

Englewood Public School District
Mathematics
Grade 1
Second Marking Period

Unit – Subtraction up to 10

Overview: During this unit, students will learn subtraction facts to 10, shapes and numbers to 20.

Time Frame: Chapter 4 – 12 days, Chapter 5 (5.1 – 5.4 only) – 10 days, and Chapter 7 – 14 days
(Pacing includes 1 day for Chapter Opener pages if needed.)

Enduring Understandings:

Subtraction can be used to find how many are left.
The world is made up of plane and solid figures.
Place value is based on groups of ten.
Counting finds the answer to “How many?”.

Essential Questions:

How does seeing the relationship between a number sentence and a math story help me become a better mathematician?
Explain the relationship between addition and subtraction.
Why do you think we are talking about halves and quarters in the chapter about shapes?
What are different ways to count? Why are some ways better than others?

| Standards | Topics and Objectives | Activities | Resources | Assessments |
|--|--|--|---|--|
| Chapter 4 | | | | |
| 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. | Topics Basic subtraction facts. Twenty-First Century Themes and Skills includes: <ul style="list-style-type: none"> <u>Creativity and Innovation</u> <u>Critical Thinking and Problem Solving</u> | <u>1.OA.C.6 Making a ten</u> <u>1.OA.D.7 Equality Number Sentences</u> <u>1.OA.D.8 Kiri's Mathematics Match Game</u> Math Playground | SE-1A: 67-93 Workbook 1A: 63-88 Common Core Focus Lesson Appendix Think Central: Online access to all Math in Focus materials listed above and Virtual Manipulatives | Formative Assessments: <ul style="list-style-type: none"> Do Now Exit Ticket Math Journal Entries (CRP4) Math notebook Calendar skills Observations Discussions: in groups, have |
| 1.NBT.C.4. Add within 100, including adding a two-digit | | | | |

number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

1.OA.C.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

1.OA.C.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows

- Communication and Collaboration

Objectives

Students will be able to:

- Take away to subtract.
- Count on to subtract.
- Count back to subtract.
- Use number bonds to subtract.
- Write and solve subtraction sentences.
- Tell subtraction stories about pictures.
- Write subtraction sentences.
- Solve real-world problems.
- Recognize related addition and subtraction sentences.
- Write fact families.
- Use fact families to solve real-world problems.
- Determine if number sentences involving addition and subtraction are true or false.

<http://www.mathplayground.com/>

Math Coach – Fact Fluency

<http://schoolwires.henry.k12.ga.us/Page/21865>

Math Wire – Basic Facts Link

<http://mathwire.com/numbersense/bfactslinks.html>

Math Fact Practice

<http://www.playkidsgames.com/games/mathfact/mathFact.htm>

Critical Thinking and Problem Solving p.64-66: Put on Your Thinking Cap!

Children's books:

<https://www.the-best-childrens-books.org/math-for-kids.html>

- Animals on board
- What's new at the zoo
- The mission of addition
- Monster musical chairs
- If you were a minus sign
- Ten sly piranhas

Professional Resources:

The Model Method from the Ministry of Education Singapore and Bar Modeling: A Bar Modeling Tool by Yeap Ban Har, PhD.

Lesson and Component Walkthrough:

www.hmhelearning.com

Technology Resources

- Math in Focus eBooks
- Math in Focus Teacher Resources CD

Arizona 1st Grade Flipbook

<http://www.tusd1.org/resources/curriculum/math/1stflipbook2.pdf>

Delaware Common Core Item Bank for Mathematics – Grade 1

http://www.doe.k12.de.us/cms/lib09/DE01922744/Centricity/Domain/111/Math_Grade_1.pdf

North Carolina Dept of Ed. Wikispaces:

<http://maccss.ncdpi.wikispaces.net/Elementary>

Worksheets, games, lesson plans:

<https://www.education.com>

students explain different ways of solving problems (CRP4, 8.2.2.E.1)

Summative Assessments: *Math in Focus Assessments*

- Chapter Review/Test – pp 92-93
- Assessments 1 – pp.23-27
- ExamView Assessment Suite – Test and Practice Generator
- Multiple choice / short answer assessments (CRP8)
- Performance Task

Benchmark Assessment:

- Exact Path

Alternative Assessments:

- Graphs, charts, 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

12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

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.8

More additional texts:

www.newsela.com
www.readworks.org
www.commonlit.org

/resources/first-grade/math/
(8.1.2.E.1)

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

www.khanacademy.org
(8.1.2.E.1)

Activities, worksheets, lesson plans, curriculum:
<http://www.jumpstart.com/parents/resources/grade-based-resources/1st-grade-resources>
(8.1.2.E.1)

Everyday math resources:
<http://www1.center.k12.mo.us/edtech/edm/1.htm>
(8.1.2.E.1)

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.)

| <p>1.G.A.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p> <p>1.G.B.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)</p> <p>1.G.C.3. Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>, and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares</p> | <table><tr><th>Topics</th><th>Objectives</th></tr><tr><td>Plane and solid shapes in patterns and the real world.</td><td>Students will be able to:</td></tr><tr><td>Twenty-First Century Themes and Skills includes:</td><td><ul style="list-style-type: none">Identify, classify and describe plane shapes.Make same and different shapes.Identify, classify and sort solid shapes.Combine and separate plane and solid shapes.Identify plane and solid shapes in real life.</td></tr></table> | Topics | Objectives | Plane and solid shapes in patterns and the real world. | Students will be able to: | Twenty-First Century Themes and Skills includes: | <ul style="list-style-type: none">Identify, classify and describe plane shapes.Make same and different shapes.Identify, classify and sort solid shapes.Combine and separate plane and solid shapes.Identify plane and solid shapes in real life. | <p><u>1.G.A.1 All vs. Only some</u></p> <p><u>1.G.A.1 3-D Shape Sort</u></p> <p><u>1.G.A.2 Make Your Own Puzzle</u></p> <p><u>1.G.A.2 Overlapping Rectangles</u></p> <p><u>1.G.A.3 Equal Shares</u></p> <p>Math Playground http://www.mathplayground.com/</p> <p>Math Coach – Fact Fluency http://schoolwires.henry.k12.ga.us/Page/21865</p> <p>Math Wire – Basic Facts Link http://mathwire.com/numbersense/bfactslinks.html</p> <p>Math Fact Practice http://www.playkidsgames.com/games/mathfact/mathFact.htm</p> <p>Children’s books: https://www.the-best-childrens-books.org/math-for-kids.html</p> <ul style="list-style-type: none">When a line bends, a shape begins | <p>SE-1A: 98-128; 136-137 Workbook 1A: 93-116; 133-136</p> <p>Common Core Focus Lesson Appendix</p> <p>Think Central: Online access to all Math in Focus materials listed above and Virtual Manipulatives</p> <p>Professional Resources: The Model Method from the Ministry of Education Singapore and Bar Modeling: A Bar Modeling Tool by Yeap Ban Har, PhD.</p> <p>Lesson and Component Walkthrough: www.hmhelearning.com</p> <p>Technology Resources</p> <ul style="list-style-type: none">Math in Focus eBooksMath in Focus Teacher Resources CD <p>Arizona 1st Grade Flipbook http://www.tusd1.org/resources/curriculum/math/1stflippdf2.pdf</p> <p>Delaware Common Core Item Bank for Mathematics – Grade 1 http://www.doe.k12.de.us/cms/lib09/DE01922744/Cent</p> | <p>Formative Assessments:</p> <ul style="list-style-type: none">Do NowExit TicketMath Journal Entries (CRP4)Math notebookCalendar skillsObservationsDiscussions: in groups, have students explain different ways of solving problems (CRP4, 8.2.2.E.1) <p>Summative Assessments: <i>Math in Focus Assessments</i></p> <ul style="list-style-type: none">Chapter Review/Test – pp 133-136Assessments 1 – pp.40-44ExamView Assessment Suite – Test and Practice GeneratorPerformance Task <p>Alternative Assessments:</p> <ul style="list-style-type: none">Learning centers: students can use materials to create their own shapes (specifically 3D shapes) (8.2.2.E.1) |
|--|---|--------|------------|--|---------------------------|--|--|---|--|--|
| Topics | Objectives | | | | | | | | | |
| Plane and solid shapes in patterns and the real world. | Students will be able to: | | | | | | | | | |
| Twenty-First Century Themes and Skills includes: | <ul style="list-style-type: none">Identify, classify and describe plane shapes.Make same and different shapes.Identify, classify and sort solid shapes.Combine and separate plane and solid shapes.Identify plane and solid shapes in real life. | | | | | | | | | |

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| <p>creates smaller shares.</p> <p><i>Mathematical Practices</i> MP.1, MP.2, MP.3, MP.4, MP.5, MP.6</p> | | <ul style="list-style-type: none"> • Shape by shape • The greedy triangle • So many circles, so many squares | <p><u>ricity/Domain/111/Math Grade 1.pdf</u></p> <p>North Carolina Dept of Ed. Wikispaces: http://maccss.ncdpi.wikispaces.net/Elementary</p> <p><u>Standards Solution Lessons:</u></p> <ul style="list-style-type: none"> • CCSS Lesson Plan: Composite Shapes • CCSS Lesson Plan: Defining Attributes of Shapes | <ul style="list-style-type: none"> • Food party: have students divide different foods (pizza, sheet cake, cookies, etc) into halves, quarters, fourths. (8.2.2.E.1) |
|--|--|---|---|--|

| Chapter 7 | | | | |
|---|--|--|---|--|
| <p>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.</p> <p>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:</p> <p>a. 10 can be thought of as a bundle of ten ones — called a “ten.”</p> <p>b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or</p> | <p>Topics</p> <p>Counting, comparing, and ordering numbers to 20.</p> <p>Twenty-First Century Themes and Skills includes:</p> <ul style="list-style-type: none"> • <u>Creativity and Innovation</u> • <u>Critical Thinking and Problem Solving</u> • <u>Communication and Collaboration</u> <p>Objectives</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • Count on from 10-20. • Read and write 11 to 20 in numbers and words. • Use a place-value chart | <p><u>1.NBT.B.2 Roll & Build</u></p> <p><u>1.NBT.B.3 Ordering Numbers</u></p> <p><u>1.NBT.A.1 Start/Stop Counting 2</u></p> <p>Math Playground http://www.mathplayground.com/</p> <p>Math Coach – Fact Fluency http://schoolwires.henry.k12.ga.us/Page/21865</p> <p>Math Wire – Basic Facts Link</p> | <p>SE-1A: 165-191</p> <p>Workbook 1A: 161-190</p> <p>Common Core Focus Lesson Appendix</p> <p>Think Central: Online access to all Math in Focus materials listed above and Virtual Manipulatives</p> <p>Professional Resources: The Model Method from the Ministry of Education Singapore and Bar Modeling: A Bar Modeling Tool by Yeap Ban Har, PhD.</p> <p>Lesson and Component Walkthrough: www.hmhelearning.com</p> | <p>Formative Assessments:</p> <ul style="list-style-type: none"> • Do Now • Exit Ticket • Math Journal Entries (CRP4) • Math notebook (NJSLSA.W2.) • Calendar skills • Observations • Discussions: in groups, have students explain different ways of solving problems (CRP4, 8.2.2.E.1) <p>Summative Assessments: <i>Math in Focus Assessments</i></p> |

nine ones.

1.NBT.B.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

Mathematical Practices
MP.1, MP.2, MP.5, MP.6, MP.7, MP.8

- to show numbers to 20.
- Show objects up to 20 as tens and ones.
 - Compare numbers to 20
 - Order numbers by making number patterns.

<http://mathwire.com/numbersense/bfactslinks.html>

Math Fact Practice
<http://www.playkidsgames.com/games/mathfact/mathFact.htm>

Critical Thinking and Problem Solving p.189:
Put on Your Thinking Cap!

Technology Resources

- Math in Focus eBooks
- Math in Focus Teacher Resources CD

Arizona 1st Grade Flipbook
<http://www.tusd1.org/resources/curriculum/math/1stflipbook2.pdf>

Delaware Common Core Item Bank for Mathematics – Grade 1
http://www.doe.k12.de.us/cms/lib09/DE01922744/Centricity/Domain/111/Math_Grade_1.pdf

North Carolina Dept of Ed. Wikispaces:
<http://maccss.ncdpi.wikispaces.net/Elementary>

Standards Solution Lessons:

- **CCSS Lesson Plan:**
Adding and subtracting within 20

Explanation of math journals:
<https://thecornerstoneforteachers.com/math-journals/>
(CRP4, NJSLSA.W2)

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

- Chapter Review/Test – pp 190-191
- Assessments 1 – pp.55-57
- ExamView Assessment Suite – Test and Practice Generator
- Multiple choice / short answer assessments (CRP8)
- Performance Task

Alternate Assessments:

- Graphs, charts, 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 about community workers/jobs (NJSLSA.W2.)(9.2.

[5matteachingresources.com](http://5matteachingresources.com/math-journals.html)
[/math-journals.html](http://5matteachingresources.com/math-journals.html)
(CRP4, NJSLSA.W2)

4.A.2)

- Story illustrations:
have students
illustrate a math
problem
(NJSLSA.W2.)

Key Vocabulary:

Chapter 4:

take away, subtract, minus(-), subtraction sentence, less than, subtraction story, fact family

Chapter 5:

plane shapes, circle, triangle, square, rectangle, side, corner, sort, color, alike, size, different, solid shapes, rectangular prism, cube, sphere, cone, cylinder, pyramid, stack, slide, roll

Chapter 7:

eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, place-value chart, greatest, least, order

NJ Learning Standards Vocabulary:

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.OA.5 & 6

Add and subtract within 20.

addition, putting together, adding to, counting on, making ten, subtraction, taking apart, taking from, equivalent, sum, unknown, equal, equation,

counting all, 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.G.1, 2, & 3

Reason with shapes and their attributes.

shape, closed, open, side, attribute, feature, two-dimensional, rectangle, square, trapezoid, triangle, half-circle, and quarter-circle, three-dimensional, rectangular prism cube, cone, prism, cylinder, partition, equal shares, halves, fourths, quarters, half of, fourth of, quarter of

From previous grades: circle, rectangle, hexagon, sphere

From previous grade: circle, hexagon, cube, cone, cylinder, sphere

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:

- Peer modeling
- Books in native language
- Word walls
- Give directions in small steps and in as few words as

Special Education:

- Use manipulatives
- Tape a number line to the student’s desk
- Create a math journal that they can use during class,

At-Risk:

- Create a math journal that they can use during class, on assignments and (if teacher allows) on assessments Use visual

Gifted and Talented:

- Choice boards
- Inquiry based instruction
- Independent study
- Higher order thinking skills
- Adjusting the pace of the

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| <p>possible</p> <ul style="list-style-type: none"> • Provide visual aids • Group similar problems together | <p>on assignments and (if teacher allows) on assessments Utilize modifications & accommodations delineated in the students' IEP</p> <ul style="list-style-type: none"> • 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 | <p>demonstrations, illustrations and models</p> <ul style="list-style-type: none"> • 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 out in large print and hung up for the students to see during the time of the lesson • Review behavior expectations and make adjustments | <p>lessons</p> <ul style="list-style-type: none"> • Real world scenarios • Student driven instruction |
|--|--|---|---|

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

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.

RL.1.1. Ask and answer questions about key details in a text.

RI.1.7. Use the illustrations and details in a text to describe its key ideas.

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 NJSL:

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:

9.2.4.A.2. Identify various life roles and civic and work-related activities in the school, home, and community.

Major **Supporting** **Additional** (Identified by PARCC Model Content Frameworks)