## Englewood Public School District <br> Mathematics <br> Grade 1 <br> Third Marking Period

## Unit - Addition and Subtraction up to 20

Overview: During this unit, students will learn addition and subtractions Facts to 20, length, picture and bar graphs and numbers to 40.
(Pacing includes 1 day for Chapter Opener pages if needed.)
Time Frame: Chapter 8 - 12 days, Chapter 9 - 10 days, Chapter 11 - 8 days, Chapter 12 - 8 days

## Enduring Understandings:

Different strategies can be used to add and subtract.
Objects have attributes that can be compared and measured to a certain degree of accuracy.
Data can be organized in ways to make it easier to interpret the information.
Place value is based on groups of ten.
Grouping is a way to count, measures, and compare.
Counting finds the answer to "how many."

## Essential Questions:

Why is adding 10 so easy?
How do you know which strategy to use for different types of problems?
How is using ten frames helpful in solving problems?
How can measuring length help you in your life?
How do you measure the length of things?
How can you organize and collect data?
How does the position of the digit affect the value of the number?

| Standards | Topics and Objectives | Activities | Resources | Assessments |
| :---: | :---: | :---: | :---: | :---: |
| Chapter 8 |  |  |  |  |
| 1.NBT.C.4. Add within 100, including adding a two-digit number and a one-digit number, and adding a twodigit number and a multiple | Topics <br> Adding and subtracting within 20 using different strategies. | Math Playground http://www.mathplaygrou nd.com/ <br> Math Coach - Fact | SE-1A: 195-217 <br> Workbook 1A: 191-218 <br> Common Core Focus <br> Lesson Appendix | Formative Assessments: <br> - Do Now <br> - Exit Ticket <br> - Math Journal |


| of 10, using concrete model | Twenty-First Century <br> Themes and Skills includes: <br> - Creativity and Innovation <br> - Critical Thinking and Problem Solving <br> - Communication and Collaboration <br> Objectives | Fluency |  | Entries (CRP4) |
| :---: | :---: | :---: | :---: | :---: |
| or drawings and strategies |  | http://schoolwires.henry. | Think Central - Online | Math notebook |
| based on place value, |  | k12.ga.us/Page/21865 | access to all Math in Focus | (NJSLSA.W2.) |
| properties of operations, |  |  | materials listed above and | Calendar skills |
| d/or the relationship |  | Math Wire - Basic Facts | Virtual Manipulatives | Observations |
| etween addition and |  |  |  | cussions: in |
| btraction; relate the |  | http://mathwire.com/nu | Profession | roups, have |
| rategy to a written method |  | mbersense/bfactslinks.ht | The Model Method from the | udents explain |
| d explain the reasoning |  | $\underline{\mathrm{ml}}$ | Ministry of Education | different ways of |
| ed. Understand that in |  |  | Singapore and Bar | solving problems |
| dding two-digit numbers, |  | Math Fact Practice | Modeling: A Bar Modeling | (CRP4, 8.2.2.E.1) |
| e adds tens and tens, ones |  |  | D. |  |
| dones; and sometimes it | Students will be able to: <br> - Use different strategies to add 1- and 2 digit numbers. <br> - Subtract a 1- digit number from a 2-digit number with and without regrouping. <br> - Solve real-world problems. | es.com/games/mathfact/ |  | Summative Assessments: |
| necessary to compose a |  |  | esson and Compone | Math in Focus |
|  |  | Critical Thinking and <br> Problem Solving p.214- <br> 215: <br> Put on Your Thinking Cap! | www.hmhelearning.com | Assessments |
| 1.OA.A.1. Use addition and subtraction within 20 to |  |  | Technology Resources | $\begin{aligned} & \text { Review/Test - pp } \\ & 216-217 \end{aligned}$ |
| solve word problems |  |  | - Math in Focus eBooks | - Assessments 1 |
| involving situations of |  |  | - Math in Focus Teacher | pp.60-63 |
| utting together, taking |  |  | Resources CD | ExamView |
| apart, and comparing, with |  | More additional texts: www.newsela.com | Arizona $1^{\text {st }}$ Grade Flipbook | Assessment Suite <br> - Test and Practice |
| unknowns in all positions, |  | www.readworks.org | http://www.tusd1.org/resou | Generator |
| g., by using objects, |  | www.commonlit.org | rces/curriculum/math/1stfli | - Multiple choice |
| awings, and equations |  |  | ppdf2.pdf | short answer |
| with a symbol for the |  |  |  | sessments |
| known number to |  |  | Delaware Common Core | (CRP8) |
| Table 1.) |  |  | Item Bank for | erformance Tas |
|  |  |  | Mathematics - Grade 1 |  |
| 1.OA.A.2. Solve word |  |  | ms/lib09/DE01922744/Cent | Benchmark Assessment: <br> - Exact Path |
| problems that call for |  |  | ricity/Domain/111/Math G |  |
| ddition of three whole |  |  | rade_1.pdf | Common |
| numbers whose sum is less |  |  |  | Formative |
| an or equal to 20, e.g., by |  |  | North Carolina Dept of Ed. | Assessment |
| using objects, drawings, and equations with a symbol for |  |  | Wikispaces: http://maccss.ncdpi.wikispac | Alternative Assessments: <br> - Graphs, charts, |

the unknown number to represent the problem.

## 1.OA.B.4. Understand

 subtraction as an unknownaddend problem. For example, subtract $10-8$ by finding the number that makes 10 when added to 8 .1.OA.D.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6=6,7$ $=8-1,5+2=2+5,4+1=$ $5+2$.
1.OA.D.8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations: $8+$ ? $=11$, $5=\square-3,6+6=\square$.

Mathematical Practices MP.1, MP.2, MP.3, MP.4, MP.6, MP.7, MP. 8
es.net/Elementary

## Standards Solution

Lessons:

- CCSS Lesson Plan:

Adding and subtracting within 20

## Explanation of math

 journals:https://thecornerstoneforteac hers.com/math-journals/ (CRP4, NJSLSA.W2)

More math journal explanation / ideas:
https://www.k-
5mathteachingresources.com
/1st-grade-math-journalgallery.html
(CRP4, NJSLSA.W2)

## Worksheets, games, lesson plans: <br> https://www.education.com <br> /resources/first- <br> grade/math/ <br> (8.1.2.E.1)

Worksheets, games, videos:
http://www.mathchimp.co
m/1st-grade-math-
resources
(8.1.2.E.1)

## www.khanacademy.org

(8.1.2.E.1)
diagrams (RI.1.7)

- Create a how-to
book (8.2.2.E.1)
- Learning centers: each learning center focuses on a different type of problem
(8.2.2.E.1)
- Posters: create posters of fact families to display in the classroom (NJSLSA.W2.)
- Short stories: have students create a short story illustrating a math problem
(NJSLSA.W2.)
- Story illustrations: have students illustrate a math problem
(NJSLSA.W2.)

|  | Activities, worksheets, lesson plans, curriculum: http://www.jumpstart.com/ parents/resources/grade-based-resources/1st-graderesources $\overline{\text { (8.1.2.E.1) }}$ <br> Everyday math resources: http://www1.center.k12.mo .us/edtech/edm/1.htm (8.1.2.E.1) |
| :---: | :---: |


| Chapter 9 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1.MD.A.1. Order th | Topics |  | SE-1A: 221-2 | Formative Ass |
| objects by length; compare |  | Class discussion about | Workbook 1A: 219-246 | No |
| the lengths of two objects | Comparing and measuring | how we use measurements |  | Tick |
| indirectly by using a third | the height and length of | in everyday life including | Common Core Focu | Jou |
| object. | things. | careers. (9.2.4.A.2) | Lesson | tries (CRP4) |
|  | Twenty-First Century | 1.MD.A. 2 Measure Me! | Think Central: Online access to all Math in Fo | Math notebook (NJSLSA.W2.) |
| 1.MD.A.2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length |  |  |  | alendar skills |
|  | - Creativity and <br> Innovation | 1.MD.A. 2 Measuring <br> Blocks | materials listed above and <br> Virtual Manipulatives | Observations Discussions: |
|  | Critical Thinking and | 1.MD.A. 2 Growing Bean | Professional R | groups, have |
|  | mmunication and | Plant | The Model Method from the | students explain different ways of |
|  | ollaboration | 1.MD.B Making a clock | Ministry of Education Singapore and Bar | solving problems (CRP4, 8.2.2.E.1) |
|  | Students will be able to: <br> - Identify how we use measurements in everyday life, including |  | Modeling: A Bar Modeling <br> Tool by Yeap Ban Har, PhD. |  |
|  |  | http://www.mathplaygrou |  | Summative Assessments: <br> Math in Focus |
|  |  | nd.com | Lesson and Component | Assessmen |
|  |  | Math Coach - Fact | www.hmhelearnin | - Chapt |


| units with no gaps or overlaps. <br> Mathematical Practices MP.1, MP.2, MP.3, MP.5, MP. 6 | in careers. <br> - Compare two lengths using the terms tall/taller, long/longer, and short/shorter. <br> - Compare two lengths by comparing each with a third length. <br> - Compare more than two lengths using the terms tallest, longest, and shortest. <br> - Use a common starting point when comparing lengths. <br> - Measure lengths using non-standard units. <br> - Understand that using different non-standard units may give different measurements for the same item. <br> - Use the term "unit" to describe length. <br> - Count measurement units in a group of ten and ones. | Fluency <br> http://schoolwires.henry. <br> k12.ga.us/Page/21865 <br> Math Wire - Basic Facts <br> Link <br> http://mathwire.com/nu <br> mbersense/bfactslinks.ht ml <br> Math Fact Practice http://www.playkidsgam es.com/games/mathfact/ mathFact.htm <br> Critical Thinking and <br> Problem Solving p.247: <br> Put on Your Thinking Cap! <br> Which is longer? <br> https://www.k- <br> 5mathteachingresources.c om/support-files/which-islongest.pdf <br> Scoop and order: <br> https://www.k- <br> 5mathteachingresources.c om/support-files/scoop-and-order.pdf <br> (8.1.2.E.1) <br> Rekenrek activities: <br> https://www.k- <br> 5mathteachingresources.c om/Rekenrek.html | Technology Resources <br> - Math in Focus eBooks <br> - Math in Focus Teacher Resources CD <br> Arizona ${ }^{\text {st }}$ Grade Flipbook http://www.tusd1.org/resou rces/curriculum/math/1stfli ppdf2.pdf <br> Delaware Common Core Item Bank for <br> Mathematics - Grade 1 http://www.doe.k12.de.us/c ms/lib09/DE01922744/Cent ricity/Domain/111/Math_G rade_1.pdf <br> North Carolina Dept of Ed. Wikispaces: <br> http://maccss.ncdpi.wikispac es.net/Elementary <br> Standards Solution <br> Lessons: <br> - CCSS Lesson Plan: <br> Measuring Using Length Units <br> - CCSS Lesson Plan: Comparing Lengths of Objects <br> Measurement activities: https://www.k- <br> 5mathteachingresources.com <br> /1st-grade-measurement-anddata.html | 248-249 <br> - Assessments 1 -pp.65-69 <br> - ExamView Assessment Suite - Test and Practice Generator <br> - Performance Task <br> Alternative Assessments: <br> - Use drawings to illustrate measurement (RI.1.7) <br> - Learning centers: each learning center focuses on different items to measure / discuss / write about |
| :---: | :---: | :---: | :---: | :---: |





| $\frac{\text { https://www.education.com }}{\frac{\text { /worksheet/article/collect- }}{\text { and-represent-data/ }}}$ |
| :--- |
| $\frac{\text { (8.1.2.E.1, RI.1.7) }}{}$ |

## Chapter 12

## 1.NBT.A.1. Count to 120,

starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

## 1.NBT.B. 2 Understand that

 the two digits of a two-digit number represent amounts of tens and ones.Understand the following as special cases:
a. 10 can be thought of as a bundle of ten ones called a "ten."
c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
1.NBT.B.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the

## Topics

Counting, comparing and ordering numbers to 40 .

Twenty-First Century
Themes and Skills includes:

- Creativity and

Innovation

- Critical Thinking and Problem Solving
- Communication and Collaboration


## Objectives

Students will be able to:

- Count on from 21 to 40.
- Read and write 21 to 40 in numbers and words.
- Use a place-value chart to show numbers up to 40.
- Show objects up to 40 as tens and ones.
- Use a strategy to compare numbers to 40 .
- Compare numbers to 40 .
- Order numbers to 40 .

| Math Playground | SE-1B: 57-79 | Formative Assessments: |
| :---: | :---: | :---: |
| http://www.mathplaygrou | Workbook 1B: 45-60 | - Do Now |
| nd.com/ |  | - Exit Ticket |
|  | Common Core Focus | h Journ |
| Math Coach - Fact | Lesson Appendix | Entries (CRP4) |
| Fluency |  | - Math notebook |
| http://schoolwires.henry. | Think Central - Online | (NJSLSA.W2.) |
| k12.ga.us/Page/21865 | access to all Math in Focus materials listed above and | - Calendar skills |
| Math Wire - Basic Facts Link | Virtual Manipulatives | - Observations <br> - Discussions: in |
| http://mathwire.com/nu | Professional Reso | groups, hav |
| mbersense/bfactslinks.ht | The Model Method from the | different ways of |
| ml | Ministry of Education Singapore and Bar | solving problems (CRP4, 8.2.2.E.1) |
| Math Fact Practice | Modeling: A Bar Modeling |  |
| http://www.playkidsgam es.com/games/mathfact/ |  | Summative Assessments: Math in Focus |
| mathFact.htm | Lesson and Component Walkthrough: | Assessments |
| Critical Thinking and Problem Solving p.76-77: | www.hmhelearning.com | - Chapter <br> Review/Test - pp |
| Put on Your Thinking | Technology Resources |  |
| Cap! | - Math in Focus eBooks <br> - Math in Focus Teacher | - ExamView |
| Videos / practice: www.khanacademy.com | Resources CD | Assessment Suite <br> - Test and Practice Generator |
| More additional texts: | Arizona $1^{\text {st }}$ Grade Flipbook http://www.tusd1.org/resou | - Multiple choice / |



## Key Vocabulary:

Chapter 8:
group, same, doubles fact, doubles plus one

Chapter 9:
tall, taller, tallest, short, shorter, shortest, start line, about, unit
Chapter 11:
data, picture graph, more, fewer, most, fewest, tally chart, bar graph
Chapter 12:
twenty-one, twenty-two, twenty-three, twenty-four, twenty-five, twenty -six, twenty-seven, twenty-eight, twenty-nine, thirty, forty, counting tape

## NJ Learning Standards Vocabulary:

1.OA. 1

Represent and solve problems involving addition and subtraction.
add, adding to, taking from, putting together, comparing, unknown, sum, less than, equal to, minus, subtract, the same amount as, counting on, making ten, doubles, equation

## 1.OA. 3 \& 4

Understand and apply properties of operations and the relationship between addition and subtraction.
add, subtract, unknown addend, order, first, second

## 1.OA. 5

Add and subtract within 20.
addition, putting together, adding to, counting on, making ten, subtraction, taking apart, taking from, sum, unknown, equal, counting on, counting back

## 1.OA. 7 \& 8

Work with addition and subtraction equations.
equation, equal, the same amount/quantity as, true, false, addition, putting together, adding to, counting on, making ten, subtract, taking apart, taking from, sum, unknown

## 1.NBT. 1

Extend the counting sequence.
number, zero, one, two...thirteen, fourteen...nineteen...one hundred twenty

## 1.NBT. 2 \& 3

Understand place value.
ones, tens, bundle, left-overs, singles, groups, compare, greater than, less than, equal to, «, 〉, =

## 1.NBT. 4

Use place value understanding and properties of operations to add and subtract.
ones, tens, add, subtract, reason, more, less

## 1.MD. 1 \& 2

Measure lengths indirectly and by iterating length units.
compare, measure, order, length, height, more, less, longer than, shorter, than, first, second, third, gap, overlap, about , a little less than, a little more than
1.MD. 4

Represent and interpret data.

## Accommodations and Modifications:

Students with special needs: Support staff will be available to aid students related to IEP specifications. 504 accommodations will also be attended to by all instructional leaders. Modifications, alternative assessments, and scaffolding strategies will be used to support this learning. The use of Universal Design for Learning (UDL) will be considered for all students as teaching strategies are considered. Additional staff should be included so all students can fully participate in the standards associated with this curriculum.

ELL/ESL students: Students will be supported according to the recommendations for "can do's" as outlined by WIDA -
https://www.wida.us/standards/CAN_DOs/
Students at risk of school failure: Formative and summative data will be used to monitor student success at first signs of failure. Student work will be reviewed to determine support. This may include parent consultation, basic skills review and differentiation strategies. With considerations to UDL, time may be a factor in overcoming developmental considerations. More time will be made available with a certified instructor to aid students in reaching the standards.

Gifted and Talented Students: Students excelling in mastery of standards will be challenged with complex, high level challenges.

## English Language Learners:

- Give directions in small steps and in as few words as possible
- Books in native language
- Teaching modeling
- Peer modeling
- Word walls
- Provide visual aids
- Group similar problems together
- Repeat directions when necessary


## Special Education:

- Provide definitions of different graphs / charts with illustrations Utilize modifications \& accommodations delineated in the students' IEP
- Work with paraprofessional
- Work with a partner
- Shorten assignments to focus on mastery or key concepts
- Maintain adequate space between desks
- Keep workspaces clear of unrelated materials
- Provide fewer problems to attain passing grades


## At-Risk:

- Create a math journal that they can use during class, on assignments and (if teacher allows) on assessments Use visual demonstrations, illustrations and models
- Give directions / instructions verbally and in simple written format
- Peer support
- Increased one - on - one time
- Teachers may modify instructions by modeling what the student is expected to do
- Instructions may be printed


## Gifted and Talented:

- Choice Boards
- Inquiry based instruction
- Independent study
- Higher order thinking skills
- Adjusting the pace of the lessons
- Real world scenarios
- Student driven instruction

|  | - Tape a number line to the student's desk <br> - Create a math journal that they can use during class, on assignments and (if teacher allows) on assessments <br> - Provide extra time to complete a task when needed | out in large print and hung up for the students to see during the time of the lesson <br> - Review behavior expectations and make adjustments |  |
| :---: | :---: | :---: | :---: |
| Interdisciplinary Connections: ELA <br> NJSLSA.R1. Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text <br> NJSLSA.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone. <br> RL.1.1. Ask and answer questions about key details in a text. <br> RI.1.7. Use the illustrations and details in a text to describe its key ideas. <br> NJSLSA.W2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content. |  |  |  |
| Integration of Technology Standards NJSLS: <br> 8.1.2.E.1: Use digital tools and online resources to explore a problem or issue <br> 8.2.2.E.1: List and demonstrate the steps to an everyday task |  |  |  |
| Career Ready Practices: <br> CRP2: Apply appropriate academic and technical skills <br> CRP4: Communicate clearly and effectively and with reason <br> CRP6: Demonstrate creativity and innovation <br> CRP8: Utilize critical thinking to make sense of problems and persevere in solving them |  |  |  |
| $21^{\text {st }}$ Century Standards: <br> 9.2.4.A.2. Identify various life roles and civic and work-related activities in the school, home, and community. |  |  |  |

