## Englewood Public School District <br> Mathematics <br> Grade 2 <br> Third Marking Period

## Unit - Money, Fractions and Measurement

Overview: During this unit, students will learn about money, Fractions, Customary Measurement of Length, and Time
Time Frame: Chapter 11 - 12 days, Chapter 12 (12.1) only - 2 days, Chapter 13 - 12 days, Chapter 14 - 10 days (Pacing includes 1 day for Chapter Opener pages if needed.)

## Enduring Understandings:

Money amounts can be shown and counted using bills and coins.
Money is a convenient way to buy and sell goods and services.
Fractions can be used to describe how equal parts are related to a whole.
Rulers can be used to measure and compare how long and how tall things are.
Objects have distinct attributes that can be measured.
Clocks are tools to measure time
Time has specific units that can be measured
The time of day can be shown in different ways

## Essential Questions:

Why is it important to have money?
Why is it important to know how to count money and make change?
Where can you find fractions in real life?
How do you determine which objects are taller/longer or shorter than another?
Why is telling time important?
Can you compare the time with a digital clock to an analog clock?

| Standards | Topics and Objectives | Activities | Resources | Assessments |
| :---: | :---: | :---: | :---: | :---: |
| Chapter 11 |  |  |  |  |
| 2.MID.C.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ | Topics <br> Counting and comparing amounts of money in bills | 2.MD.C. 8 Delayed Gratification <br> Math Playground | SE-2B: 46-72 <br> Workbook 2B: 23-44 <br> Common Core Focus | Formative Assessments: <br> - Do Now <br> - Exit Ticket <br> - Math Journal |



|  | many: by Brian P. Cleary <br> - Once upon a dime: by Nancy Allen <br> - Money madness: by David Adler <br> More additional texts: <br> www.newsela.com www.readworks.org www.commonlit.org | ricity/Domain/111/Math_G <br> rade_2-Nov.pdf <br> Worksheets, games, lesson plans: <br> https://www.education.com /resources/secondgrade/math/ $\overline{\text { (8.1.2.E.1) }}$ <br> Worksheets, games, videos: http://www.mathchimp.co m/2nd-grade-mathresources <br> (8.1.2.E.1) <br> www.khanacademy.org <br> (8.1.2.E.1) <br> Activities, worksheets, lesson plans, curriculum: http://www.jumpstart.com/ parents/resources/grade-based-resources/2nd-graderesources <br> (8.1.2.E.1) <br> Everyday math resources: <br> http://www1.center.k12.mo .us/edtech/edm/2.htm (8.1.2.E.1) <br> Explanation of math journals: <br> https://thecornerstoneforteac hers.com/math-journals/ (CRP4, NJSLSA.W2) | Alternative Assessments: <br> - Online assessments: https://www.open ed.com/search?are a=mathematics\&gr ade=2\&resource ty pe=assessment (CRP2, CRP4, CRP8) <br> - Learning centers: each learning center focuses on a different type of problem (8.2.2.E.1) <br> - Graphs, charts, diagrams |
| :---: | :---: | :---: | :---: |


|  |  |  | Math journals: <br> https://www.k- |
| :--- | :--- | :--- | :--- | :--- |


\(\left.$$
\begin{array}{lll}\hline & \begin{array}{l}\text { Activities, worksheets, } \\
\text { lesson plans, curriculum: } \\
\text { http://www.jumpstart.com/ }\end{array}
$$ <br>
\hline parents/resources/grade- <br>

based-resources/2nd-grade-\end{array}\right]\)| resources |
| :--- |
| $(8.1 .2 . E .1)$ |


| va | Innovation <br> - Critical Thinking a Problem Solving <br> - Communication an | Math Playground http://www.mathplaygrou nd.com/ | Profes <br> The M <br> Minist |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| ing |  |  | Modeling: A Bar Modeli Tool by Yeap Ban Har, P | m |
|  | Students will be able to: <br> - Use a ruler to estimate and measure length. <br> - Compare lengths. <br> - Find the difference in lengths of objects. <br> - Use a ruler to measure length to the nearest inch. <br> - Draw parts of lines of given lengths. <br> - Use an inch ruler to measure and compare lengths. <br> - Find the difference in lengths of objects in inches. <br> - Measure the same objects in inches and feet. <br> - Understand how measurements relate to the sizes of units. <br> - Solve one- and twostep problems involving length. <br> - Draw bar models to solve real-world problems. | Math Wire - Basic Facts Link <br> http://mathwire.com/nu $\underline{\text { mbersense/bfactslinks.ht }}$ ml |  | Math in Focus |
|  |  |  | www.hmhelearning.com |  |
|  |  |  |  |  |
|  |  |  | Technology Resources <br> - Math in Focus eBooks <br> - Math in Focus Teacher Resources CD |  |
| written method. Understand that in adding or |  |  |  |  |
|  |  | Math Fact Practice http://www.playkidsgam es.com/games/mathfact/ mathFact.htm |  |  |
|  |  |  | North Carolina Dept of Ed. Wikispaces: <br> http://maccss.ncdpi.wikispac es.net/Elementary | Test and Practice |
|  |  |  |  |  |
|  |  | Critical Thinking and <br> Problem Solving p.127: <br> Put on Your Thinking Cap! |  | tiple choice |
|  |  |  | Arizona Flip Book http://www.azed.gov/azccrs /files/2013/11/2flipbookedit | Performance T |
| 2.NBT.B.9. Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.) |  |  |  |  |
|  |  |  |  | Alternative Assessments: <br> - Online assessments: <br> https://www.open |
|  |  |  |  |  |
|  |  |  | Mathematics - Grade 2 | ed.com/search?are |
|  |  |  |  |  |
|  |  |  | http://www.doe.k12.de.us/c ms/lib09/DE01922744/Cent |  |
| 2.MD.A.1. |  |  | ricity/Domain/111/Math_G |  |
| length of an object |  |  | de_2-Nov.p | earning centers: |
| ulers, yardsticks, meter ticks, and measuring tap |  | hildrens-books.org/mat | Standards Solution <br> Lessons: <br> CCSS Lesson Plan: | each learning center focuses on a different type of |



| situations of adding to, <br> taking from, putting <br> together, taking apart, and <br> comparing, with unknowns <br> in all positions, e.g., by using <br> drawings and equations <br> with a symbol for the | $\frac{\text { https://www.k- }}{5 \text { mathteachingresources.com }}$ |
| :--- | :--- |
| unknown number to |  |
| represent the problem. (See |  |
| Table 1.) |  |

## Chapter 14 (skip 14.4)

| 2.MID.C.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. | Topics <br> Telling the time of day in different ways. | 2.MD.C. 7 Ordering Time <br> Math Playground http://www.mathplaygrou nd.com/ | SE-2B: 133-149; 158 <br> Workbook 2B: 97-110; 121122 <br> Common Core Focus | Formative Assessments: <br> - Do Now <br> - Exit Ticket <br> - Math Journal Entries (CRP4) |
| :---: | :---: | :---: | :---: | :---: |
| Mathematical Practices <br> MP.1, MP.2, MP.4, MP. 6 | Twenty-First Century <br> Themes and Skills include: <br> - Creativity and Innovation <br> - Critical Thinking and Problem Solving <br> - Communication and Collaboration | Math Coach - Fact <br> Fluency <br> http://schoolwires.henry. <br> k12.ga.us/Page/21865 <br> Math Wire - Basic Facts <br> Link <br> http://mathwire.com/nu mbersense/bfactslinks.ht | Lesson Appendix | - Math notebook (NJSLSA.W2.) |
|  |  |  | Think Central: Online access to all Math in Focus materials listed above and Virtual Manipulatives | - Calendar skills <br> - Observations <br> - Discussions: in groups, have students explain |
|  |  |  | Professional Resources: <br> The Model Method from the Ministry of Education | different ways of solving problems (CRP4 8.2.2.E.1) |
|  |  | Math Fact Practice http://www.playkidsgam | Singapore and Bar Modeling: A Bar Modeling | ) |
|  | Students will be able to: <br> - Use the minute hand to show and tell the number for every five minutes after the hour. <br> - Show and tell time in hours and minutes. | es.com/games/mathfact/ $\underline{\text { mathFact.htm }}$ | Tool by Yeap Ban Har, PhD. | Assessments: Math in Focus |
|  |  | Critical Thinking and Problem Solving p157.: Put on Your Thinking | Lesson and Component Walkthrough: www.hmhelearning.com | Assessments <br> - Chapter Review/Test - pp 158 |


|  | - Use a.m. and p.m. to show morning, afternoon, or night. <br> - Order events by time. | Cap! <br> 5 hands on ways to teach telling time: <br> https://www.weareteacher s.com/5-hands-on-ways-to-teach-telling-time/ (CRP6, CRP8) <br> Children's books: <br> https://www.the-best-childrens-books.org/math-for-kids.html <br> - A second, a minute, a week with days in it: by Kathryn Heling <br> - Telling time with big mama cat: by Dan Harper <br> More additional texts: www.newsela.com www.readworks.org www.commonlit.org | Technology Resources <br> - Math in Focus eBooks <br> - Math in Focus Teacher Resources CD <br> North Carolina Dept of Ed. Wikispaces: <br> http://maccss.ncdpi.wikispac es.net/Elementary <br> Arizona Flip Book http://www.azed.gov/azccrs /files/2013/11/2flipbookedit ed.pdf <br> Delaware DOE Common <br> Core Item Bank for <br> Mathematics - Grade 2 <br> http://www.doe.k12.de.us/c <br> ms/lib09/DE01922744/Cent ricity/Domain/111/Math_G rade_2-Nov.pdf <br> Worksheets, games, lesson plans: <br> https://www.education.com /resources/secondgrade/math/ <br> (8.1.2.E.1) <br> Worksheets, games, videos: http://www.mathchimp.co m/2nd-grade-mathresources (8.1.2.E.1) <br> www.khanacademy.org <br> (8.1.2.E.1) | - Assessments 2 -pp.111-114 <br> - ExamView Assessment Suite - Test and Practice Generator <br> - Short answer / multiple choice assessments (8.2.2.E.1) <br> - Performance Task <br> Alternative Assessments: <br> - Online assessments: https://www.open ed.com/search?are a=mathematics\&gr ade=2\&resource ty pe=assessment (CRP2, CRP4, CRP8) <br> - Learning centers: each learning center focuses on a different type of problem (8.2.2.E.1) <br> - Graphs, charts, diagrams <br> - Posters for a movie while displaying movie times |
| :---: | :---: | :---: | :---: | :---: |


|  | Activities, worksheets, <br> lesson plans, curriculum: <br> http://www.jumpstart.com/ |
| :--- | :--- |
| parents/resources/grade- <br> based-resources/2nd-grade- |  |
| resources |  |
| $(8.1 .2 . E .1)$ |  |

## Key Vocabulary:

## Chapter 11:

$\$ 1$ bill, $\$ 5$ bill, $\$ 10$ bill, $\$ 20$ bill, cent sign ( $\$$ ), dollar sign (\$), decimal point, table
Chapter 12:
equal, unequal, whole, fraction, one-half, one-third, one-fourth
Chapter 13:
foot/feet (ft), length, ruler, unit, width, height, longest, shortest, inch (in)
Chapter 14:
hour hand, minute hand, minute, hour, o'clock, after, clock face, a.m., p.m.

## NJ Learning Standards Vocabulary:

## 2.MD.C. 8

Work with time and money.
quarter, dime, nickel, dollar, cent(s), \$, $₫$, heads, tails

## 2.G.A. 2

Reason with shapes and their attributes.
partition, equal size, equal shares, half, halves, thirds, half of, a third of, whole, two halves, three thirds, four fourths, rows, columns
2.G.A. 3

Reason with shapes and their attributes.
partition, equal size, equal shares, half, halves, thirds, half of, a third of, whole, two halves, three thirds, four fourths, rows, columns
From previous grades: circle, square, sphere, half-circle, quarter-circle, cone, prism, cylinder, trapezoid

## 2.NBT.B.5, 6, 7 \& 9

Use place value understanding and properties of operations to add and subtract.
fluent, compose, decompose, place value, digit, ten more, ten less, one hundred more, one hundred less, add, subtract, sum, equal, addition, subtraction

## 2.MD.A.1, 3, \& 4

Measure and estimate lengths in standard units.
about, a little less than, a little more than, longer, shorter, measure, standards units, units, customary, metric, inch, foot, centimeter, tools, ruler, meter, centimeter, ruler, yardstick, meter stick, measuring tape, estimate, sums, differences

## 2.MD.B. 5 \& 6

Relate addition and subtraction to length.
inch, foot, yard, centimeter, meter, ruler, yardstick, meter stick, measuring tape, estimate, length, equation, number line, equally spaced, point, addition, subtraction, unknown, sums, differences, measure, standard units, customary, metric, units, sums, differences

## 2.OA.A. 1

Represent and solve problems involving addition and subtraction.
add, subtract, more, less, equal, equation, putting together, taking from, taking apart, addend, comparing, unknown

## 2.MD.C. 7

Work with time and money.
time, hour hand, minute hand, hour, minute, a.m., p.m., o’clock, multiples of 5 (e.g., five, ten, fifteen, etc.), analog clock, digital clock, quarter 'til, quarter after, half past, quarter hour, half hour, thirty minutes before, 30 minutes after, 30 minutes until, 30 minutes past

## 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:

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


## Special Education:

- 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
- Tape a number line to the students desk
- Create a math journal that they can use during class, on assignments and (if


## Gifted and Talented:

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

|  | teacher allows) on assessments <br> - Provide extra time to complete a task when needed <br> - Provide definitions of different graphs / charts with illustrations | adjustments <br> - Create a math journal that they can use during class, on assignments and (if teacher allows) on assessments |
| :---: | :---: | :---: |

Interdisciplinary Connections: ELA
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.
RI.2.3. Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
RI.2.7. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text
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
SL.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue
SL.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification
NJSLSA.L1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking
Integration of Technology Standards NJSLS:
8.1.2.E.1: Use digital tools and online resources to explore a problem or issue
8.2.2.E.1: List and demonstrate the steps to an everyday task.

## Career Ready Practices:

CRP2: Apply appropriate academic and technical skills
CRP4: Communicate clearly and effectively and with reason
CRP6: Demonstrate creativity and innovation
CRP8: Utilize critical thinking to make sense of problems and persevere in solving them

## 21st Century Standards

9.1.4.B.3 Explain what a budget is and why it is important.
9.1.4.B. 4 Identify common household expense categories and sources of income.

Major Supporting Additional (Identified by PARCC Model Content Frameworks)

