

## Quarter 1

Unit 1: Building a Mathematical Community \& Understanding Equal Groups

- Objects can be counted in equal groups instead of individual units (NC.3.OA.1).
- Products of a whole number can be interpreted as the total number of objects, given the number of groups and the amount in each group (NC.3.OA.1).
- Multiplication can be used when solving story problems that involve equal groups (a number of groups with an equal number of items in each group) (NC.3.OA.3).
- Division can be used when solving story problems that involve an unknown number of groups or an unknown size of groups (NC.3.OA.3).
- The Commutative Property can be applied to numbers to make sense of patterns in multiplication (NC.3.OA.9).

Unit 2: Using Data to Solve Problems

- Data can be collected using a frequency table. (NC.3.MD.3)
- Data can be organized by creating scaled bar graphs and scaled picture graphs. (NC.3.MD.3)
- Data in graphs can be used to answer questions and compare categories. NC.3.MD.3)

Unit 3: Stories With Addition \& Subtraction

- Place value strategies can be used to solve addition and subtraction problems less than or equal to 1,000. (NC.3.NBT.2)
- Reasonableness of answers can be assessed by using estimation strategies. (NC.3.NBT.2)


## Quarter 2

Unit 3: Stories With Addition \& Subtraction

- Place value strategies can be used to solve addition and subtraction problems less than or equal to 1,000. (NC.3.NBT.2)
- Reasonableness of answers can be assessed by using estimation strategies. (NC.3.NBT.2)

Unit 4: Making Sense of Multiplication \& Division

- Multiplication is the process used to find the total when given the number of groups and the amount in each group. (NC.3.OA.1)
- Properties of operations (commutative, associative, distributive) can be applied as strategies to multiply and divide. (NC.3.OA.1)
- Division means solving for the number of equal groups OR the number of objects in each equal group when the total is known. (NC.3.OA.2)
- One-step problem situations involving equal groups can be represented by multiplication and/or division. (NC.3.OA.3)
- Division can be represented as an unknown factor multiplication problem. (NC.3.OA.6)
- Multiplication and division are related operations. (NC.3.OA.7)
- Patterns in multiplication can be uncovered when looking at 100 charts and multiplication tables. (NC.3.OA.9)

Unit 5: Reasoning with Shapes \& their Attributes

- The defining attributes of quadrilaterals including rhombuses, rectangles, squares, and parallelograms. (NC.3.G.1)
- There are several different types of quadrilaterals. (NC.3.G.1)
- Math Language: Non-example Quadrilateral Rhombus Rectangle Square Parallelogram Trapezoid




$3^{\text {rd }}$ Grade Math at a Glance for Parents 2018-2019

|  | First Quarter |  |  |  | Second Quarter |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unit | ```Building Mathematical Community & Understanding Equal``` | Using P | o Solve <br> ns | Stories with Addition \& Subtraction | Stories with Addition \& Subtraction (cont'd) | Making Multiplicat |  | Reasoning with Shapes and their Attributes |
| Standards Assessed | NC. 3.OA. 1 NC. 3.OA. 3 NC. 3.OA. 9 | NC.3.MD. 3 |  |  | NC. $3.0 A .8$ NC.3.NBT. 2 | NC. 3.OA. 1 <br> NC.3.OA. 2 <br> NC $3.0 A .3$ <br> NC. 3.OA. 6 |  | NC.3.6.1 |
| Big Ideas on the Elementary Report Card | - Represent and solve problems involving multiplication and $c$ <br> - Multiply and divide within 100 . <br> - Represent and interpret data. <br> - Use place value understanding and properties of operations digit arithmetic. |  |  |  | - Use place value understanding and properties of operations to perform multidigit arithmetic. <br> - Solve problems involving the four operations, and identify and explain patterns in arithmetic. <br> - Understand properties of multiplication and the relationship between multiplication and division. <br> - Multiply and divide within 100 . <br> - Reason with shapes and their attributes. |  |  |  |
|  | Third Quarter |  |  |  | Fourth Quarter |  |  |  |
| Unit | $\frac{\text { Applying the Operations to Area \& }}{\text { Perimeter }}$ |  |  |  | Using Tools to Measure Length, Weight. and Capacity |  | Understanding Time |  |
| Standards Assessed | NC. 3.MD. 5 NC. 3.MD. 7 NC. 3.MD. 8 |  | NC. 3.NF. 1 NC. 3.NF. 2 NC. 3.NF. 3 NC. 3.NF. 4 |  | NC.3.MD. 2 |  | NC.3.MD. 1 |  |
| Big Ideas on the Elementary Report Card | - Geometric measurement: understand concepts of area and relate area to multiplication and to addition. <br> - Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. <br> - Develop understanding of fractions as numbers. |  |  |  | - Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. <br> - Solve problems involving the four operations, and identify and explain patterns in arithmetic. |  |  |  |

## tinyurl.com/y6wnekgs

## Dear Parents,

We will begin our next unit of study in math soon. The information below will serve as an overview of the unit as you work to support your child at home. If you have any questions, please feel free to contact me . I appreciate your ongoing support.

Sincercly,
Your Child's Teacher

## Unit Name: Stories with Addition and Subtraction

## North Carolina Content State Standards:

NC.3.NBT. 2
Add and subtract whole numbers up to and including 1,000 .

- Use estimation strategies to assess reasonableness of answers
- Model and explain how the relationship between addition and subtraction can be applied to solve addition and subiraction probiems.
- Use expanded form to decompose numbers and then find sums and differences.

Solve two-step word problems involving adddtion, subtraction, med multelientien, representing problems using equations with a symbol for the unknown number.

## Math Language:

- Addition
- Place Value
- Expressio
- Difference
- Decompose
- Number Lin
- Value
- Value
- Estimation
- Actual
- Relationship - Pur Together/Take Apar
- Add to/Take from Combine Strategies


## Unit Overview:

The focus of this unit is on addition and subtraction within 1000 . Students focus on understanding and applying strategies, such as place value blocks, place value drawings, expanded form/method, and numbers lines to add and subtract numbers up to and including 1,000 . Students will simultaneously review concepts about place value, regrouping, and ungrouping. Throughout the unit, students will use these operations within the context of one and two step story problems. They will also develop an une these operatoons within the conlext of one and two step story problems. They will also develop an understanding of how place value can then be used to round numbers. The primary strategy used for
rounding in this unit is the number line. Students will use the number line to round numbers to the nearest ten and hundred. Rounding and other estimating strategies, such as benchmarking, will help students have a better understanding of the reasonableness of their final answers when finding a solution to a math problem. Students will also be asked to explain their math thinking, make sense of the strategies they used, and assess the reasonableness of their answers

## Skills/Strategies:

Students will be able to

- Use expanded form to decompose numbers to solve addition and subtraction problems
- Apply the relationship between addition and subtraction to solve problems
- Solve two-step word problems using addition and subtraction

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Strategies stadents will learn:

| Strategy Name | Example of strategy: | Example of strategy: |
| :---: | :---: | :---: |
| Expanded Form/ Method: <br> Decomposing or separating numbers to add or subtract | $\begin{gathered} 756+279 \\ (700+50+6)+(200+70+9) \\ 700+200=900 \\ 50+70=120 \\ 6+9=15 \\ 900+120+15=1070 \end{gathered}$ | $\begin{gathered} 321-117 \\ 321-(100+10+7) \\ 321-100=221 \\ 221-10=211 \\ 211-7 \text { or }(6+1) \\ 211-1=210 \\ 210-6=204 \end{gathered}$ |
| Creating new problems | $\begin{gathered} 721+279 \\ 721(-21)+279(+21) \\ 700+300=1000 \end{gathered}$ | $\begin{gathered} 547-297 \\ 547(+3)-297(+3) \\ 550-300=250 \\ (500-300 \text { is } 200 \text { so } 550-300 \text { is } 250) \end{gathered}$ |
| Changing a number when adding or subtracting and adjusting the answer to account for the change | $721+279$ $721+280($ adding 1 toe many $)$ $721+280=1001$ $1001-1$ (the 1 extra we added $)=1000$ | $\begin{gathered} 547-297 \\ 547-297(+3) \\ 547-300 \text { (removing } 3 \text { toe many) }=247 \\ 247+3=250 \text { (sdd back the extra } 3 \text { we } \\ \text { teok atf) } \end{gathered}$ |
| Place Value Drawing |  |  |
| Number Line (Addition \& Subtraction) |  |  |

## Video Support:

Video support can be found on The WCPSS Academics YouTube Channel.

- butp//tinyurl.com/WCPSSAcademicsYouTubs
- ES 3 Math Whole Number Place Value Addition without Regrouping (three digit mumbers)
- ES 3 Math Whole Number Place Value Addition with Rearouping (two digit numbers)
- ES 3 Math Whole Number Place Value Addition with Regrouping (three diyit numbers
- ES 3 Math Whole Number Show All Totals Addition
- ES 3 Math Whole Number Addition on the Number Line
- ES 3 Math Whole Number Place Value Subtraction without Ungrouning
- ES 3 Math Whole Number Place Value Subtraction with Ungrouping
- ES 3 Math Whole Number Expanded Form Subtraction
- ES 3 Math Whole Number Subtraction on the Number Line

Subtraction Using a Number Line

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## Module 1 Learning Challenges Around the World: Unit 1

Students read literary texts about children who face challenges with access to education. Throughout the course of the unit, students read three literary texts: Waiting for the Biblioburro by Monica Brown, Rain School by James Rumford, and Nasreen's Secret School by Jeanette Winter. They read each text for gist, recount the text, determine its central message or lesson, and then closely read and answer text-dependent questions designed to help them explain how that central message or lesson is conveyed through details in the text. Students also identify the challenges faced by the characters and how they are able to overcome them. For the mid-unit assessment, students discuss what they like about their independent reading books and the things that they have found challenging. In the second half of the unit, after learning how to write short constructed responses, students read a new literary text, answer selected response questions, and write short constructed responses about questions having to do with the text.

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## Module 1 Learning Challenges Around the World: Unit 2

In Unit 2, students move from analyzing challenges others face in accessing schools to more specifically analyzing challenges others face in accessing books. Students closely read excerpts from My Librarian Is a Camel by Margriet Ruurs, which describes ways people living in different countries around the world access books. For a mid-unit assessment, students demonstrate their reading skills by reading a new excerpt from this book and determining its main idea.

In the second half of the unit, students switch gears to begin writing informative texts. Using what they have learned about reading informational texts in the first half of the unit, they plan, write, revise, and edit an informative paragraph describing how people in a particular country overcome the challenge of access to books. For the End of Unit 2 Assessment, students write a new informative paragraph describing the challenge and how it was overcome, using evidence from the excerpt from My . Librarian Is a Camel read for the mid-unit assessment.

## Module 1 Learning Challenges Around the World: Unit 3

In Unit 3, students move from analyzing challenges faced by others, to learning challenges that they face, specifically with reading. This is framed with the book More Than Anything Else by Marie Bradby, which describes the reading challenges Booker $T$. Washington faced. Students hear the whole text read aloud and analyze in detail an excerpt of text that is rich in figurative language and describes the challenges Booker faced in detail. For a mid-unit assessment, students demonstrate their writing skills by writing an informative paragraph recounting Booker's story from More Than Anything Else and the lesson they learned through the challenges faced and how those challenges were overcome.

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## Unit 3- Continued

In the second half of the unit, students determine their own reading challenges and some strategies to overcome those challenges. They write a reading contract outlining two of their most significant reading challenges and two strategies to overcome each challenge. Students also practice reading excerpts of Nasreen's Secre $\dagger$ School and Rain School for fluency practice throughout the second half of the unit. For Part I of the End of Unit 3 Assessment, students read an excerpt of Nasreen's Secret School or Rain School in a group to record an audiobook. In Part II, students revise their reading contracts based on teacher and peer feedback. For the performance task, students create a reading strategies bookmark to quickly reference the reading strategies they have outlined in their reading contract.

## Module 2: Adaptations and the Wide World of Frogs

Unit 1: Reading and Writing Narratives: Poems and Pourquoi Tales about Frogs
In this unit, students read and write narrative texts about frogs. They closely read poems about frogs and develop 'why' questions about frogs. They read and write narrative pourquoi tales that answer these 'why' questions. Students learn that narrative texts have a clear sequence of events that makes sense and is easy to understand. The beginning establishes the situation and introduces characters. The middle describes the central problem and explains how the characters respond to the problem. The ending tells the solution/resolution to 'wrap up' the story. Students also learn to form and use comparative and superlative adjectives and adverbs.

## Module 2: Adaptations and the Wide World of Frogs

Unit 2: Building Background Knowledge: Researching Frogs In this unit, students build background knowledge about frogs. They closely read excerpts of a complex text to answer several research questions. They write informational paragraphs answering these questions. When reading, students use text features to find information about a topic, look a connections between sentences and paragraphs in an excerpt of text, and analyze illustrations to further their understanding of a text. The language study standard requires students to form and use regular and irregular verbs in the present tense.

## Module 2: Adaptations and the Wide World of Frogs

## Unit 3: Using Writing to Inform

 In this unit, students complete their Freaky Frog book by writing an informative 4- paragraph essay about a chosen 'freaky' frog and creating a trading card of their chosen frog. Students choose one frog from the options given. After analyzing the model about the poison dart frog students write their own essay giving the background information, two proof paragraphs about physical and behavioral adaptations, and a concluding paragraph. Through mini lessons and peer critique, students revise their writing. The language standards that students will focus on are using regular and irregular verbs, and writing simple, compound and complex sentences.For the performance task, each student will create a trading card and compile the writing from the module into a book with a front cover and table of contents.



Quarter 1 - The Human Body
3.L. 1 - Understand human body systems and how they are essential for life: protection, movement, and support.
3.L.1.1 - Compare the different functions of the skeletal and muscular systems.
3.L.1.2 - Explain why skin is necessary for protection and for the body to remain healthy.

Quarter 2 - Matter, Force \& Motion
3.P. 1 - Understand motion and factors that affect motion.
3.P. 2 - Understand the structure and properties of matter before and after they undergo a change.
3.P. 3 - Recognize how energy can be transferred from one object to another.


- NC Essential Standards for Science: Assessed standards stating what students should know, understand, and be able to do by the end of the unit.
- Integrated Standards: NC Essential Standards that are integrated into another unit
- Sample Time Frame: Due to units overlapping the end of nine weeks, teachers may adjust reporting quarter as needed or report on taught standard a unit for two consecutive quarters.

Quarter 1 - Civics and Government
3.C\&G. 1 - Understand the development, structure, \& function of local government.
3.C\&G. 2 - Understand how citizens participate in their communities

Quarter 2 - Geography
3.C.1 - Understand how diverse cultures are visible in local \& regional communities
3.G.1 - Understand the earth's patterns by using the 5 themes of geography: location, place, human-environment interaction, movement, and regions.

Third graders go on 3 field trips this year.

1. Morehead Planetarium and Science Center (TBD)

2. Triangle Rock Club (January 24)
3. JCR Arboretum (April 9)


We will need chaperones for each of these trips. You must be registered as a volunteer with WCPSS each year to be a chaperone.






