identify the main idea and key details. (K.RL.3)	▪ Readers teach themselves what the book is about.
Standards addressed in this unit: **(Reading Foundational Skills)**	
1. Demonstrate understanding of spoken words, syllables, and sounds. (K.RFS.2)	▪ Hearing four or more phonemes in a word. ▪ Hearing and identifying phonemes in a word in sequence.
2. Recognize and name all upper- and lowercase letters of the alphabet. (K.RFS.1)	▪ Recognize uppercase and lower case letters ▪ Recognize the sequence of letters in words ▪ Recognize letters in words ▪ Understand that words are made up of letters ▪ Make connections between words by recognizing letters ▪ Recognize letters in words ▪ Make connections between words by recognizing letter placement ▪ Use consistent and efficient motions to form letters ▪ Recognize letters in continuous text
3. Know and apply grade-level phonics and word analysis skills in decoding words. (K.RFS.3)	▪ Understanding letters that represent consonant sounds or vowel sounds

	▪ Hearing and identifying short vowel sounds in words and the letters that represent them ▪ Recognize that words have letter patterns that are connected to sounds (phonograms/word families are spelling patterns) ▪ Recognizing and using the consonant-vowel-consonant (CVC) pattern ▪ Recognizing and using short vowel sounds at the beginning of words (at, apple, Andrew) ▪ Recognizing and using short vowel sounds in the middle of words (CVC) : hat, bed ▪
4. Read high-frequency words by sight. (K.RFS.3)	***Lists are differentiated based on individual student need.*** • Recognize and use high frequency words • Locate and read high frequency words in continuous text <u>List A</u> the, I, to, a, is, my, go, me, like, on, in, so, we, it, and, up, at, see, he, do, you, an, can, no, am, said* (*said may also need to be taught in order to aid students in accessing texts.) <u>List B</u> went, are, this, look, for, get, come, got, play, was, had, they, will, too, all, be, as, ball, by, day, did, has, her, him, fun (any 10 from List B)
5. Read emergent-reader texts with purpose and understanding. (K.RFS.4)	• Re-read familiar texts read aloud • Read the pictures • Read the words • Retell the story (partner reading/teacher conference) • Recognize and locate words (names) • Make connections between names and other words • Use the letters in names to read and write words: *Chuck, chair* • Use know words to monitor reading and spelling • Use first and last names to read and write words • Recognize and spell known words quickly • Use Superpowers: a. Use our finger to point to a word b. Match the words the reader says with the words on the page c. Read *snap words* (high-frequency words) d. What to do with tricky words: • Check the picture • Go back and read it again • Get your mouth ready • Find chunks you know • Use the pattern to read smoothly • Look for things you know

Significant Tasks

Significant Task 1 – Teach yourself about the book (7-10 days)
Essential Question: How can we be reading teachers?
Big Idea: Readers teach themselves about the book

Build student confidence in their many abilities and powers to read books. Inform them that readers often teach themselves about books. Model for students previewing the texts and making predictions what the text will be about. Model the behaviors that readers use to teach themselves the book: readers examine the pictures and the title, readers make their reading sound right, readers reread by reading the word, checking the picture and making another guess, readers teach each other to use the letters in the word, readers think about how the story might go, reading partners cheer each other on, and reading partners tell us when it doesn't sound right.

Vocabulary: (as dictated by texts)

Significant Task 2 – Retelling the story (5-7 days)
Essential Question: What do readers do?
Big Idea: Readers tell others about their book

Students continue to practice retelling their stories and information learned from texts. Students can also share parts of their stories by rereading parts of the story to remember what they'd like to share. Focus students on sharing what they've taught themselves from their books. Students can focus on telling about the interesting parts, funny, or favorite parts. Daily allow students to share with the class what they learned and shared from their books. Record this information to later review all the things learned from kindergarten reading.

Assessment: kindergarten retelling

Grade: Kindergarten **Time: February**	**Genre: Writing** **Theme: Raising the quality of small moments**
Big Ideas	**Essential Questions**
• Writers writer about their lives • Writers are specific • Writers revise their writing	• What do writers write about? • How do writers make their writing better?

Standards addressed in this unit:	**The students will know and be able to do: (Independently)**
1. Use a combination of drawing, dictating and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. (K.W.3) 2. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (K.W.5) 3. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. (K.W.8)	▪ Write small moments ▪ Stretch small moments out ▪ Use drawing and writing to share key details ▪ Picture events like a movie (sequence) ▪ Use rereading to add details ▪ Stretch stories over many pages ▪ Sequence events appropriately ▪ Revise writing ▪ Work with partners to improve writing ▪ Write words they know quickly ▪ Find resources to help with unknown words ▪ Include feelings and thoughts in small moments ▪ Revise work to include additional details ▪ Use mentor texts as inspiration

Significant Tasks

Significant Task 1 – Small Moments (7-10 days)
Essential Questions: What do writers write about?
Big Idea: Writers write the stories of their lives

Instruction in this unit uses mentor texts to help model for students zooming in on one small moment. Highlight for students the specific moments that authors have shared. Keep a running list of small moments for student reference. Through independent writing and conferences, students focus on a small moment and zoom in. Students work in partnerships to identify small moments and evaluate whether the writer has zoomed in. Student independent writing should produce multiple work samples from which students can revise and rewrite. Once students have mastered zooming in, develop student understanding that authors stretch out these small moments with specific details. Use multiple examples from mentor texts of how small moments are then stretched out with key details. Through mini lesson instruction provide strategies for stretching out the moment and sequencing events chronologically. For example, write across your fingers, itsy bitsy details, draw to help with details, picture a movie in your head, reread and partner work. Utilize conferences to provide direct instruction differentiated by evidenced student work. Word work with students includes writing words you know quickly, partner work for revisions and available key resources. Students publish a small moment for teacher evaluation.

Significant Task 2 – Details, Details, Details (3-5 days)
Essential Question: How do writers make their writing better?
Big Idea: Writers revise their writing

Continue to use mentor texts and mini lesson instruction to notice how authors use details. Focus instruction on how authors express their feelings and thoughts about the selected small moment. During student independent writing students reread to see if small moments contain their feelings and thoughts. Students work with partners and in conferences to add details about their feelings and thoughts about the moment. Use mini lesson instruction to teach strategies such as, inside/outside the story. Student assessment consists of two pieces focusing on how the author has used their feeling and thoughts to add details to their writing.

Grade: Kindergarten **Time: March/April (6 weeks)**	**Theme: Learning About Ourselves and Our World**
Big Ideas	**Essential Questions**
▪ Readers work hard to learn information. ▪ Nonfiction readers read more than one book about a topic to compare and contrast. ▪ Nonfiction readers ask and answer questions to learn more about a topic.	▪ How do we learn information from books? ▪ How do we combine learning from more than one book? ▪ How can we compare and contrast books?
Standards addressed in this unit: **(Speaking & Listening/Language)**	**The students will know and be able to do: (Independently)**
1. Participate in small and large group conversations with peers and adults about Kindergarten topics. (K. SL.1)	▪ Tell about personal experiences in a logical sequence ▪ Have a clear purpose ▪ Present ideas and information in a logical sequence
2. Ask and answer questions in order to seek help, get information, or clarify something heard. (K. SL.3)	***These skills have been previously introduced. They are now expectations.*** ▪ Know and use question words ▪ Form clear questions to gain information or clarify ▪ Ask many questions, demonstrating curiosity
3. Add drawings or other visual displays to descriptions as desired to provide additional detail. (K. SL.5)	***These skills have been previously introduced. They are now expectations.*** ▪ Use props or illustrations to extend the meaning.
4. Audibly express thoughts, feelings, and ideas. (K. SL.6)	***These skills have been previously introduced. They are now expectations.*** ▪ Express and reflect on feelings of self and others.
Comprehension Standards addressed in this unit: (Reading for Literature/Information Skills)	**The students will know and be able to do:**
1. Actively engage in independent and group reading activities with purpose and understanding. (K.RIT. 10)	▪ Readers know how to identify informational books (photographs on cover and inside pages) ▪ Readers teach themselves about the informational book. ▪ Readers look at the pictures, think about the title and what they know about the topic of the book to help them figure out a tricky word. ▪ Readers make sure their reading makes sense, sounds right and looks right. ***This has been previously introduced. They are now expectations.*** ▪ Readers think about the topic. ▪ Reading partners cheer each other on.
2. Retell stories including key details. (K.RL.2.)	▪ Readers share what they've learned from their books ▪ Readers tell about interesting parts of the book. ▪ Readers reread parts of the story to remember. ▪ Readers share their new learning and thinking with their reading partners.

3. Ask and answer questions about key details in a text. (K.RIT.1)	▪ Readers use what they already know about a topic to get ready to read. ▪ Readers ask what the book is about. ▪ Reading communities ask questions when they don't understand. ▪ Readers ask questions about the story or information to remember the big parts of the story. ▪ Reading partners ask, "What else did you learn…? or "What's the most important thing to know about…? What else did you learn about….?"
4. Identify the main topic and key details. (K.RIT.2)	▪ Readers teach themselves what the book is about. ▪ Readers anticipate the next pages in the book to help them think about what is the same between one page and another. ▪ Readers think about what is this particular book teaching. ▪ Readers share all they know about a topic with their partner.
5. Identify front cover, back cover and the title page. (K.RIT.5)	▪ Readers use thoughts they have about the title, covers and what they already know about the topic to read each page. ▪ Readers use the images on the front and back cover of a book to help them figure out the topic.
6. Identify basic similarities in and differences between two texts on the same topic. (K. RIT.9)	▪ Readers will combine their learning from two or more books to compare and contrast information.
Standards addressed in this unit: **(Foundational Skills)**	**The students will *know* and be able to *do*:**
1. Demonstrate understanding of spoken words, syllables, and sounds. (K.RFS.2)	• Blending three or more phonemes in a word • Deleting phonemes in a word
2. Recognize and name all upper- and lowercase letters of the alphabet. (K.RFS.1)	• Recognizing uppercase and lower case letters • Recognizing letters in words • Recognizing the sequence of letters in words • Understanding that words are made up of letters • Making connections between words by recognizing letters • Recognize letters that are embedded in words and in text • Making connections between words by recognizing letter placement • Identify a word that begins with the sound of each letter • Recognize letters in continuous text • Uses consistent and efficient motions to form letters
3. Know and apply grade-level phonics and word analysis skills in decoding words. (K.RFS.3)	• Hearing and identifying long vowel sounds in words and the letters that represent them

	• Recognize and use simple phonograms with a VC pattern (easiest): -ad, -ag, -an*, -am, -at*, -ed, -en, -et, -ig, -in*, -it*, • -og, -op*, -to, -ut *=most common phonogram
4. Read high-frequency words by sight. (K.RFS.3)	***Lists are differentiated based on individual student need.*** • Recognize and use high frequency words • Locate and read high frequency words in continuous text <u>List A</u> the, I, to, a, is, my, go, me, like, on, in, so, we, it, and, up, at, see, he, do, you, an, can, no, am, said* (*said may also need to be taught in order to aid students in accessing texts.) <u>List B</u> went, are, this, look, for, get, come, got, play, was, had, they, will, too, all, be, as, ball, by, day, did, has, her, him, fun (any 10 from List B) • Recognize and learn concept words: color names, number words, days of the week, months of the year, seasons • Recognize and use words that are related in many ways: sound, spelling, meaning • Understand the concept of plural • Recognize and use plurals that add s: dogs, cats, apples • Recognize and use endings that add s to a verb to make it agree with the subject: skate/skates; run/runs • Recognize and use endings that use *ing* to denote the present participle: play/playing; send/sending
5. Read emergent-reader texts with purpose and understanding. (K.RFS.4)	▪ Re-read familiar texts read aloud ▪ Read the pictures ▪ Read the words ▪ Retell the story (partner reading/teacher conference) ▪ Recognize and locate words (names) ▪ Make connections between names and other words ▪ Use the letters in names to read and write words: *Chuck, chair* ▪ Use know words to monitor reading and spelling ▪ Use first and last names to read and write words ▪ Recognize and spell known words quickly ▪ Use Superpowers ▪ Use our finger to point to a word ▪ Match the words the reader says with the words on the page ▪ Read *snap words* (high-frequency words) ▪ What to do with tricky words: ▪ Check the picture ▪ Go back and read it again

	▪ Get your mouth ready ▪ Find chunks you know ▪ Use the pattern to read smoothly ▪ Look for things you know

Significant Tasks

Significant Task 1 – Going on trips in our books
Essential Question: How do we learn information from books?
Big Idea: Readers work hard to learn information.

Inform students that when we read nonfiction it's like going on a trip into our book. Instruction includes teacher modeling on previewing the text and asking questions about what the text might be about. Demonstrate for students how the title and pictures will give you insight into the topic of the text and also some key details. Include lessons on activating prior knowledge about various topics. Re-introduce the concept of using the pattern to help determine what the book is about. Through guided practice and independent reading, students continue to travel through their books. Teach students in partnerships and independent reading to count the things they've learned from reading on their fingers. Continue to develop student understanding through instruction through the teaching of text structures that help us with nonfiction including bold words, chapter and section headings, and illustrations. Model through read aloud time how these structures help with learning new information from the text. Mini lesson instruction should include how to solve tricky words with nonfiction texts. Provide students with the structure to discuss where they are "travelling" to in their books.

Vocabulary: travel
Assessment: Travel book – Where did I go?

Significant Task 2 – Comparing and Contrasting
Essential Question: How can we compare and contrast information in books?
Big Idea: Nonfiction readers read more than one book about a topic to compare and contrast.

Utilizing the texts read aloud in the first task, begin to demonstrate for students how after reading several texts on the same topic readers can make comparisons. Teach students the same different game. Partnerships then learn to look for similar information in texts when they are reading. Students are encouraged to share the similarities and differences in the patterns of the books they're reading. Create a class chart that depicts the various comparisons students have made.

Grade: Kindergarten **Time: March**	**Genre: Writing** **Theme: Procedural writing**
Big Ideas	**Essential Questions**
• Writers write about their lives • Writers are specific • Writers revise their writing	• What do writers write about? • How do writers make their writing better?

Standards addressed in this unit:	**The students will know and be able to do: (Independently)**
1. Use a combination of drawing, dictating and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (K.W.2 2. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (K.W.5) 3. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. (K.W.8)	• Write about things they know how to do • Explain steps in order • Add details to pictures • Use precise words • Include specific text features • Spell familiar words accurately • Fix up and revise work for publishing

Significant Tasks

Significant Task 1 – How to Book
Essential Question: What do writers write about?
Big Idea: Writers write about what they know

Use mini lesson instruction and mentor texts to define "How-to Books." Students need multiple exposures to this genre of writing. Build on other units and the idea that writers write about what they know; it is the same for "How-to-Books. Independent practice produces multiple "How-to-Books." Students write about the many things they know how to do. Students work with partners to generate lists that they share with the class and invite other to write about as well. Mini lesson instruction may also include strategies that include, add details to picture, use precise words, include text features

Significant Task 2 – Fixing it up
Essential Question: How do writers make their writing better?
Big Idea: Writers revise their writing

Use mini lesson instruction to further enhance student understanding regarding completed writing. Teach students to examine examples to ask if the author has tried various craft moves. Review through mini lessons how students use their knowledge of words to be certain they're writing is clear for someone else to read; is the writing clear. Students work with partners to evaluate work to determine if it's done. Students will publish a "How-to-Book" for final assessment.

Grade: Kindergarten **Time: May (4 weeks)**	**Theme: Brave and Resourceful Readers**
Big Ideas	**Essential Questions**
▪ Readers notice when there is a tricky part and then take action ▪ Readers reread with purpose ▪ Readers support their partners with words and comprehension	▪ How do readers help themselves when they come to an unknown word? ▪ How do readers reread books with a particular goal in mind? ▪ How do readers know how to help a partner with tricky parts?

Standards addressed in this unit: **(Speaking & Listening/Language)**	**The students will know and be able to do: (Independently)**
1. Participate in small and large group conversations with peers and adults about Kindergarten topics.(K.SL.1)	▪ Explain and describe people, events, places, and objects ▪ Compare personal knowledge with what is heard
2. Ask and answer questions in order to seek help, get information, or clarify something heard. (K.SL.3)	***These skills have been previously introduced. They are now expectations.*** ▪ Confirm understandings ▪ Form clear questions to gain information
3. Add drawings or other visual displays to descriptions as desired to provide additional detail. (K.SL.5)	***These skills have been previously introduced. They are now expectations.*** ▪ Use props or illustrations to extend the meaning
4. Audibly express thoughts, feelings, and ideas. (K.SL.6)	***These skills have been previously introduced. They are now expectations.*** • Engage in imaginary play ▪ Express and reflect on feelings of self and others
5. Produce and expand complete sentences in shared language activities. (K.L.1)	▪ Add details to ideas
6. Use the most frequently occurring inflections and affixes as a clue to the meaning of an unknown word. (K.L.4)	▪ -s, -ed
7. Use words and phrases acquired through conversations, reading and being read to, and responding to texts. (K.L.6)	▪ Content as dictated by curriculum ▪ Using nouns ▪ Using verbs
Comprehension Standards addressed in this unit: (Reading for Literature/Information Skills)	**The students will know and be able to do:**
1. Actively engage in independent and group reading activities with purpose and understanding. (K.RL.10)	▪ Reading partners help each other when one of them gets stuck on a tricky part. S/he doesn't tell the word but uses prompts like, "Try something." "Look at the picture." Think about what is happening in the story." "Look at the word." ▪ Reading partners listen to each other read and think alongside each other. When something doesn't seem quite right we remind each other to "Check it." "Fix it." or "Try that again." ▪ Reading partners help each other look more closely at the words. We might say," Read this again while pointing underneath this word."
2. Retell stories including key details. (K.RL.2)	▪ Readers retell the story to each other to make sure they both understand what is happening in the book. ▪ Reading partners reread to find a part they forgot or missed when

	retelling. ▪ Readers when finished with a book retell the important part to themselves. Then they reread to make sure they did not leave anything important out.
3. Ask and answer questions about key details in a text. (K.RL.1)	▪ Reading partners go back to reread if they don't agree with something the other partner said to fix their retell.
4. Ask and answer questions about unknown words in text. (K.RL.4)	Readers act when they read a part that does not make sense. ▪ Readers scan the whole picture, look at the word and think what would make sense. ▪ Readers go back and reread, and think what would look right and make sense. ▪ Readers get their mouth ready and think what would sound right and make sense. ▪ Readers work hard to figure out words. They are flexible and try to different strategies if they don't work. ▪ Readers finish a book and go back to the pages and find the words that gave them trouble. They practice rereading and remembering each word. Reread the book again and make it sound perfect.
Foundations Standards Addressed in this unit:	
1. Demonstrate understanding of spoken words, syllables, and sounds. (K.RFS.2)	▪ Add phonemes to the end of words ▪ Manipulates phonemes in the middle of words
2. Recognize and name all upper- and lowercase letters of the alphabet. (K.RFS.1)	▪ Recognize uppercase and lower case letters ▪ Recognize the sequence of letters in words ▪ Recognize letters in words ▪ Understand that words are made up of letters ▪ Make connections between words by recognizing letters ▪ Recognize letters in words ▪ Make connections between words by recognizing letter placement ▪ Use consistent and efficient motions to form letters ▪ Recognize letters in continuous text
3. Know and apply grade-level phonics and word analysis skills in decoding words. (K.RFS.3)	▪ Recognize and use more difficult phonograms with a VC pattern: -ap*, -aw*, -ay*, -ip*, -ug*, -ab, -ar, -ed, -eg, -em, -en, -ib, -ix, -ob, -od, -ow, (blow) -ow (cow), -um, -un *=most common phonogram ▪ Recognize and understand simple compound words: into, myself, itself, today Recognize and use word parts (onset, rimes) to read a word: br-ing; cl-ap
4. Read high-frequency words by sight. (K.RFS.3)	***Lists are differentiated based on individual student need.***

	▪ Recognize and use high frequency words ▪ Locate and read high frequency words in continuous text <u>List A</u> the, I, to, a, is, my, go, me, like, on, in, so, we, it, and, up, at, see, he, do, you, an, can, no, am, said* (*said may also need to be taught in order to aid students in accessing texts.) <u>List B</u> went, are, this, look, for, get, come, got, play, was, had, they, will, too, all, be, as, ball, by, day, did, has, her, him, fun (any 10 from List B) ▪ Recognize and learn concept words: color names, number words, days of the week, months of the year, seasons • Recognize and use words that are related in many ways: sound, spelling, meaning • Understand the concept of plural • Recognize and use plurals that add s: dogs, cats, apples • Recognize and use endings that add s to a verb to make it agree with the subject: skate/skates; run/runs • Recognize and use endings that use *ing* to denote the present participle: play/playing; send/sending
5. Read emergent-reader texts with purpose and understanding. (K.RFS.4)	▪ Re-read familiar texts read aloud ▪ Read the pictures ▪ Read the words ▪ Retell the story (partner reading/teacher conference) ▪ Recognize and locate words (names) ▪ Make connections between names and other words ▪ Use the letters in names to read and write words: *Chuck, chair* ▪ Use know words to monitor reading and spelling ▪ Use first and last names to read and write words ▪ Recognize and spell known words quickly ▪ Practice Superpowers ▪ Use our finger to point to a word ▪ Match the words the reader says with the words on the page ▪ Use the pattern to read smoothly ▪ Look for things you know ▪ Read *snap words* (high-frequency words) ▪ What to do with tricky words: i. Check the picture ii. Go back and read it again iii. Get your mouth ready iv. Find chunks you know

Significant Tasks

Significant Task 1 – What to do with tricky words (3-5 days)
Essential Question: What do readers do when they come to a tricky word?
Big Idea: Readers notice when there's a tricky part and take action.

Instruction focuses on using a variety of strategies to solve tricky words. Through mini lesson instruction remind students of all the word solving strategies they know: check the picture, does that make sense, does it sound right, thinking about the whole book (not exclusive list). Create a criteria chart for what to do with tricky words. After re-introducing and modeling use of the strategies students help identify a strategy that may help with a particular tricky word. Model why certain strategies are not successful with certain words. In partnerships have students help each other and remind each other of all the strategies they could use to solve unknown words. Demonstrate through mini lessons how sometimes you have to use the whole word to determine what it says. In small group and conferences check and encourage the use of multiple strategies to solve words even if the first strategy selected works.

Assessment: Teacher listens to student read orally
Vocabulary: tricky, prompt

Significant Task 2 – Re-read with purpose (2-3 days)
Essential Question: How do readers reread books with a particular goal in mind?
Big Idea: Readers reread with purpose.

Model for students re-reading with a purpose. The purpose can be to improve fluency, better understand the story, learn new words, etc. Demonstrate for students the many reasons that readers re-read a text. Create a class criteria chart to list the reasons to re-read. Model this over several days. Through guided practice students can help participate in the reason for the re-reading. In partnerships and independent reading students select various reasons to re-read a text.

Grade: Kindergarten **Time: April/May**	**Genre: Writing** **Theme: Informational Texts**
Big Ideas	**Essential Questions**
• Writers write about their lives • Writers are specific • Writers revise their writing	• What do writers write about? • How do writers make their writing better?

Standards addressed in this unit:	**The students will know and be able to do: (Independently)**
1. Use a combination of drawing, dictating and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (K.W.2 2. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (K.W.5) 3. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. (K.W.8)	• Write about things they know how to do • Write across fingers • Use visuals to explain ideas • Sort information/ideas in texts • Revise for organization • Revise for elaboration • Revise to add text features • Make writing easy to read • Check for spelling • Use resources to check

Significant Tasks

Significant Task 1 – Informational texts
Essential Question: What do writers write about?
Big Idea: Writers write what they know

Use mini lesson instruction and multiple mentor texts to collaboratively define informational texts and how they are the same or different from narratives and other types of writing. Model for students how writers write everything they know about a topic. Build this knowledge with instruction in writing across their fingers, using visuals to explain and clarify their ideas. Students use independent writing to practice incorporating strategies into multiple informational booklets. Utilize partnerships to examine student writing for strategic work. Return to mentor texts to examine and develop understanding of how information is organized.

Significant Task 2 – Revision
Essential Question: How do writers make their writing better
Big Idea: Writers revise their writing

Use mini lesson instruction to develop student understanding in how revision can be used to improve writing in many ways. Use shared writing experiences to revise writing for organization, elaboration, and text features. During independent writing students work to incorporate these strategies into their work. Model how writers go back and make sure words are spelled correctly and how to utilize various resources to help spell unknown words

Grade: Kindergarten **Time: June (3 weeks)**	**Theme: Readers Get to Know Characters by Pretending and by Performing Our Books**
Big Ideas	**Essential Questions**
▪ Readers have strategies for getting to know a character ▪ Readers can work with partners to pretend we are the characters in the book	▪ How do readers get to know a character better? ▪ What comprehension strategies do readers use to understand characters in meaningful ways?
Standards addressed in this unit: **(Speaking & Listening/Language)**	**The students will know and be able to do: (Independently)**
1. Participate in small and large group conversations with peers and adults about Kindergarten topics.(K.SL.1)	▪ Build on statements of others ▪ Explain and describe people, events, places, and objects • Compare personal knowledge with what is heard
2. Ask and answer questions in order to seek help, get information, or clarify something heard. (K.SL.3)	• Ask many questions, demonstrating curiosity (is this in previous months) • Explain cause-and-effect relationships • Show interest in meaning of words?? ***These skills have been previously introduced. They are now expectations.*** ▪ Confirm understandings ▪ Form clear questions to gain information
3. Add drawings or other visual displays to descriptions as desired to provide additional detail. (K.SL.5)	***These skills have been previously introduced. They are now expectations.*** • Engage in imaginary play ▪ Use props or illustrations to extend the meaning
4. Audibly express thoughts, feelings, and ideas. (K.SL.6)	• Begin to verbalize reasons for problems, events, and actions ▪ Describe how the characters look and how the character feelings change
5. Use words and phrases acquired through conversations, reading and being read to, and responding to text. (K.L.6)	• Begin to talk about what the character may be saying and *how* the character may be talking (ie: speech bubbles)
Comprehension Standards addressed in this unit: (Reading for Literature/Information Skills)	**The students will know and be able to do:**
1. Actively engage in independent and group reading activities with purpose and understanding. (K.RL.10)	▪ Readers compare and contrast the experiences of new characters with ones they know ▪ Readers make connections with characters ▪ Readers pretend to be the characters in the book ▪ Readers act out scenes with partners using animated voices and dramatic motions ▪ Readers empathize with a character's situations, experiences and relationships
2. Retell stories including key details. (K.RL.2)	▪ Readers use the setting and story elements (character, setting and story events) to understand the character better ▪ Readers will dramatize what is happening in their stories as a way to think about their characters

3. Ask and answer questions about key details in a text. (K.RL.1)	▪ Readers use the title and cover of a book to ask themselves, "What does this tell me about the characters?" ▪ Readers ask themselves, "How does the character feel now?"
4. Identify characters, settings, and major events in the story. (K.RL.3)	▪ Readers will take on roles that of the narrator and characters of familiar stories ▪ Readers will learn how to focus on the illustrations and photographs (character's facial expressions, body language, and gestures) to teach them about the characters' moods, personality, and feelings
Standards addressed in this unit: **(Foundational Skills)**	**The students will *know* and be able to *do*:**
1. Demonstrate understanding of spoken words, syllables, and sounds. (K.RFS.2)	▪ Add phonemes to the end of words ▪ Manipulate phonemes in the middle of words
2. Recognize and name all upper- and lowercase letters of the alphabet. (K.RFS.1)	▪ Recognize uppercase and lower case letters ▪ Recognize the sequence of letters in words ▪ Recognize letters in words ▪ Understand that words are made up of letters ▪ Make connections between words by recognizing letters ▪ Recognize letters in words ▪ Make connections between words by recognizing letter placement ▪ Use consistent and efficient motions to form letters ▪ Recognize letters in continuous text
3. Know and apply grade-level phonics and word analysis skills in decoding words. (K.RFS.3)	▪ Recognize and use phonograms with a vowel-consonant-silent e (VCe) pattern: -ake*, -ale*, -ame*, -ate*, -ice*, -ide*, -ine*, -oke* -ade, ace, age, ane, ape, ike, ile, ime, ite, ive, obe, ope, ore *=most common phonogram ▪ Recognize and understand simple compound words: into, myself, itself, today
4. Read high-frequency words by sight. (KRFS.3)	***Lists are differentiated based on individual student need.*** ▪ Recognize and use high frequency words ▪ Locate and read high frequency words in continuous text <u>List A</u> the, I, to, a, is, my, go, me, like, on, in, so, we, it, and, up, at, see, he, do, you, an, can, no, am, said* (*said may also need to be taught in order to aid students in accessing texts.) <u>List B</u> went, are, this, look, for, get, come, got, play, was, had, they, will, too, all, be, as, ball, by, day, did, has, her, him, fun (any 10 from List B) • Recognize and learn concept words: color names, number words, days of the week, months of the year, seasons • Recognize and use words that are related in many ways: sound,

	spelling, meaning • Understand the concept of plural • Recognize and use plurals that add s: dogs, cats, apples • Recognize and use endings that add s to a verb to make it agree with the subject: skate/skates; run/runs • Recognize and use endings that use *ing* to denote the present participle: play/playing; send/sending
5. Read emergent-reader texts with purpose and understanding. (K.RFS.4)	• Reread familiar books to make it sound like the character • Reread to build fluency • Read the words • Retell the story (partner reading/teacher conference) • Recognize and locate words (names) • Make connections between names and other words • Use the letters in names to read and write words: *Chuck, chair* • Use know words to monitor reading and spelling • Use first and last names to read and write words • Recognize and spell known words quickly • Use parts of known words that are like other words: my, sky; tree, try; she, shut

Significant Tasks

Significant Task 1 – Pretending to be characters
Essential Question: How do readers learn about characters?
Big Idea: Readers use many strategies to understand characters

Provide instruction in noticing characters. Modeling previewing the text and the pictures. Model inferring how characters might be feeling or wonder what the pictures tell you about what might happen to the characters in the text. Make predictions about characters beyond one page and check and revise those predictions. In partnerships students can imagine what the characters might be saying and try to sound like them. Create a vocabulary chart with language students can use to describe the characters.