Grade 1 Math

Link Community Charter School

UNITS (8/8 SELECTED)	SUGGESTED DURATION
Unit 1: Adding, Subtracting, and Working with Data	17 lessons
Unit 2: Addition and Subtraction Story Problems	24 lessons
Unit 3: Adding and Subtracting Within 20	30 lessons
Unit 4: Numbers to 99	25 lessons
Unit 5: Adding Within 100	16 lessons
Unit 6: Length Measurements Within 120 Units	19 lessons
Unit 7: Geometry and Time	19 lessons
Unit 8: Putting It All Together	12 lessons

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STANDARDS ADDRESSED

New Jersey (NJSLS) - Grade 1 - Mathematics (2020)

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 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.MD.C.4

Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

1.OA.B.4

Understand subtraction as an unknown-addend problem. For example, subtract 10 - 8 by finding the number that makes 10 when added to 8.



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DESIRED RESULTS

Established Goals

In this unit, students deepen their understanding of addition and subtraction within 10, and extend what they know about organizing objects into categories and representing the quantities. The activities in this unit reinforce the understandings learned in kindergarten solving addition and subtraction word problems and initiate the year-long work of developing fluency with sums and differences within 10. Some problems involve finding sums greater than 10, a skill to be honed throughout the course and with the support of tools such as connecting cubes. Students also build on the work in kindergarten as they engage with data. Previously, they sorted objects into given categories such as size or shape. Here, students use drawings, symbols, tally marks, and numbers to represent categorical data. They go further by choosing their own categories, interpreting representations with up to three categories, and asking and answering questions about the data. This opening unit also offers teachers opportunities to introduce mathematical routines and structures for centers, and to develop a shared understanding of what it means to do math and to be a part of a mathematical community.

Transfer

Students will be able to independently use their learning to...

- add and subtract within 10, and represent and interpret categorical data
- develop of shared understanding of what it means to do math and be part of a mathematical community.

Meaning Meaning		
Big Ideas & Understandings	Essential Questions	
 Students will understand that being part of a math community means sharing ideas about math and working with others math tools from Kindergarten will continue to be used to count, represent numbers, add, subtract and represent data collections they can count on or count back to connect adding and subtracting to counting they can can collect data by conducting a survey and represent the data in a way that makes sense to them 	 Students will keep considering How do we share ideas as a math community? What is the relationship of addition and subtraction? How do we add and subtract using counting on and counting back strategies? How do we collect data? How can we organize data? How can we understand the data? What questions can we create about data collections? 	

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Meaning	
they can interpret data by asking and answering questions about the data	

Acquisition		
Knowledge	Skills	
 Students will know the different types of tools used in math what a member of a math community says/does/is the established rules and responsibilities for using math tools how to add and subtract within 10 in a way that make sense to them how to organize and represent data how to interpret data representations by asking and answering questions such as "how many in each category" and "how many in all" how to develop questions about data 	Students will be skilled at describing and explaining what it means to be part of a math community listing and using the rules for using math tools adding and subtracting within 10 organizing data representing data asking and answering questions about data creating questions about data	

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ASSESSMENT EVIDENCE (DIAGNOSTIC / FORMATIVE / SUMMATIVE)

Assessments

Evaluation Criteria	Assessment Evidence
Rubrics/Checklists: Section A Checkpoint Interview Section B Checkpoint Interview Section C Checkpoint Interview End of Unit Assessment	Performance Task(s): Center: Sort and Display Student sort a collection and create a representation of their data
	Other Evidence: • Observation • Anecdotal evidence



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LEARNING PLAN

Summary of Key Learning Events and Instruction:

Section A: Add and Subtract within 10

Lessons 1-6

Section A Checkpoint Interview (During Centers)

Learning Centers - Day 1

Section B: Show us your Data

Lessons 7-10

Section B Checkpoint Interview (During Centers)

Learning Centers - Day 2

Section C: What does the data tell us?

Lesson 11 - 15

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 3

End-of-Unit Assessment

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SUPPORTING MATERIALS/RESOURCES/STRATEGIES FOR DIFFERENTIATION

Materials for Centers

Lesson	Gather	Сору
A.1	Collections of objectsDot cubes	 10-Frame Standard (groups of 1) Counting Collections Stages 1 and 2 Recording Sheet (groups of 1) Number Race Stage 3 Gameboard (groups of 1)
A.2	10-framesDot cubesTwo-color counters	 Check It Off Stage 1 Recording Sheet Grade 1 (groups of 1) Number Cards (0-10) (groups of 2)
A.3	 10-frames Materials from previous centers Number cards 0–10 Two-color counters 	• Five in a Row Addition and Subtraction Stages 1 and 2 Gameboard (groups of 2)
A.4	 10-frames Materials from a previous activity Materials from previous centers Number cards 0–10 Two-color counters 	• none
A.5	 10-frames Materials from previous centers Number cards 0–10 Two-color counters 	Check It Off Stage 2 Recording Sheet (groups of 1)
A.6	 10-frames Materials from previous centers Number cards 0–10 Two-color counters 	• Find the Pair Stage 2 Recording Sheet (groups of 1)

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Lesson	Gather	Сору
B.7	 Inch tiles Materials from a previous activity Materials from previous centers Pattern blocks Two-color counters 	 Two-Column Table (groups of 1) Three-Column Table (groups of 1)
B.8	 Colored pencils or crayons Materials from a previous activity 	Shape Cards (groups of 2)
B.9	 Colored pencils or crayons Connecting cubes Materials from a previous activity 	• none
B.10	 10-frames Connecting cubes Materials from previous centers Two-color counters 	What's Behind My Back Stage 2 Recording Sheet Grade 1
C.11	Materials from previous centers	• none
C.12	Connecting cubes	 Data Represented with Numbers (groups of 2) Data Represented with Tally Marks (groups of 2)
C.13	Connecting cubesMaterials from a previous activity	Favorite Special Class Data (groups of 4)
C.14	Collections of objectsMaterials from previous centers	Sort and Display Stage 1 Recording Sheet (groups of 1)

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Lesson	Gather	Сору
C.15	 Materials from a previous activity Tools for creating a visual display 	• none

Special Education	ELLS
 Adhere to all modifications and health concerns stated in each IEP Provide students a choice board, allowing students to pick assignments from different levels based on difficulty. Provide supportive strategies: Educator or para reading aloud text or tech read-aloud Develop or provide graphic organizers Small group and one-on-one instruction Easy to find information on Google Classroom Personal copies of anchor charts and notes Vocabulary list with visuals Extended time on assignments and assessments Allow students to demonstrate understanding of a problem using models, captions and, when possible, explaining the reasoning orally and/or in writing. Provide tech support for recording oral or video answers Provide breaks between tasks, use positive 	 Use manipulatives to promote conceptual understanding and enhance vocabulary usage Provide graphic representations, gestures, drawings, equations, realia, and pictures during all segments of instruction During i-Ready lessons, click on "Español" to hear specific words in Spanish Utilize graphic organizers which are concrete, pictorial ways of constructing knowledge and organizing information Use sentence frames and questioning strategies so that students will explain their thinking/ process of how to solve word problems Utilize program translations (if available) for L1/ L2 students Reword questions in simpler language Make use of the ELL Mathematical Language Routines (click here for additional information) Scaffolding instruction for ELL Learners

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- Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum by using manipulatives
- Use any suggestions provided by the specific text for a curriculum

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Gifted and Talented

- Elevated contextual complexity (use leveled books via tech resources such as NEWSELA)
- Inquiry based or open ended assignments and projects
- Add in inquiry-based questions and research opportunities to existing projects
- More time to study concepts with greater depth through independent study or genius hour projects
- Promote the synthesis of concepts and making real world connections
- Provide students with enrichment opportunities and experiences suggested by the curriculum
- Provide opportunities for competitions (math, science, writing, art, etc)
- Alternative instruction pathways available

Students At Risk For Failure

- Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum
- Modify Instructional Strategies, reading aloud text, graphic organizers, one-onone instruction, class website (Google Classroom), inclusion of more visuals and manipulatives, Field Trips, Google Expeditions, Peer Support, one on one instruction
- Assure constant parental/ guardian contact throughout the year with successes and challenges
- Design and provide academic contracts to students and guardians with clear goals and deadlines
- Create an interactive notebook with samples, key vocabulary words, student goals/ objectives.
- Always plan to address students at risk in your learning tasks, instructions, and directions. Try to anticipate where the needs will be and then address them prior to lessons.
- Use the programs intended for remediation ancillary to the curriculum



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(i.e. IXL or iReady for math)

*Strategies for Students with 504 Plans

The goal of 504 plans is for students to be educated in regular classrooms along with the services, accommodations, or educational aids they might need. Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:

- · walk, breathe, eat, or sleep
- · communicate, see, hear, or speak
- · read, concentrate, think, or learn
- · stand, bend, lift, or work

General program accommodations/adjustments or services are always made on a case-by-case basis and individualized. Accommodations are to be reasonable and are intended to provide persons with disabilities compensation for their functional limitation(s) due to a mental or physical impairment. Where Section 504 is concerned, accommodations are made to bring a student with a disability to the same starting point as a non-disabled student. Consequently, the accommodations defined in a Section 504 plan are those interventions that are not typically available to all students.

Environmental Strategies

- Provide a structured learning environment
- · Make separate "space" for different types of tasks
- Possible adapting of non-academic times such as lunch, recess, and physical education
- Change student seating
- · Utilize a study carrel
- · Alter location or personal or classroom supplies for easier access or to minimize distraction
- Provide sensory breaks
- · Provide a written or picture schedule

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- Write out homework assignments, check student's recording of assignments
- · Tailor homework assignments toward student strengths
- Set time expectations for assignments
- Provide clues such as clock faces indicating beginning and ending times
- Teach study/organizational skills
- Schedule before or after school tutoring/homework assistance

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- Implement behavioral/academic contracts



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- Utilize positive verbal and/or nonverbal reinforcements
- · Utilize logical consequences
- Confer with the student's parents (and student as appropriate)
- Establish a home/school communication system for behavior monitoring
- · Post rules and consequences for classroom behavior
- Put student on daily/weekly progress report/contract
- Reinforce self-monitoring and self-recording of behaviors

Presentation Strategies

- Record lessons so the student can listen to them again; allow students to record lessons
- Use computer-aided instruction and other audiovisual equipment
- Select alternative digital/audio textbooks, workbooks, or provide books
- Highlight main ideas and supporting details in the book
- Provide copied material for extra practice (i.e. outlines, study guides)
- Prioritize drill and practice activities for relevance
- Vary the method of lesson presentation using multi-sensory techniques:
 - a) lecture plus overhead/board demonstration support
 - b) small groups required to produce a written product
 - c) large groups required to demonstrate a process
 - d) computer-assisted instruction
 - e) peer tutors or cross-age tutors
 - f) demonstrations, simulations
 - g) experiments
 - h) games
- Ask student to repeat/paraphrase context to check understanding
- Arrange for a mentor to work with student in his or her interest area or area of greatest strength
- Provide peer tutoring
- Simplify and repeat instructions about in-class and homework assignments
- Vary instructional pace
- Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, "spell check"
- · Vary kind of instructional materials used
- Assess whether the student has the necessary prerequisite skills.
- Reinforce study skill strategies (survey, read, recite, review)
- Introduce definition of new terms/vocabulary and review to check for understanding
- Be aware of student's preferred learning style and provide matching instruction materials
- Pre-teach and/or re-teach important concepts
- Prepare advanced organizers/study guides for new material

Assignments

- Modify the amount of homework
- Use written directions to supplement oral directions



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- Reduce paper and pencil tasks
- Allow for assignments to be word processed
- Lower reading level of assignments
- · Break assignments into a series of smaller assignments
- Use highlighted texts

Evaluation Methods

- · Limit amount of material presented on a single page
- Provide a sample or practice test
- · Provide for oral testing
- · Provide tests in segments so that student hands in one segment before receiving the
- next part
- · Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- · Modify weights of tests when grading

*Adapted from Orange Public Schools Curriculum Guide



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STANDARDS ADDRESSED

New Jersey (NJSLS) - Grade 1 - Mathematics (2020)

1.MD.C.4

Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

1.OA.A.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.B.4

Understand subtraction as an unknown-addend problem. For example, subtract 10 - 8 by finding the number that makes 10 when added to 8.

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 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.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.OA.B.3

Apply properties of operations as strategies to add and subtract.3 Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to

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make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) {Students need not use formal terms for these properties}

1.OA.D.8

Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? - 3, 6 + 6 = ?.

1.OA.A

Represent and solve problems involving addition and subtraction.

1.OA.A.2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.



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DESIRED RESULTS

Established Goals

In this unit, students learn to solve new types of addition and subtraction story problems and relate the quantities in the stories to equations. The numbers are kept within 10 so students can focus on interpreting each problem and the relationship between counting and addition and subtraction. This also allows students to continue developing fluency with addition and subtraction within 10.

As they solve problems, students analyze and write equations and consider the meaning of the equal sign. They may initially see it as a prompt for the answer to a question, which makes it difficult to interpret equations such as . Developing an understanding of the equal sign is particularly important in solving missing-addend problems.

Transfer

Students will be able to independently use their learning to...

- Students solve new types of story problems within 10 using the relationship between addition and subtraction. They develop an understanding of the meaning of the equal sign and connect story problems to equations.
- Solve Add To and Take From, Result Unknown and Add To, Change Unknown story problems.
- Understand the meaning of the equal sign
- Solve Put Together/Take Apart problems with the unknown in different positions.
- Write equations to represent problems.
- · Relate addition and subtraction.
- · Solve Compare, Difference Unknown problems.
- Apply understanding of the meaning of the equal sign to make sense of equations with a symbol for the unknown.
- Solve different types of story problems, limited to those learned in this unit.

Meaning		
Big Ideas & Understandings	Essential Questions	
Students will understand that they can represent addition and subtraction problems by acting it out they can represent an addition or subtraction story	 Students will keep considering How do we represent addition and subtraction? How do we write an equation to represent addition or subtraction in a number story? 	

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Meaning

problem using an equation

- the answer to a question does not necessarily come after the equal sign, information from the story can provide a missing addend (6 + ___ = 8)
- the same situation can be represented by different equations (7 = 4+3, 4+3 = 7 and 3+4 = 7)
- they can compare questions, quantities and relationships in story problems and write relationships as both addition and subtraction equations (3+7 = 10 and 10-3 = 7)
- they can write a story or question to correspond to an equation and use drawings, numbers and words to find the answers.

- How do we know where to put the numbers in an equation?
- How do we write an equation in different ways to represent the same situation?
- How do we write an addition equation to match a subtraction equation and vice versa?
- How do we write a story to match an equation?

Acquisition	
Knowledge	Skills
Students will know how to determine the action in a story problem how to relate addition and/or subtraction to a number story how to use objects, drawings or words to represent a story problem how to write an equation how to read an equation	 Students will be skilled at retelling the story problem representing the story problem with objects or drawings explaining how their representation matches the story representing the story with an equation adding and subtracting using objects, drawings, or symbols identifying equations that match a story problem completing an equation with correct addends, subtrahends, or answers

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ASSESSMENT EVIDENCE (DIAGNOSTIC / FORMATIVE / SUMMATIVE)

Assessments

Evaluation Criteria	Assessment Evidence
Rubrics/Checklists: Section A Checkpoint Interview Section B Checkpoint Interview Section C Checkpoint Interview Section D Checkpoint Interview End of Unit Assessment	Performance Task(s): Create your own math stories from equations
	Other Evidence: Observation Anecdotal evidence



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LEARNING PLAN

Summary of Key Learning Events and Instruction:

Section A: Add to and take from story problems

Lessons 1-5

Section A Checkpoint Interview (During Centers)

Learning Centers - Day 1

Section B: Put together/take apart story problems

Lessons 6-10

Section B Checkpoint Interview (During Centers)

Learning Centers - Day 2

Section C: Compare Story Problems

Lesson 11 - 16

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 3

Section D: All Kinds of Story Problems

Lesson 17-22

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 4

End-of-Unit Assessment



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SUPPORTING MATERIALS/RESOURCES/STRATEGIES FOR DIFFERENTIATION

Lesson	Gather	Сору
A.1	10-frames Connecting cubes or two-color counters	• none
A.2	 10-frames Connecting cubes or two-color counters 	• none
A.3	 10-frames Connecting cubes or two-color counters Materials from previous centers 	• none
A.4	 10-frames Connecting cubes or two-color counters Tools for creating a visual display 	• none
A.5	Materials from previous centers	 Math Stories Stage 1 and 4 Pictures (groups of 8) Math Stories Stage 4 Recording Sheet (groups of 2)
B.6	 10-frames Connecting cubes or two-color counters Materials from previous centers 	• none
B.7	10-framesCupsTwo-color counters	• Shake and Spill Stage 3 Recording Sheet Grade 1 (groups of 1)
B.8	10-framesCupsTwo-color counters	• Shake and Spill Stage 4 and 5 Recording Sheet (G1 and 2) (groups of 1)
B.9	• 10-frames	• none

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Lesson	Gather	Сору
	 Connecting cubes or two-color counters Materials from a previous activity Tools for creating a visual display 	
B.10	 10-frames Colored pencils or crayons Connecting cubes or two-color counters Materials from previous centers Number cubes 	• Capture Squares Stage 1 Gameboard (groups of 2)
C.11	Connecting cubes in towers of 10 and singles	• none
C.12	Connecting cubes or two-color counters	• none
C.13	Connecting cubes or two-color counters	• none
C.14	 Connecting cubes or two-color counters Materials from previous centers 	• none
C.15	 Connecting cubes or two-color counters Materials from previous centers 	• none
C.16	 Colored pencils or crayons Connecting cubes or two-color counters Materials from previous centers Number cards 0–10 	Capture Squares Stage 2 Gameboard (groups of 2)
D.17	Tools for creating a visual display	• Story Problem Cards Grade 1 (groups of 2)

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Lesson	Gather	Сору
D.18	 Connecting cubes or two-color counters Materials from a previous lesson 	 Story Problem Cards Grade 1 (groups of 2) Equation Cards Grade 1 (groups of 2)
D.19	Connecting cubes or two-color counters	• none
D.20	 Connecting cubes or two-color counters Materials from previous centers 	• none
D.21	Materials from previous centers	 Number Puzzles Addition and Subtraction Stage 1 Gameboard (groups of 2) Number Puzzles Digit Cards (groups of 2)
D.22	Materials from a previous activityMaterials from a previous lesson	• Revisit Data (groups of 1)

Special Education	ELLS
 Adhere to all modifications and health concerns stated in each IEP Provide students a choice board, allowing students to pick assignments from different levels based on difficulty. Provide supportive strategies: Educator or para reading aloud text or tech read-aloud Develop or provide graphic organizers Small group and one-on-one instruction Easy to find information on Google Classroom Personal copies of anchor charts and 	 Use manipulatives to promote conceptual understanding and enhance vocabulary usage Provide graphic representations, gestures, drawings, equations, realia, and pictures during all segments of instruction During i-Ready lessons, click on "Español" to hear specific words in Spanish Utilize graphic organizers which are concrete, pictorial ways of constructing knowledge and organizing information Use sentence frames and

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notes

- Vocabulary list with visuals
- Extended time on assignments and assessments
- Allow students to demonstrate understanding of a problem using models, captions and, when possible, explaining the reasoning orally and/or in writing.
- Provide tech support for recording oral or video answers
- Provide breaks between tasks, use positive reinforcement, use proximity
- Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum by using manipulatives
- Use any suggestions provided by the specific text for a curriculum

- questioning strategies so that students will explain their thinking/ process of how to solve word problems
- Utilize program translations (if available) for L1/ L2 students
- Reword questions in simpler language
- Make use of the ELL Mathematical Language Routines (click <u>here</u> for additional information)
- Scaffolding instruction for ELL Learners
- Use any suggestions provided by the specific text for a curriculum

Gifted and Talented	Students At Risk For Failure
 Elevated contextual complexity (use leveled books via tech resources such as NEWSELA) Inquiry based or open ended assignments and projects Add in inquiry-based questions and research opportunities to existing projects More time to study concepts with greater depth through independent study or genius hour projects Promote the synthesis of concepts and making real world connections Provide students with enrichment 	 Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum Modify Instructional Strategies, reading aloud text, graphic organizers, one-onone instruction, class website (Google Classroom), inclusion of more visuals and manipulatives, Field Trips, Google Expeditions, Peer Support, one on one instruction Assure constant parental/ guardian contact throughout the year with successes and challenges

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- opportunities and experiences suggested by the curriculum
- Provide opportunities for competitions (math, science, writing, art, etc)
- · Alternative instruction pathways available
- Design and provide academic contracts to students and guardians with clear goals and deadlines
- Create an interactive notebook with samples, key vocabulary words, student goals/ objectives.
- Always plan to address students at risk in your learning tasks, instructions, and directions. Try to anticipate where the needs will be and then address them prior to lessons.
- Use the programs intended for remediation ancillary to the curriculum (i.e. IXL or iReady for math)

*Strategies for Students with 504 Plans

The goal of 504 plans is for students to be educated in regular classrooms along with the services, accommodations, or educational aids they might need. Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:

- · walk, breathe, eat, or sleep
- · communicate, see, hear, or speak
- · read, concentrate, think, or learn
- · stand, bend, lift, or work

General program accommodations/adjustments or services are always made on a case-by-case <u>basis</u> <u>and individualized</u>. Accommodations are to be reasonable and are intended to provide persons with disabilities compensation for their functional limitation(s) due to a mental or physical impairment. Where Section 504 is concerned, accommodations are made to bring a student with a disability to the same starting point as a non-disabled student. Consequently, the accommodations defined in a Section 504 plan are those interventions that are not typically available to all students.

Environmental Strategies

- · Provide a structured learning environment
- Make separate "space" for different types of tasks
- Possible adapting of non-academic times such as lunch, recess, and physical education
- Change student seating
- Utilize a study carrel
- Alter location or personal or classroom supplies for easier access or to minimize distraction
- Provide sensory breaks



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· Provide a written or picture schedule

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- · Write out homework assignments, check student's recording of assignments
- · Tailor homework assignments toward student strengths
- Set time expectations for assignments
- Provide clues such as clock faces indicating beginning and ending times
- · Teach study/organizational skills
- Schedule before or after school tutoring/homework assistance

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- Implement behavioral/academic contracts
- Utilize positive verbal and/or nonverbal reinforcements
- Utilize logical consequences
- Confer with the student's parents (and student as appropriate)
- Establish a home/school communication system for behavior monitoring
- Post rules and consequences for classroom behavior
- Put student on daily/weekly progress report/contract
- Reinforce self-monitoring and self-recording of behaviors

Presentation Strategies

- Record lessons so the student can listen to them again; allow students to record lessons
- Use computer-aided instruction and other audiovisual equipment
- Select alternative digital/audio textbooks, workbooks, or provide books
- Highlight main ideas and supporting details in the book
- Provide copied material for extra practice (i.e. outlines, study guides)
- Prioritize drill and practice activities for relevance
- Vary the method of lesson presentation using multi-sensory techniques:
 - a) lecture plus overhead/board demonstration support
 - b) small groups required to produce a written product
 - c) large groups required to demonstrate a process
 - d) computer-assisted instruction
 - e) peer tutors or cross-age tutors
 - f) demonstrations, simulations
 - g) experiments
 - h) games
- Ask student to repeat/paraphrase context to check understanding
- Arrange for a mentor to work with student in his or her interest area or area of greatest strength
- · Provide peer tutoring



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- · Simplify and repeat instructions about in-class and homework assignments
- Vary instructional pace
- · Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, "spell check"
- · Vary kind of instructional materials used
- Assess whether the student has the necessary prerequisite skills.
- Reinforce study skill strategies (survey, read, recite, review)
- · Introduce definition of new terms/vocabulary and review to check for understanding
- Be aware of student's preferred learning style and provide matching instruction materials
- Pre-teach and/or re-teach important concepts
- Prepare advanced organizers/study guides for new material

Assignments

- · Modify the amount of homework
- Use written directions to supplement oral directions
- Reduce paper and pencil tasks
- · Allow for assignments to be word processed
- · Lower reading level of assignments
- Break assignments into a series of smaller assignments
- Use highlighted texts

Evaluation Methods

- Limit amount of material presented on a single page
- · Provide a sample or practice test
- Provide for oral testing
- · Provide tests in segments so that student hands in one segment before receiving the
- · next part
- Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- · Modify weights of tests when grading

*Adapted from Orange Public Schools Curriculum Guide



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STANDARDS ADDRESSED

New Jersey (NJSLS) - Grade 1 - Mathematics (2020)

1.OA.A.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.B.3

Apply properties of operations as strategies to add and subtract.3 Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) {Students need not use formal terms for these properties}

1.OA.B.4

Understand subtraction as an unknown-addend problem. For example, subtract 10 - 8 by finding the number that makes 10 when added to 8.

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 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 to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? - 3, 6 + 6 = ?.

1.NBT.A.1



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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.a

10 can be thought of as a bundle of ten ones — called a "ten."

1.NBT.B.2.b

The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

1.OA.A.2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.



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DESIRED RESULTS

Established Goals

In this unit, students develop an understanding of 10 ones as a unit called "a ten" and use the structure of to add and subtract within 20.

Students decompose and recompose addends to find the sum of two or three numbers. For example, to find the value of 9 + 6, they may decompose 6 into 1 and 5, compose the 1 and 9 into 10, and find 10 + 5.

Subtraction work occurs throughout the unit and becomes the focus in the last section. Students consider taking away and counting on as methods for subtracting. They understand subtraction as an unknown-addend problem and use their knowledge of addition to find the difference of two numbers.

Students solve story problems throughout the unit and learn two new problem types—Add To, Start Unknown and Take From, Change Unknown. Students compare the structure of different types of story problems as they practice adding and subtracting within 20.

Transfer

Students will be able to independently use their learning to...

- add and subtract within 20.
- apply the properties of operations and the relationship between addition and subtraction.
- build toward fluency with adding and subtracting within 10.
- add and subtract one-digit numbers from teen numbers without composing or decomposing a ten.
- find the value that makes an addition or subtraction equation true, involving 10.
- understand 10 ones as a ten and the numbers 11 to 19 as a ten and some ones
- · add within 20, including three addends.
- · subtract within 20.

Meaning Meaning	
Big Ideas & Understandings	Essential Questions
Students will understand that • 10 ones as a unit is called "a ten" and use the	Students will keep considering • How do we compose and decompose numbers in

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Meaning

structure of 10+ n to add and subtract within 20

- they can act out a story problem to solve and find an answer
- teen numbers are composed of 1 unit of ten plus some number of ones.
- an equation can be used to solve problems and relate to the number stories
- grouping numbers to make a sum of ten is useful to find the value of 3 digits in an addition problem
- when doing a subtraction problem, the idea of making ten can make the problem easier to solve (ex. 15-8, students can take away 5 to get 10 and take away another 3 to get 7.

the teens?

- How do we solve story problems and represent the story with an equation?
- How do we use 10 to help us compose or add numbers?
- How do we use 10 to help us decompose or subtract numbers?

Acquisition	
Knowledge	Skills
Students will know numbers can be added and subtracted in more than one way strategies to add and subtract using 10 that equations can be used to represent adding and subtracting numbers in story problems	 Students will be skilled at counting on to find the sum take away to find the difference count up to find the difference know certain sums know certain differences use the relationship between addition and subtraction to find the difference use known sums to adjust expressions and find the sum or difference understand 10 ones as a ten and the numbers 11 to 19 as a ten and some ones. Identify teen numbers as a ten and some ones. find the value that makes an addition or subtraction equation true, involving 10.

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Acquisition	
	 add and subtract one-digit numbers from teen numbers without composing or decomposing a ten. use the 10+n structure of teen numbers to add and subtract

ASSESSMENT EVIDENCE (DIAGNOSTIC / FORMATIVE / SUMMATIVE)

Assessments

Evaluation Criteria	Assessment Evidence
Rubrics/Checklists: Section A Checkpoint Interview Section B Checkpoint Interview Section C Checkpoint Interview Section D Checkpoint Interview End of Unit Assessment	Performance Task(s):
	Other Evidence: Observation Anecdotal evidence



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LEARNING PLAN

Summary of Key Learning Events and Instruction:

Section A: Develop Fluency with Addition and Subtraction within 10

Lessons 1-7

Section A Checkpoint Interview (During Centers)

Learning Centers - Day 1

Section B: Add and Subtract using Ten as a Unit

Lessons 7-14

Section B Checkpoint Interview (During Centers)

Learning Centers - Day 2

Section C: Add within 20

Lesson 15 - 21

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 3

Section D: Subtract within 20

Lesson 22-28

Section D Checkpoint Interview (During Centers)

Learning Centers - Day 4

End-of-Unit Assessment



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SUPPORTING MATERIALS/RESOURCES/STRATEGIES FOR DIFFERENTIATION

Lesson	Gather	Сору
A.1	Bags (brown paper)Bags or envelopesScissors	Compare Stage 1 Addition Cards to 10 (groups of 2)
A.2	 10-frames Connecting cubes or two-color counters Materials from a previous lesson Two-color counters 	• none
A.3	 Connecting cubes or two-color counters Materials from a previous lesson 	• none
A.4	 10-frames Crayons Cups Materials from previous centers Two-color counters 	• Shake and Spill Stage 3 Recording Sheet Grade 1 (groups of 1)
A.5	Connecting cubes or two-color counters	• none
A.6	 10-frames Connecting cubes or two-color counters 	• none
A.7	 Connecting cubes or two-color counters Materials from previous centers 	 Compare Stage 1 Subtraction Cards to 10 (groups of 2) Compare Stage 1 Addition Cards to 10 (groups of 2)
B.8	• 10-frames • Bags	Counting Collections Stages 1 and 2 Recording Sheet (groups of 1)

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Lesson	Gather	Сору
	Connecting cubes	
В.9	 Connecting cubes or two-color counters Double 10-frames 	 Double 10-Frame - Standard (groups of 1) Number Cards 11-20 (groups of 2)
B.10	 Connecting cubes or two-color counters Double 10-frames 	• none
B.11	 Connecting cubes or two-color counters Double 10-frames Materials from previous centers 	• none
B.12	 Connecting cubes or two-color counters Cups Double 10-frames Two-color counters 	• Shake and Spill Stage 4 and 5 Recording Sheet (G1 and 2) (groups of 1)
B.13	 Connecting cubes or two-color counters Double 10-frames Materials from previous centers 	• none
B.14	Materials from previous centers	Number Puzzles Addition and Subtraction Stage 2 Gameboard (groups of 1)
C.15	 Connecting cubes or two-color counters Double 10-frames 	• none
C.16	Connecting cubes or two-color counters	• none

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Lesson	Gather	Сору
	• Double 10-frames	
C.17	 Connecting cubes or two-color counters Double 10-frames Number cards 0–10 	• none
C.18	 Connecting cubes or two-color counters Double 10-frames Materials from previous centers Tools for creating a visual display 	• Compare Stage 2 Addition Cards to 20 (groups of 2)
C.19	 Connecting cubes or two-color counters Double 10-frames Materials from a previous lesson 	• none
C.20	 Connecting cubes or two-color counters Double 10-frames 	• none
C.21	 Connecting cubes or two-color counters Double 10-frames Number cards 0–10 Two-color counters 	 Five in a Row Addition and Subtraction Stage 3 Gameboard (groups of 2) How Close? Stage 1 Recording Sheet (groups of 1)
D.22	 Connecting cubes or two-color counters Double 10-frames Materials from a previous lesson Number cards 0–10 	• none

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Lesson	Gather	Сору
	Tools for creating a visual display	
D.23	 Connecting cubes or two-color counters Double 10-frames Materials from a previous lesson Number cards 0–10 	• none
D.24	 Connecting cubes or two-color counters Double 10-frames 	• none
D.25	 Connecting cubes or two-color counters Double 10-frames 	• none
D.26	 Connecting cubes or two-color counters Double 10-frames Tools for creating a visual display 	• none
D.27	 Connecting cubes or two-color counters Double 10-frames Materials from a previous lesson Materials from previous centers Number cards 0–10 	 How Close? Stage 2 Recording Sheet (groups of 1) Compare Stage 2 Subtraction Cards to 20 (groups of 2)
D.28	 Connecting cubes or two-color counters Double 10-frames Tools for creating a visual display 	• none

Special Education	ELLS
 Adhere to all modifications and health concerns stated in each IEP Provide students a choice board, allowing students to pick assignments from different levels based on difficulty. Provide supportive strategies: Educator or para reading aloud text or tech read-aloud Develop or provide graphic organizers Small group and one-on-one instruction Easy to find information on Google Classroom Personal copies of anchor charts and notes Vocabulary list with visuals Extended time on assignments and assessments Allow students to demonstrate understanding of a problem using models, captions and, when possible, explaining the reasoning orally and/or in writing. Provide tech support for recording oral or video answers Provide breaks between tasks, use positive reinforcement, use proximity Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum by using manipulatives Use any suggestions provided by the specific text for a curriculum 	 Use manipulatives to promote conceptual understanding and enhance vocabulary usage Provide graphic representations, gestures, drawings, equations, realia, and pictures during all segments of instruction During i-Ready lessons, click on "Español" to hear specific words in Spanish Utilize graphic organizers which are concrete, pictorial ways of constructing knowledge and organizing information Use sentence frames and questioning strategies so that students will explain their thinking/ process of how to solve word problems Utilize program translations (if available) for L1/ L2 students Reword questions in simpler language Make use of the ELL Mathematical Language Routines (click here for additional information) Scaffolding instruction for ELL Learners Use any suggestions provided by the specific text for a curriculum

Gifted and Talented Students At Risk For Failure Elevated contextual complexity (use Assure students have experiences that leveled books via tech resources such as are on the Concrete- Pictorial- Abstract NEWSELA) spectrum Inquiry based or open ended assignments Modify Instructional Strategies, reading aloud text, graphic organizers, one-onand projects Add in inquiry-based questions and one instruction, class website (Google research opportunities to existing projects Classroom), inclusion of more visuals and More time to study concepts with greater manipulatives, Field Trips, Google depth through independent study or Expeditions, Peer Support, one on one genius hour projects instruction Promote the synthesis of concepts and Assure constant parental/ quardian making real world connections contact throughout the year with Provide students with enrichment successes and challenges opportunities and experiences suggested Design and provide academic contracts to students and guardians with clear goals by the curriculum Provide opportunities for competitions and deadlines (math, science, writing, art, etc) Create an interactive notebook with · Alternative instruction pathways available samples, key vocabulary words, student goals/ objectives. Always plan to address students at risk in your learning tasks, instructions, and directions. Try to anticipate where the needs will be and then address them prior to lessons. Use the programs intended for remediation ancillary to the curriculum (i.e. IXL or iReady for math)

*Strategies for Students with <u>504 Plans</u>

The goal of 504 plans is for students to be educated in regular classrooms along with the services, accommodations, or educational aids they might need. Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:

- · walk, breathe, eat, or sleep
- · communicate, see, hear, or speak
- · read, concentrate, think, or learn
- · stand, bend, lift, or work



Unit 3: Adding and Subtracting Within 20

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General program accommodations/adjustments or services are always made on a case-by-case basis and individualized. Accommodations are to be reasonable and are intended to provide persons with disabilities compensation for their functional limitation(s) due to a mental or physical impairment. Where Section 504 is concerned, accommodations are made to bring a student with a disability to the same starting point as a non-disabled student. Consequently, the accommodations defined in a Section 504 plan are those interventions that are not typically available to all students.

Environmental Strategies

- · Provide a structured learning environment
- Make separate "space" for different types of tasks
- Possible adapting of non-academic times such as lunch, recess, and physical education
- Change student seating
- Utilize a study carrel
- Alter location or personal or classroom supplies for easier access or to minimize distraction
- · Provide sensory breaks
- · Provide a written or picture schedule

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- Write out homework assignments, check student's recording of assignments
- · Tailor homework assignments toward student strengths
- Set time expectations for assignments
- Provide clues such as clock faces indicating beginning and ending times
- Teach study/organizational skills
- Schedule before or after school tutoring/homework assistance

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- Implement behavioral/academic contracts
- Utilize positive verbal and/or nonverbal reinforcements
- Utilize logical consequences
- Confer with the student's parents (and student as appropriate)
- Establish a home/school communication system for behavior monitoring
- Post rules and consequences for classroom behavior
- Put student on daily/weekly progress report/contract
- Reinforce self-monitoring and self-recording of behaviors

Presentation Strategies

- · Record lessons so the student can listen to them again; allow students to record lessons
- Use computer-aided instruction and other audiovisual equipment
- Select alternative digital/audio textbooks, workbooks, or provide books
- · Highlight main ideas and supporting details in the book
- Provide copied material for extra practice (i.e. outlines, study guides)
- Prioritize drill and practice activities for relevance



Unit 3: Adding and Subtracting Within 20

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- Vary the method of lesson presentation using multi-sensory techniques:
 - a) lecture plus overhead/board demonstration support
 - b) small groups required to produce a written product
 - c) large groups required to demonstrate a process
 - d) computer-assisted instruction
 - e) peer tutors or cross-age tutors
 - f) demonstrations, simulations
 - g) experiments
 - h) games
- Ask student to repeat/paraphrase context to check understanding
- · Arrange for a mentor to work with student in his or her interest area or area of greatest strength
- Provide peer tutoring
- Simplify and repeat instructions about in-class and homework assignments
- · Vary instructional pace
- · Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, "spell check"
- · Vary kind of instructional materials used
- · Assess whether the student has the necessary prerequisite skills.
- Reinforce study skill strategies (survey, read, recite, review)
- Introduce definition of new terms/vocabulary and review to check for understanding
- Be aware of student's preferred learning style and provide matching instruction materials
- Pre-teach and/or re-teach important concepts
- · Prepare advanced organizers/study guides for new material

Assignments

- Modify the amount of homework
- Use written directions to supplement oral directions
- · Reduce paper and pencil tasks
- · Allow for assignments to be word processed
- · Lower reading level of assignments
- Break assignments into a series of smaller assignments
- Use highlighted texts

Evaluation Methods

- Limit amount of material presented on a single page
- Provide a sample or practice test
- Provide for oral testing
- · Provide tests in segments so that student hands in one segment before receiving the
- next part
- Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- · Modify weights of tests when grading

*Adapted from Orange Public Schools Curriculum Guide



Unit 4: Numbers to 99

Grade 1 Math - Last Updated on July 21, 2022

STANDARDS ADDRESSED

New Jersey (NJSLS) - Grade 1 - Mathematics (2020)

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:

1.NBT.B.2.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.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 (e.g., base ten blocks) 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.NBT.C.5

Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

1.NBT.C.6

Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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.

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,

Unit 4: Numbers to 99

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one knows 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.8

Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? - 3, 6 + 6 = ?.

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 <.

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.NBT.B

Understand place value.

1.NBT.B.2.a

10 can be thought of as a bundle of ten ones — called a "ten."

1.NBT.B.2.b

The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

DESIRED RESULTS

Established Goals

This unit develops students' understanding of the structure of numbers in base ten, allowing them to see that the two digits of a two-digit number represent how many tens and ones there are. As they count and group quantities, students generalize the structure of two-digit numbers in terms of the number of tens and ones. This understanding enables students to transition from counting by one to counting by ten and then counting on. For example, to count to 73, they may count 7 tens and count on—71, 72, 73.

Students interpret and use multiple representations of two-digit numbers: connecting cubes, base-ten diagrams, words, and expressions.

Students also represent two-digit numbers with their own drawings. They may start by drawing towers of ten and show each unit of one within each ten, and later simplify their drawings to show rectangles for tens and small squares for ones.

Later in the unit, students use the value of the digits to compare two-digit numbers and learn to use comparison symbols (<, >) to record their comparisons. The unit concludes with opportunities for students to explore different ways of using tens and ones to represent two-digit numbers.

Transfer

Students will be able to independently use their learning to...

- Students develop an understanding of place value for numbers up to 99.
- · Add and subtract multiples of 10.
- Represent the base-ten structure of multiples of 10 up to 90 using towers of 10, drawings, numbers, or words.
- Add and subtract multiples of 10.
- Represent the base-ten structure of numbers up to 99 using drawings, numbers, and words.
- Understand that the two digits of a two-digit number represent amounts of tens and ones.
- Compare 2 two-digit numbers based on the values of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.>
- Represent two-digit numbers in different ways, using different amounts of tens and ones.

Meaning	
Big Ideas & Understandings	Essential Questions
Students will understand that • the two digits of a two-digit number	Students will keep considering • How can we compose and decompose numbers

Meaning

- represent amounts of tens and ones
- two-digit numbers can be represented using connecting cubes, base-ten diagrams, words and expressions
- two-digit numbers can be represented by drawing
- numbers can be compared using the symbols<, > and =

- using tens and ones?
- How can we show our two-digit numbers using math tools and drawings?
- How can we write an equation using symbols to compare two-digit numbers?

Acquisition	
Knowledge	Skills
 Students will know how to use math tools (connecting cubes, double 10-frames, and two-color counters) to represent two-digit numbers how to draw towers of 10 and units to represent two-digit numbers the symbols used to compare numbers (<, >, and =) 	 Students will be skilled at Representing the base-ten structure of multiples of 10 up to 90 using towers of 10, drawings, numbers, and words. Organizing and counting objects by ten. Representing a number in more than one way (cube towers, drawings, numbers, words, expressions). Connecting different place value representations. Writing multiples of 10 accurately. Adding and subtracting multiples of 10. Adding and subtracting multiples of 10 from other multiples of 10. Representing the base-ten structure of numbers up to 99 using drawings, numbers, and words. Describing a two-digit number as made up of tens ones. Represent a number in more than one way (drawings, numbers, words, expressions). Recognize different base-ten representations of the same number.

Acquisition	
Acqui	 Write two-digit numbers accurately. Comparing 2 two-digit numbers based on the values of the tens and ones digits, recording the results of comparisons with the symbols <,>, and =. Connecting different place value representations. Determining which two-digit number is greater or less. Using <,> and = to write comparison statements. Reading comparison statements that use <,>,
	 Represent two-digit numbers in different ways, using different amounts of tens and ones (for example). Represent a number with tens and ones in more than one way. Recognize when the same number is represented with different amounts of tens and ones. Compare two-digit numbers represented in different ways.

Unit 4: Numbers to 99

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ASSESSMENT EVIDENCE (DIAGNOSTIC / FORMATIVE / SUMMATIVE)

Assessments

Evaluation Criteria	Assessment Evidence
Rubrics/Checklists: Section A Checkpoint Interview Section B Checkpoint Interview Section C Checkpoint Interview End of Unit Assessment	Performance Task(s): Center: Center Demonstration Choose a center for students to demonstrate their skills. For example, make a poster of a problem from "Greatest of them All" to demonstrate understanding of using symbols to compare numbers.
	Other Evidence: Observation Anecdotal evidence

Unit 4: Numbers to 99

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LEARNING PLAN

Summary of Key Learning Events and Instruction:

Section A: Units of ten

Lessons 1-5

Section A Checkpoint Interview (During Centers)

Learning Centers - Day 1

Section B: Tens and Ones

Lessons 6-13

Section B Checkpoint Interview (During Centers)

Learning Centers - Day 2

Section C: Compare Numbers to 99

Lessons 14-18

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 3

Section D: Different Ways to Make a Number

Lessons 19-23

Section D Checkpoint Interview (During Centers)

Learning Centers - Day 4

End-of-Unit Assessment

SUPPORTING MATERIALS/RESOURCES/STRATEGIES FOR DIFFERENTIATION

Lesson	Gather	Сору
A.1	 Bags Collections of objects Cups Double 10-frames Materials from a previous activity Materials from previous centers Paper plates 	Counting Collections Stages 1 and 2 Recording Sheet (groups of 1)
A.2	Connecting cubes	 It's a Match (10-90) words, numbers, pictures (groups of 1) Representations of Tens (groups of 27)
A.3	 Connecting cubes in towers of 10 and singles Materials from previous centers Two-color counters 	 Number Cards, Multiples of 10 (0-90) (groups of 2) Five in a Row Addition and Subtraction Stage 4 Gameboard (groups of 2)
A.4	 Connecting cubes in towers of 10 and singles Double 10-frames 	• none
A.5	 Connecting cubes in towers of 10 and singles Materials from previous centers 	 Number Cards, Multiples of 10 (0-90) (groups of 2) Check It Off Stage 3 Recording Sheet (groups of 1)
B.6	 Bags Connecting cubes Connecting cubes in towers of 10 and singles Cups Double 10-frames Materials from previous centers Paper plates 	Counting Collections Stages 1 and 2 Recording Sheet (groups of 1)

Lesson	Gather	Сору
В.7	 Connecting cubes in towers of 10 and singles Materials from previous centers Number cards 0–10 	Make It, Two-Digit Numbers Recording Sheet Number, Drawing, Words (groups of 1)
B.8	 Base-ten blocks Connecting cubes in towers of 10 and singles 	 Representations of Tens and Ones (groups of 2) Grab and Count Stage 2 Recording Sheet (groups of 1)
B.9	 Connecting cubes in towers of 10 and singles Materials from a previous activity Materials from previous centers Number cards 0–10 	• none
B.10	 Connecting cubes in towers of 10 and singles Dry erase markers Sheet protectors 	Write the Number Stage 1 Gameboard (groups of 2)
B.11	• Connecting cubes in towers of 10 and singles	• none
B.12	Dry erase markersSheet protectors	Write the Number Stage 2 Gameboard (groups of 2)
B.13	Materials from previous centers	• none
C.14	 Connecting cubes in towers of 10 and singles Materials from previous centers Paper clips 	• none

Lesson	Gather	Сору
C.15	• Connecting cubes in towers of 10 and singles	• none
C.16	 Connecting cubes in towers of 10 and singles Number cards 0–10 	Greatest of Them All Stage 1 Recording Sheet (groups of 1)
C.17	• Connecting cubes in towers of 10 and singles	Ordering Cards: Tens and Ones (groups of 2)
C.18	 Dry erase markers Materials from previous centers Number cards 0–10 Sheet protectors 	Get Your Numbers in Order Stage 1 Gameboard (groups of 2)
D.19	 Bags Connecting cubes in towers of 10 and singles Materials from previous centers 	• none
D.20	• Connecting cubes in towers of 10 and singles	• none
D.21	• Connecting cubes in towers of 10 and singles	• none
D.22	 Materials from previous centers Number cards 0–10 	Mystery Number Stage 1 Directions (groups of 2)
D.23	BagsCollections of objects	• Estimating Quantities Card Sort (groups of 2)

Special Education	ELLS
 Adhere to all modifications and health concerns stated in each IEP Provide students a choice board, allowing students to pick assignments from different levels based on difficulty. Provide supportive strategies: Educator or para reading aloud text or tech read-aloud Develop or provide graphic organizers Small group and one-on-one instruction Easy to find information on Google Classroom Personal copies of anchor charts and notes Vocabulary list with visuals Extended time on assignments and assessments Allow students to demonstrate understanding of a problem using models, captions and, when possible, explaining the reasoning orally and/or in writing. Provide tech support for recording oral or video answers Provide breaks between tasks, use positive reinforcement, use proximity Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum by using manipulatives Use any suggestions provided by the specific text for a curriculum 	 Use manipulatives to promote conceptual understanding and enhance vocabulary usage Provide graphic representations, gestures, drawings, equations, realia, and pictures during all segments of instruction During i-Ready lessons, click on "Español" to hear specific words in Spanish Utilize graphic organizers which are concrete, pictorial ways of constructing knowledge and organizing information Use sentence frames and questioning strategies so that students will explain their thinking/ process of how to solve word problems Utilize program translations (if available) for L1/ L2 students Reword questions in simpler language Make use of the ELL Mathematical Language Routines (click here for additional information) Scaffolding instruction for ELL Learners Use any suggestions provided by the specific text for a curriculum

Gifted and Talented Students At Risk For Failure Elevated contextual complexity (use Assure students have experiences that leveled books via tech resources such as are on the Concrete- Pictorial- Abstract NEWSELA) spectrum Inquiry based or open ended assignments Modify Instructional Strategies, reading aloud text, graphic organizers, one-onand projects Add in inquiry-based questions and one instruction, class website (Google research opportunities to existing projects Classroom), inclusion of more visuals and More time to study concepts with greater manipulatives, Field Trips, Google depth through independent study or Expeditions, Peer Support, one on one genius hour projects instruction Promote the synthesis of concepts and Assure constant parental/ quardian making real world connections contact throughout the year with Provide students with enrichment successes and challenges opportunities and experiences suggested Design and provide academic contracts to students and guardians with clear goals by the curriculum Provide opportunities for competitions and deadlines (math, science, writing, art, etc) Create an interactive notebook with Alternative instruction pathways available samples, key vocabulary words, student goals/ objectives. Always plan to address students at risk in your learning tasks, instructions, and directions. Try to anticipate where the needs will be and then address them prior to lessons. Use the programs intended for remediation ancillary to the curriculum (i.e. IXL or iReady for math)

*Strategies for Students with <u>504 Plans</u>

The goal of 504 plans is for students to be educated in regular classrooms along with the services, accommodations, or educational aids they might need. Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:

- · walk, breathe, eat, or sleep
- · communicate, see, hear, or speak
- · read, concentrate, think, or learn
- · stand, bend, lift, or work

General program accommodations/adjustments or services are always made on a case-by-case basis and individualized. Accommodations are to be reasonable and are intended to provide persons with disabilities compensation for their functional limitation(s) due to a mental or physical impairment. Where Section 504 is concerned, accommodations are made to bring a student with a disability to the same starting point as a non-disabled student. Consequently, the accommodations defined in a Section 504 plan are those interventions that are not typically available to all students.

Environmental Strategies

- · Provide a structured learning environment
- Make separate "space" for different types of tasks
- · Possible adapting of non-academic times such as lunch, recess, and physical education
- Change student seating
- Utilize a study carrel
- Alter location or personal or classroom supplies for easier access or to minimize distraction
- Provide sensory breaks
- · Provide a written or picture schedule

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- · Write out homework assignments, check student's recording of assignments
- · Tailor homework assignments toward student strengths
- Set time expectations for assignments
- Provide clues such as clock faces indicating beginning and ending times
- Teach study/organizational skills
- Schedule before or after school tutoring/homework assistance

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- Implement behavioral/academic contracts
- Utilize positive verbal and/or nonverbal reinforcements
- Utilize logical consequences
- Confer with the student's parents (and student as appropriate)
- Establish a home/school communication system for behavior monitoring
- Post rules and consequences for classroom behavior
- Put student on daily/weekly progress report/contract
- Reinforce self-monitoring and self-recording of behaviors

Presentation Strategies

- · Record lessons so the student can listen to them again; allow students to record lessons
- Use computer-aided instruction and other audiovisual equipment
- Select alternative digital/audio textbooks, workbooks, or provide books
- · Highlight main ideas and supporting details in the book
- Provide copied material for extra practice (i.e. outlines, study guides)
- Prioritize drill and practice activities for relevance



Unit 4: Numbers to 99

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- Vary the method of lesson presentation using multi-sensory techniques:
 - a) lecture plus overhead/board demonstration support
 - b) small groups required to produce a written product
 - c) large groups required to demonstrate a process
 - d) computer-assisted instruction
 - e) peer tutors or cross-age tutors
 - f) demonstrations, simulations
 - g) experiments
 - h) games
- Ask student to repeat/paraphrase context to check understanding
- · Arrange for a mentor to work with student in his or her interest area or area of greatest strength
- Provide peer tutoring
- Simplify and repeat instructions about in-class and homework assignments
- Vary instructional pace
- Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, "spell check"
- · Vary kind of instructional materials used
- · Assess whether the student has the necessary prerequisite skills.
- Reinforce study skill strategies (survey, read, recite, review)
- Introduce definition of new terms/vocabulary and review to check for understanding
- Be aware of student's preferred learning style and provide matching instruction materials
- Pre-teach and/or re-teach important concepts
- Prepare advanced organizers/study guides for new material

Assignments

- Modify the amount of homework
- Use written directions to supplement oral directions
- Reduce paper and pencil tasks
- · Allow for assignments to be word processed
- · Lower reading level of assignments
- Break assignments into a series of smaller assignments
- Use highlighted texts

Evaluation Methods

- Limit amount of material presented on a single page
- Provide a sample or practice test
- Provide for oral testing
- Provide tests in segments so that student hands in one segment before receiving the
- next part
- · Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- · Modify weights of tests when grading

*Adapted from Orange Public Schools Curriculum Guide



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STANDARDS ADDRESSED

New Jersey (NJSLS) - Grade 1 - Mathematics (2020)

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:

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 (e.g., base ten blocks) 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.A.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

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 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.8

Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? - 3, 6 + 6 = ?.

1.NBT.B

Understand place value.

1.NBT.B.3

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

1.NBT.C.5

Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

1.NBT.C.6

Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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.

1.OA.C.5

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

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.



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DESIRED RESULTS

Established Goals

In this unit, students add within 100, using place value and properties of operations in their reasoning. Students begin by adding a two-digit number with another two-digit number or with a one-digit number where it is not necessary to compose a new ten. Then, they observe cases in which adding some ones together require composing a new ten. Expressions and equations are presented horizontally here to encourage students to make sense of the numbers and ways of adding rather than apply an algorithm. Eventually, they write equations to represent their thinking.

Transfer

Students will be able to independently use their learning to...

Students use place value understanding and properties of operations to add within 100.

- · Add within 100 without composing a ten.
- Add a one-digit and a two-digit number within 100 with composing a ten.
- Add 2 two-digit numbers within 100, with composing a ten.
- · Use equations to represent addition methods.

Meaning	
Big Ideas & Understandings	Essential Questions
 Students will understand that adding units can be done by place value (i.e. adding tens together and ones together) adding units can be done by adding on (adding on tens, then ones) adding can be done using connecting cubes, base-ten drawings, expressions or equations 	 Students will keep considering How do we add within 100? How can we use 10 to help us add within 100? How can we use equations to represent our addition problems?

Acquisition		
Knowledge	Skills	



Acquisition

Students will know...

- composing a 10 can be used to help add within 100
- a strategy to add within 100 without composing a ten
- equations can be used to represent addition story problems

Students will be skilled at...

- · Add within 100 without composing a ten.
 - · Add within 100 by counting on by tens and ones.
 - Add within 100 by combining tens and tens and ones and ones.
 - Explain their addition method orally in a way others will understand.
 - Represent their addition method on paper in a way others will understand.
- · Use equations to represent addition methods.
 - · Write equations to represent addition methods.
- Add a one-digit and a two-digit number within 100 that require composing a ten.
 - Add within 100 by counting on.
 - · Make a ten to add within 100.
 - · Add within 100 by combining ones and ones.
 - Explain their addition method orally in a way others will understand.
 - Represent their addition method on paper in a way others will understand.



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ASSESSMENT EVIDENCE (DIAGNOSTIC / FORMATIVE / SUMMATIVE)

Assessments

Evaluation Criteria	Assessment Evidence
Rubrics/Checklists: Section A Checkpoint Interview Section B Checkpoint Interview Section C Checkpoint Interview End of Unit Assessment	Performance Task(s): Center:
	Other Evidence: Observation Anecdotal evidence

LEARNING PLAN

Summary of Key Learning Events and Instruction:

Section A: Add without making a ten

Lessons 1-4

Section A Checkpoint Interview (During Centers)

Learning Centers - Day 1

Section B: Make a ten: add one- and two-digit numbers

Lessons 5-8

Section B Checkpoint Interview (During Centers)

Learning Centers - Day 2

Section C: Make a ten: add within 100

Lesson 9-14

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 3

End-of-Unit Assessment



SUPPORTING MATERIALS/RESOURCES/STRATEGIES FOR DIFFERENTIATION

Lesson	Gather	Сору
A.1	 Connecting cubes in towers of 10 and singles Number cards 0–10 Paper clips (2-inch) 	• none
A.2	 Connecting cubes in towers of 10 and singles Paper clips Two-color counters 	• Five in a Row Addition and Subtraction Stage 5 Gameboard (groups of 2)
A.3	Connecting cubes in towers of 10 and singles	• none
A.4	Materials from previous centers	Number Puzzles Addition and Subtraction Stage 3 Gameboard (groups of 2)
B.5	Connecting cubes in towers of 10 and singles	Add Em' Up Cards (2-digit and 1-digit numbers to 100) (groups of 2)
B.6	 Connecting cubes in towers of 10 and singles Number cards 0–10 	Target Numbers Stage 1 Recording Sheet (groups of 1)
В.7	Connecting cubes in towers of 10 and singles	• none
B.8	 Connecting cubes in towers of 10 and singles Materials from previous centers Number cards 0–10 	Target Numbers Stage 2 Recording Sheet (groups of 1)
C.9	Connecting cubes in towers of 10 and singles	• none
C.10	Connecting cubes in towers of 10 and singles	Number Puzzles Addition Stage 4 Gameboard (groups of 2)

Lesson	Gather	Сору
	Materials from previous centers	
C.11	 Connecting cubes in towers of 10 and singles Tools for creating a visual display 	• none
C.12	Connecting cubes in towers of 10 and singles	• none
C.13	 Connecting cubes in towers of 10 and singles Materials from previous centers Number cubes Paper clips Two-color counters 	 Five in a Row Addition and Subtraction Stage 6 Gameboard (groups of 2) Target Numbers Stage 3 Recording Sheet (groups of 1)
C.14	Connecting cubes in towers of 10 and singles	• none

Special Education	ELLS
 Adhere to all modifications and health concerns stated in each IEP Provide students a choice board, allowing students to pick assignments from different levels based on difficulty. 	 Use manipulatives to promote conceptual understanding and enhance vocabulary usage Provide graphic representations, gestures, drawings, equations, realia, and pictures during all segments of
Provide supportive strategies: Educator or para reading aloud text or tech read-aloud Develop or provide graphic organizers Small group and one-on-one instruction Easy to find information on Google Classroom 	 instruction During i-Ready lessons, click on "Español" to hear specific words in Spanish Utilize graphic organizers which are concrete, pictorial ways of constructing knowledge and organizing information

- Personal copies of anchor charts and notes
- Vocabulary list with visuals
- Extended time on assignments and assessments
- Allow students to demonstrate understanding of a problem using models, captions and, when possible, explaining the reasoning orally and/or in writing.
- Provide tech support for recording oral or video answers
- Provide breaks between tasks, use positive reinforcement, use proximity
- Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum by using manipulatives
- Use any suggestions provided by the specific text for a curriculum

- Use sentence frames and questioning strategies so that students will explain their thinking/ process of how to solve word problems
- Utilize program translations (if available) for L1/ L2 students
- Reword questions in simpler language
- Make use of the ELL Mathematical Language Routines (click <u>here</u> for additional information)
- Scaffolding instruction for ELL Learners
- Use any suggestions provided by the specific text for a curriculum

Gifted and Talented	Students At Risk For Failure
 Elevated contextual complexity (use leveled books via tech resources such as NEWSELA) Inquiry based or open ended assignments and projects Add in inquiry-based questions and research opportunities to existing projects More time to study concepts with greater depth through independent study or genius hour projects Promote the synthesis of concepts and making real world connections 	 Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum Modify Instructional Strategies, reading aloud text, graphic organizers, one-onone instruction, class website (Google Classroom), inclusion of more visuals and manipulatives, Field Trips, Google Expeditions, Peer Support, one on one instruction Assure constant parental/ guardian contact throughout the year with

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- Provide students with enrichment opportunities and experiences suggested by the curriculum
- Provide opportunities for competitions (math, science, writing, art, etc)
- Alternative instruction pathways available
- successes and challenges
- Design and provide academic contracts to students and guardians with clear goals and deadlines
- Create an interactive notebook with samples, key vocabulary words, student goals/ objectives.
- Always plan to address students at risk in your learning tasks, instructions, and directions. Try to anticipate where the needs will be and then address them prior to lessons.
- Use the programs intended for remediation ancillary to the curriculum (i.e. IXL or iReady for math)

*Strategies for Students with 504 Plans

The goal of 504 plans is for students to be educated in regular classrooms along with the services, accommodations, or educational aids they might need. Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:

- · walk, breathe, eat, or sleep
- · communicate, see, hear, or speak
- · read, concentrate, think, or learn
- · stand, bend, lift, or work

General program accommodations/adjustments or services are always made on a case-by-case <u>basis</u> <u>and individualized</u>. Accommodations are to be reasonable and are intended to provide persons with disabilities compensation for their functional limitation(s) due to a mental or physical impairment. Where Section 504 is concerned, accommodations are made to bring a student with a disability to the same starting point as a non-disabled student. Consequently, the accommodations defined in a Section 504 plan are those interventions that are not typically available to all students.

Environmental Strategies

- Provide a structured learning environment
- Make separate "space" for different types of tasks
- Possible adapting of non-academic times such as lunch, recess, and physical education
- · Change student seating
- Utilize a study carrel
- Alter location or personal or classroom supplies for easier access or to minimize distraction



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- Provide sensory breaks
- · Provide a written or picture schedule

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- · Write out homework assignments, check student's recording of assignments
- Tailor homework assignments toward student strengths
- Set time expectations for assignments
- Provide clues such as clock faces indicating beginning and ending times
- Teach study/organizational skills
- · Schedule before or after school tutoring/homework assistance

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- · Implement behavioral/academic contracts
- Utilize positive verbal and/or nonverbal reinforcements
- · Utilize logical consequences
- Confer with the student's parents (and student as appropriate)
- Establish a home/school communication system for behavior monitoring
- · Post rules and consequences for classroom behavior
- Put student on daily/weekly progress report/contract
- Reinforce self-monitoring and self-recording of behaviors

Presentation Strategies

- · Record lessons so the student can listen to them again; allow students to record lessons
- Use computer-aided instruction and other audiovisual equipment
- Select alternative digital/audio textbooks, workbooks, or provide books
- · Highlight main ideas and supporting details in the book
- Provide copied material for extra practice (i.e. outlines, study guides)
- · Prioritize drill and practice activities for relevance
- Vary the method of lesson presentation using multi-sensory techniques:
 - a) lecture plus overhead/board demonstration support
 - b) small groups required to produce a written product
 - c) large groups required to demonstrate a process
 - d) computer-assisted instruction
 - e) peer tutors or cross-age tutors
 - f) demonstrations, simulations
 - g) experiments
 - h) games
- Ask student to repeat/paraphrase context to check understanding
- Arrange for a mentor to work with student in his or her interest area or area of greatest strength



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- Provide peer tutoring
- · Simplify and repeat instructions about in-class and homework assignments
- Vary instructional pace
- Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, "spell check"
- · Vary kind of instructional materials used
- Assess whether the student has the necessary prerequisite skills.
- Reinforce study skill strategies (survey, read, recite, review)
- Introduce definition of new terms/vocabulary and review to check for understanding
- Be aware of student's preferred learning style and provide matching instruction materials
- Pre-teach and/or re-teach important concepts
- · Prepare advanced organizers/study guides for new material

Assignments

- · Modify the amount of homework
- Use written directions to supplement oral directions
- Reduce paper and pencil tasks
- · Allow for assignments to be word processed
- · Lower reading level of assignments
- Break assignments into a series of smaller assignments
- · Use highlighted texts

Evaluation Methods

- Limit amount of material presented on a single page
- Provide a sample or practice test
- · Provide for oral testing
- · Provide tests in segments so that student hands in one segment before receiving the
- next part
- Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- · Modify weights of tests when grading

*Adapted from Orange Public Schools Curriculum Guide



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STANDARDS ADDRESSED

New Jersey (NJSLS) - Grade 1 - Mathematics (2020)

1.MD.A.1

Order three objects by length; compare the lengths of two objects indirectly by using a third object.

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 <.

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 (e.g., base ten blocks) 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.NBT.C.5

Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

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 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.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 units with no gaps or overlaps.

1.NBT.A.1

Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a



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number of objects with a written numeral.

1.OA.A.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.A.2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.B.4

Understand subtraction as an unknown-addend problem. For example, subtract 10 - 8 by finding the number that makes 10 when added to 8.



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DESIRED RESULTS

Established Goals

In this unit, students extend their knowledge of linear measurement while continuing to develop their understanding of operations, algebraic thinking, and place value. Students solve problems in various contexts, including measurement. They revisit Compare, Difference Unknown story problems and learn to solve Compare, Bigger Unknown and Smaller Unknown problems about lengths. Next, students are introduced to a new problem type: Take From, Start Unknown. They practice solving all story problems types with unknowns in all positions.

Transfer

Students will be able to independently use their learning to...

- Students measure length and count up to 120 length units. They solve addition and subtraction story problems with unknowns in all positions.
- · Compare the lengths of objects indirectly.
- Order objects by length.
- Count groups of up to 120 objects and write a number to represent them.
- Lay length units end-to-end with no gaps or overlaps and count the units to determine length.
- Solve addition and subtraction story problems with unknowns in all positions.

Meaning		
Big Ideas & Understandings	Essential Questions	
 Students will understand that there are attributes of objects that can be compared, such as length, weight and capacity. objects can be measured by lining them up at their endpoints objects can be measured and compared even if they cannot be lined up at their endpoints objects can be measured using connecting cubes objects can be measuring using other items (paper clips or base ten cubes) the measuring tool needs to be the same length (i.e. measuring cubes, paper clips and base ten 	 Students will keep considering How can we measure objects using connecting cubes? Why are connecting cubes a reasonable unit of measurement? How can we measure using other objects (paper clips or base ten cubes) that don't connect together? How can we compare the size of objects? 	



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Meaning	
blocks are all the same length respectively	

Acquisition		
Knowledge	Skills	
 how to line up objects to measure using their endpoints a method for measuring objects using connecting cubes strategies for measuring objects using other items how to solve story problems in familiar contexts (compare, difference unknown) about length how to solve story problems in new contexts (compare, bigger unknown and smaller unknown) about length 	 Students will be skilled at Order objects by length. Compare the lengths of objects indirectly. Compare objects directly by lining them up at an endpoint. Use precise language ("longer than," "shorter than") to describe and compare lengths of objects. Order three objects by length. Compare the length of two objects indirectly using a third object. Choose an object to compare the lengths of other objects indirectly Lay length units end-to-end with no gaps or overlaps and count the units to determine length. Measure length by iterating length units. Explain why measurements of the length of the same object can be different. Count groups of up to 120 objects and write a number to represent them. Read and write numbers 100–120. Count a group of 100–120 objects and represent it with a written number. Solve story problems within 20 with unknowns in all positions. Retell the story. Represent the story with objects or drawings. Explain how their representation matches the story. Represent the story with equations. 	

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ASSESSMENT EVIDENCE (DIAGNOSTIC / FORMATIVE / SUMMATIVE)

Assessments

Evaluation Criteria	Assessment Evidence
Rubrics/Checklists: Section A Checkpoint Interview Section B Checkpoint Interview Section C Checkpoint Interview End of Unit Assessment	Performance Task(s): Center: Estimate and measure Students estimate and measure objects.
	Other Evidence: Observation Anecdotal evidence

LEARNING PLAN

Summary of Key Learning Events and Instruction:

Section A: From Direct to Indirect Comparisons

Lessons 1-4

Section A Checkpoint Interview (During Centers)

Learning Centers - Day 1

Section B: Measure by iterating up to 120 length units

Lessons 5-10

Section B Checkpoint Interview (During Centers)

Learning Centers - Day 2

Section C: All Kinds of Story Problems

Lesson 11 - 17

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 3

End-of-Unit Assessment



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SUPPORTING MATERIALS/RESOURCES/STRATEGIES FOR DIFFERENTIATION

Lesson	Gather	Сору
A.1	 Connecting cubes Materials from a previous activity Materials from previous centers Objects of various lengths 	• none
A.2	 Materials from a previous lesson Pencils Scissors String 	• none
A.3	 Connecting cubes in towers of 10 and singles Materials from a previous activity Pencils Scissors String 	• none
A.4	 Materials from previous centers Number cards 0–10 	How Close? Stage 3 Recording Sheet (groups of 1)
B.5	Connecting cubesMaterials from previous centers	 Lengths of Creepy, Crawly Things (groups of 1) More Creepy, Crawly Things (groups of 1)
B.6	Paper clips (1-inch)Tape (painter's or masking)	Measure with Paper Clips (groups of 1)
B.7	 Base-ten blocks Connecting cubes Paper clips (1-inch) Paper clips (2-inch) Tape (painter's or masking) 	• none
B.8	Base-ten blocksScissorsString	Representations of Numbers Over 80 (groups of 2)

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Lesson	Gather	Сору
В.9	Base-ten blocksTape (painter's or masking)Tools for creating a visual display	• none
B.10	 Base-ten blocks Connecting cubes Materials from previous centers Objects of various lengths Paper clips (2-inch) 	Estimate and Measure Stage 1 Recording Sheet (groups of 1)
C.11	Connecting cubes in towers of 10 and singles	• none
C.12	 Connecting cubes in towers of 10 and singles Dry erase markers Sheet protectors 	Write the Number Stage 3 Gameboard (groups of 2)
C.13	Connecting cubes in towers of 10 and singles	• none
C.14	Connecting cubes in towers of 10 and singles	Story Problem Cards, Unknowns in All Positions (groups of 2)
C.15	 Connecting cubes in towers of 10 and singles Tools for creating a visual display 	• none
C.16	 10-frames Collections of objects Cups Materials from previous centers Paper plates 	• Counting Collections Stage 3 Recording Sheet (groups of 1)
C.17	 Colored pencils, crayons, or markers Connecting cubes Construction paper 	Origami Triangles: Puppies and Tulips (groups of 1)

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Lesson	Gather	Сору
	Glue Materials from a previous activity	

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spectrum by using manipulatives Use any suggestions provided by the specific text for a curriculum	
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Gifted and Talented	Students At Risk For Failure	
 Elevated contextual complexity (use leveled books via tech resources such as NEWSELA) Inquiry based or open ended assignments and projects Add in inquiry-based questions and research opportunities to existing projects More time to study concepts with greater depth through independent study or genius hour projects Promote the synthesis of concepts and making real world connections Provide students with enrichment opportunities and experiences suggested by the curriculum Provide opportunities for competitions (math, science, writing, art, etc) Alternative instruction pathways available 	 Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum Modify Instructional Strategies, reading aloud text, graphic organizers, one-onone instruction, class website (Google Classroom), inclusion of more visuals and manipulatives, Field Trips, Google Expeditions, Peer Support, one on one instruction Assure constant parental/ guardian contact throughout the year with successes and challenges Design and provide academic contracts to students and guardians with clear goals and deadlines Create an interactive notebook with samples, key vocabulary words, student goals/ objectives. Always plan to address students at risk in your learning tasks, instructions, and directions. Try to anticipate where the needs will be and then address them prior to lessons. Use the programs intended for remediation ancillary to the curriculum (i.e. IXL or iReady for math) 	

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*Strategies for Students with 504 Plans

The goal of 504 plans is for students to be educated in regular classrooms along with the services, accommodations, or educational aids they might need. Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:

- · walk, breathe, eat, or sleep
- · communicate, see, hear, or speak
- · read, concentrate, think, or learn
- · stand, bend, lift, or work

General program accommodations/adjustments or services are always made on a case-by-case basis and individualized. Accommodations are to be reasonable and are intended to provide persons with disabilities compensation for their functional limitation(s) due to a mental or physical impairment. Where Section 504 is concerned, accommodations are made to bring a student with a disability to the same starting point as a non-disabled student. Consequently, the accommodations defined in a Section 504 plan are those interventions that are not typically available to all students.

Environmental Strategies

- · Provide a structured learning environment
- Make separate "space" for different types of tasks
- · Possible adapting of non-academic times such as lunch, recess, and physical education
- · Change student seating
- Utilize a study carrel
- · Alter location or personal or classroom supplies for easier access or to minimize distraction
- Provide sensory breaks
- · Provide a written or picture schedule

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- · Write out homework assignments, check student's recording of assignments
- Tailor homework assignments toward student strengths
- · Set time expectations for assignments
- Provide clues such as clock faces indicating beginning and ending times
- Teach study/organizational skills
- Schedule before or after school tutoring/homework assistance

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- Implement behavioral/academic contracts
- Utilize positive verbal and/or nonverbal reinforcements
- Utilize logical consequences
- Confer with the student's parents (and student as appropriate)
- Establish a home/school communication system for behavior monitoring
- · Post rules and consequences for classroom behavior
- Put student on daily/weekly progress report/contract
- Reinforce self-monitoring and self-recording of behaviors



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Presentation Strategies

- · Record lessons so the student can listen to them again; allow students to record lessons
- Use computer-aided instruction and other audiovisual equipment
- Select alternative digital/audio textbooks, workbooks, or provide books
- Highlight main ideas and supporting details in the book
- Provide copied material for extra practice (i.e. outlines, study guides)
- · Prioritize drill and practice activities for relevance
- Vary the method of lesson presentation using multi-sensory techniques:
 - a) lecture plus overhead/board demonstration support
 - b) small groups required to produce a written product
 - c) large groups required to demonstrate a process
 - d) computer-assisted instruction
 - e) peer tutors or cross-age tutors
 - f) demonstrations, simulations
 - g) experiments
 - h) games
- Ask student to repeat/paraphrase context to check understanding
- · Arrange for a mentor to work with student in his or her interest area or area of greatest strength
- Provide peer tutoring
- · Simplify and repeat instructions about in-class and homework assignments
- Vary instructional pace
- · Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, "spell check"
- · Vary kind of instructional materials used
- Assess whether the student has the necessary prerequisite skills.
- Reinforce study skill strategies (survey, read, recite, review)
- Introduce definition of new terms/vocabulary and review to check for understanding
- Be aware of student's preferred learning style and provide matching instruction materials
- Pre-teach and/or re-teach important concepts
- Prepare advanced organizers/study guides for new material

Assignments

- Modify the amount of homework
- Use written directions to supplement oral directions
- Reduce paper and pencil tasks
- Allow for assignments to be word processed
- · Lower reading level of assignments
- · Break assignments into a series of smaller assignments
- · Use highlighted texts

Evaluation Methods

• Limit amount of material presented on a single page

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- Provide a sample or practice test
- Provide for oral testing
- · Provide tests in segments so that student hands in one segment before receiving the
- next part
- · Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- · Modify weights of tests when grading

*Adapted from Orange Public Schools Curriculum Guide



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STANDARDS ADDRESSED

New Jersey (NJSLS) - Grade 1 - Mathematics (2020)

1.G.A

Reason with shapes and their attributes.

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.

1.G.A.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.4

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 (e.g., base ten blocks) 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.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 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.G.A.3

Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

1.NBT.C.5

Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

1.MD.B.3

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Tell and write time in hours and half-hours using analog and digital clocks.

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.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.



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DESIRED RESULTS

Established Goals

In this unit, students focus on geometry and time. They expand their knowledge of two- and three-dimensional shapes, partition shapes into halves and fourths, and tell time to the hour and half of an hour. Center activities and warm-ups continue to enable students to solidify their work with adding and subtracting within 20 and adding within 100.

Transfer

Students will be able to independently use their learning to...

- · Students reason with shapes and their attributes, partition shapes into equal pieces, and tell time to the hour and half hour.
- · Build and draw shapes to possess defining attributes.
- Compose two-dimensional or three-dimensional shapes to create a composite shape.
- Describe attributes of two-dimensional and three-dimensional shapes.
- · Partition circles and rectangles into two and four equal pieces and describe the pieces with words (halves and fourths).
- · Tell and write time in hours and half-hours.

Meaning		
Big Ideas & Understandings	Essential Questions	
 Students will understand that two-dimensional and three-dimensional shapes are named based on their attributes (flat, solid) 2-D shapes have different names based on their side lengths, number of sides and whether their sides or straight lines or curves (triangle, circle, square, and rectangle) 3-D shapes have different names based on the number of their faces and the 2-D shapes on their faces (cube, sphere, cylinder and cone) shapes can be compared by their attributes shapes can be partitioned into halves and fourths or quarters 	 Students will keep considering How can we determine a shape using it's attributes? How can we partition shapes into equal pieces? How can we tell time by hour and half hour? 	

Meaning	
 clocks have an hour and minute hand that moves and can be used to tell time the language used to tell time (two o'clock, half past 2 or 2:30) 	

Acquisition		
Knowledge	Skills	
 the attributes of 2-D shapes (same length sides, curved lines, straight lines, number of sides, corners, lines that meet) the attributes of 3-D shapes (square or circle on a face, corners that meet) shapes can be put in categories of examples and non-examples (these are triangles, these are not triangles) how to split into equal halves and fourths or quarters and what a non-example looks like how to interpret a clock face that shows an hour hand how to interpret a clock face that shows an hour hand and minute hand 	 Describe attributes of two-dimensional and three-dimensional shapes. Describe attributes of two-dimensional and three-dimensional shapes using informal vocabulary (smooth, pointy, like a box). Describe the sides and corners of two-dimensional and three-dimensional shapes using informal vocabulary (corners, points, square corners, sides, long sides, short sides). Compose two-dimensional or three-dimensional shapes to create a composite shape. Put two-dimensional or three dimensional shapes together to form larger shapes or objects. Describe the composite shape and the shapes that make up the composite shape. Build and draw shapes to possess defining attributes. Recognize defining attributes of shapes. Draw shapes with given attributes. Partition circles and rectangles into two and four equal pieces, describe the pieces with words (halves and fourths). Identify when a shape is split into equal pieces. Partition a circle or rectangle into halves or fourths. Identify how much of a shape is shaded using the language "a half of," "a fourth of," "a quarter of," "two of the halves," and "four of the fourths." Understand that for halves and fourths, partitioning 	

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Acquisition	
	a shape into more equal pieces creates smaller pieces. • Tell and write time in hours and half-hours. • Identify the hour hand and minute hand on a clock. • Identify that when the minute hand points to the 12 it is "o'clock" and:00. • Identify that when the minute hand points to the 6 it is "half past" and:30. • Tell time from analog and digital clocks. • Draw hands on a clock to show a given time in hours or half hours. • Write the time using digits (:) to match an analog clock to the hour and half hour.

ASSESSMENT EVIDENCE (DIAGNOSTIC / FORMATIVE / SUMMATIVE)

Assessments

Evaluation Criteria	Assessment Evidence
Rubrics/Checklists:	Performance Task(s):
Section A Checkpoint Interview Section B Checkpoint Interview Section C Checkpoint Interview End of Unit Assessment	Center: Picture Books Students create their own picture books representing shapes
	Other Evidence: Observation Anecdotal evidence

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LEARNING PLAN

Summary of Key Learning Events and Instruction:

Section A: Flat and Solid Shapes

Lessons 1-8

Section A Checkpoint Interview (During Centers)

Learning Centers - Day 1

Section B: Halves and Quarters

Lessons 9-12

Section B Checkpoint Interview (During Centers)

Learning Centers - Day 2

Section C: Tell time in hours and half-hours

Lesson13-17

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 3

End-of-Unit Assessment



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SUPPORTING MATERIALS/RESOURCES/STRATEGIES FOR DIFFERENTIATION

Lesson	Gather	Сору
A.1	 Bags (brown paper) Geoblocks Materials from a previous activity Solid shapes 	• none
A.2	GeoblocksGeoblocksSolid shapes	• none
A.3	Materials from a previous activity	• Flat Shape Cards Grade 1 (groups of 2)
A.4	Materials from a previous activityMaterials from a previous lessonMaterials from previous centers	Centimeter Dot Paper - Standard (groups of 1)
A.5	Materials from a previous activityMaterials from a previous lessonMaterials from previous centers	Centimeter Dot Paper - Standard (groups of 1)
A.6	Chart paperMaterials from a previous activityMaterials from a previous lesson	Centimeter Dot Paper - Standard (groups of 1)
A.7	Pattern blocksPicture books	 Flat Shapes Puzzles (groups of 1) Picture Books Stage 3 Recording Sheet (groups of 1)
A.8	FoldersGeoblocksMaterials from previous centersSolid shapes	• none
В.9	• Scissors	Circles and Squares (groups of 1)Pieces of Circles (groups of 8)
B.10	Colored pencils or crayons	• Shaded Parts Cards (groups of 1)

Lesson	Gather	Сору
B.11	BagsColored pencils or crayonsGeoblocksScissors	• none
B.12	Materials from a previous lessonMaterials from previous centers	Centimeter Dot Paper - Standard (groups of 1)
C.13	Materials from a previous activityScissors	Clock Cards Hour (groups of 1)
C.14	 Colored pencils, crayons, or markers Materials from a previous activity Materials from a previous lesson Scissors 	Clock Cards Half Past (groups of 1)
C.15	Materials from a previous lesson	• none
C.16	Materials from a previous lesson	• none
C.17	Materials from previous centersTwo-color counters	• Which One Stage 2 Gameboard (groups of 2)

Special Education	ELLS
 Adhere to all modifications and health concerns stated in each IEP Provide students a choice board, allowing students to pick assignments from different levels based on difficulty. Provide supportive strategies: Educator or para reading aloud text or 	 Use manipulatives to promote conceptual understanding and enhance vocabulary usage Provide graphic representations, gestures, drawings, equations, realia, and pictures during all segments of instruction During i-Ready lessons, click on "Español" to hear specific words in

tech read-aloud

- Develop or provide graphic organizers
- Small group and one-on-one instruction
- Easy to find information on Google Classroom
- Personal copies of anchor charts and notes
- Vocabulary list with visuals
- Extended time on assignments and assessments
- Allow students to demonstrate understanding of a problem using models, captions and, when possible, explaining the reasoning orally and/or in writing.
- Provide tech support for recording oral or video answers
- Provide breaks between tasks, use positive reinforcement, use proximity
- Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum by using manipulatives
- Use any suggestions provided by the specific text for a curriculum

Spanish

- Utilize graphic organizers which are concrete, pictorial ways of constructing knowledge and organizing information
- Use sentence frames and questioning strategies so that students will explain their thinking/ process of how to solve word problems
- Utilize program translations (if available) for L1/ L2 students
- Reword questions in simpler language
- Make use of the ELL Mathematical Language Routines (click <u>here</u> for additional information)
- Scaffolding instruction for ELL Learners
- Use any suggestions provided by the specific text for a curriculum

Gifted and Talented	Students At Risk For Failure
 Elevated contextual complexity (use leveled books via tech resources such as NEWSELA) Inquiry based or open ended assignments and projects Add in inquiry-based questions and research opportunities to existing projects 	 Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum Modify Instructional Strategies, reading aloud text, graphic organizers, one-on-one instruction, class website (Google Classroom), inclusion of more visuals and

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- More time to study concepts with greater depth through independent study or genius hour projects
- Promote the synthesis of concepts and making real world connections
- Provide students with enrichment opportunities and experiences suggested by the curriculum
- Provide opportunities for competitions (math, science, writing, art, etc)
- Alternative instruction pathways available

- manipulatives, Field Trips, Google Expeditions, Peer Support, one on one instruction
- Assure constant parental/ guardian contact throughout the year with successes and challenges
- Design and provide academic contracts to students and guardians with clear goals and deadlines
- Create an interactive notebook with samples, key vocabulary words, student goals/ objectives.
- Always plan to address students at risk in your learning tasks, instructions, and directions. Try to anticipate where the needs will be and then address them prior to lessons.
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The goal of 504 plans is for students to be educated in regular classrooms along with the services, accommodations, or educational aids they might need. Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:

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- · read, concentrate, think, or learn
- · stand, bend, lift, or work

General program accommodations/adjustments or services are always made on a case-by-case <u>basis</u> <u>and individualized</u>. Accommodations are to be reasonable and are intended to provide persons with disabilities compensation for their functional limitation(s) due to a mental or physical impairment. Where Section 504 is concerned, accommodations are made to bring a student with a disability to the same starting point as a non-disabled student. Consequently, the accommodations defined in a Section 504 plan are those interventions that are not typically available to all students.

Environmental Strategies



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- Provide a structured learning environment
- · Make separate "space" for different types of tasks
- · Possible adapting of non-academic times such as lunch, recess, and physical education
- · Change student seating
- · Utilize a study carrel
- Alter location or personal or classroom supplies for easier access or to minimize distraction
- · Provide sensory breaks
- · Provide a written or picture schedule

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- · Write out homework assignments, check student's recording of assignments
- · Tailor homework assignments toward student strengths
- Set time expectations for assignments
- Provide clues such as clock faces indicating beginning and ending times
- · Teach study/organizational skills
- Schedule before or after school tutoring/homework assistance

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- Implement behavioral/academic contracts
- Utilize positive verbal and/or nonverbal reinforcements
- · Utilize logical consequences
- Confer with the student's parents (and student as appropriate)
- Establish a home/school communication system for behavior monitoring
- · Post rules and consequences for classroom behavior
- Put student on daily/weekly progress report/contract
- Reinforce self-monitoring and self-recording of behaviors

Presentation Strategies

- Record lessons so the student can listen to them again; allow students to record lessons
- Use computer-aided instruction and other audiovisual equipment
- Select alternative digital/audio textbooks, workbooks, or provide books
- Highlight main ideas and supporting details in the book
- Provide copied material for extra practice (i.e. outlines, study guides)
- Prioritize drill and practice activities for relevance
- Vary the method of lesson presentation using multi-sensory techniques:
 - a) lecture plus overhead/board demonstration support
 - b) small groups required to produce a written product
 - c) large groups required to demonstrate a process
 - d) computer-assisted instruction
 - e) peer tutors or cross-age tutors
 - f) demonstrations, simulations
 - g) experiments



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h) games

- Ask student to repeat/paraphrase context to check understanding
- · Arrange for a mentor to work with student in his or her interest area or area of greatest strength
- Provide peer tutoring
- Simplify and repeat instructions about in-class and homework assignments
- · Vary instructional pace
- Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, "spell check"
- · Vary kind of instructional materials used
- Assess whether the student has the necessary prerequisite skills.
- Reinforce study skill strategies (survey, read, recite, review)
- · Introduce definition of new terms/vocabulary and review to check for understanding
- Be aware of student's preferred learning style and provide matching instruction materials
- · Pre-teach and/or re-teach important concepts
- Prepare advanced organizers/study guides for new material

Assignments

- · Modify the amount of homework
- Use written directions to supplement oral directions
- Reduce paper and pencil tasks
- · Allow for assignments to be word processed
- · Lower reading level of assignments
- · Break assignments into a series of smaller assignments
- Use highlighted texts

Evaluation Methods

- Limit amount of material presented on a single page
- · Provide a sample or practice test
- Provide for oral testing
- · Provide tests in segments so that student hands in one segment before receiving the
- next part
- · Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- · Modify weights of tests when grading

*Adapted from Orange Public Schools Curriculum Guide



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STANDARDS ADDRESSED

New Jersey (NJSLS) - Grade 1 - Mathematics (2020)

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 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.8

Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? - 3, 6 + 6 = ?.

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 (e.g., base ten blocks) 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.A.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.A.2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

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.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.

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1.NBT.B

Understand place value.

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 <.

1.NBT.C

Use place value understanding and properties of operations to add and subtract.



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DESIRED RESULTS

Established Goals

• Students consolidate and solidify their understanding of various concepts and skills on major work of the grade. They also continue to work toward fluency goals of the grade.

Transfer

Students will be able to independently use their learning to...

- Students consolidate and solidify their understanding of various concepts and skills on major work of the grade. They also continue to work toward fluency goals of the grade.
- · Add and subtract within 20.
- Fluently add and subtract within 10.
- Solve Add To and Take From, Change Unknown story problems in a way that makes sense to them.
- Solve Compare, Difference Unknown story problems in a way that makes sense to them.
- Solve Put Together/Take Apart, Addend Unknown story problems in a way that makes sense to them.
- · Apply place value understanding to represent a quantity with written numerals and expressions.
- Count a group of up to 120 objects.

Meaning		
Big Ideas & Understandings	Essential Questions	
 Students will understand that the numbers 1-20 can be composed and decomposed quickly and easily number stories can be solved using pictures, drawings, objects, acting it out and writing an expression or equation counting a group of 120 objects can be done using pictures, objects, or two-digit addition 	 Students will keep considering How can we understand which facts within 20 we know and don't know? How can we write equations to represent number stories? How can we count a group of up to 120 objects? 	

Acquisition		
Knowledge	Skills	
 how to keep track of their fluency facts and have strategies to practice their facts in addition and subtraction of 1-20 how to write an equation that represents a number story how to use place value to organize, count and represent groups of up to 120 objects 	 Students will be skilled at Fluently add and subtract within 10. Add fluently within 10. Subtract fluently within 10. Add and subtract within 20. Use the relationship between addition and subtraction. Make 10 when adding or subtracting within 20. Solve Add To and Take From, Change Unknown story problems in a way that makes sense to them. Solve Put Together and Take Apart, One Addend Unknown story problems in a way that makes sense to them. Solve Compare, Difference Unknown story problems in a way that makes sense to them. Retell the story. Represent the story with objects or drawings. Represent the story with equations. Explain how their representation matches the story. Answer the question correctly. Count a group of up to 120 objects. Say the count sequence up to 120. Organize objects to make counting large groups of objects easier. Apply place value understanding to represent a quantity with written numerals and expressions. Read and write numbers within 120. Represent numbers to show the base-ten structure. Represent the same number with different amounts of tens and ones. 	

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ASSESSMENT EVIDENCE (DIAGNOSTIC / FORMATIVE / SUMMATIVE)

Assessments

Evaluation Criteria	Assessment Evidence
Rubrics/Checklists: Section A Checkpoint Interview Section B Checkpoint Interview Section C Checkpoint Interview End of Unit Assessment	Performance Task(s): Center: What I learned in math Collection of math learning throughout the year. Create a picture book or poster to show 4-6 topics learned during the year.
	Other Evidence: Observation Anecdotal evidence

LEARNING PLAN

Summary of Key Learning Events and Instruction:

Section A: Add and Subtract within 20

Lessons 1-3

Section A Checkpoint Interview (During Centers)

Learning Centers - Day 1

Section B: Story Problems

Lessons 4-6

Section B Checkpoint Interview (During Centers)

Learning Centers - Day 2

Section C: Numbers to 120

Lesson 7-10

Section C Checkpoint Interview (During Centers)

Learning Centers - Day 3

End-of-Unit Assessment



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SUPPORTING MATERIALS/RESOURCES/STRATEGIES FOR DIFFERENTIATION

Lesson	Gather	Сору
A.1	Colored pencilsIndex cardsMaterials from previous centers	• none
A.2	Colored pencilsConnecting cubesIndex cards	• none
A.3	 Connecting cubes in towers of 10 and singles Number cards 0–10 Tools for creating a visual display 	• none
B.4	Connecting cubes in towers of 10 and singles	• none
B.5	Connecting cubes in towers of 10 and singles	• none
В.6	Connecting cubes in towers of 10 and singles	• none
C.7	 Collections of objects Cups Double 10-frames Paper plates 	• none
C.8	 Connecting cubes in towers of 10 and singles Materials from a previous activity Materials from previous centers Paper 	• none
C.9	 Bags or envelopes Connecting cubes in towers of 10 and singles 	Number Riddle Cards (groups of 20)
C.10	 Bags or envelopes Connecting cubes in towers of 10 and singles Index cards Materials from a previous activity 	• none

Special Education	ELLS
 Adhere to all modifications and health concerns stated in each IEP Provide students a choice board, allowing students to pick assignments from different levels based on difficulty. Provide supportive strategies: Educator or para reading aloud text or tech read-aloud Develop or provide graphic organizers Small group and one-on-one instruction Easy to find information on Google Classroom Personal copies of anchor charts and notes Vocabulary list with visuals Extended time on assignments and assessments Allow students to demonstrate understanding of a problem using models, captions and, when possible, explaining the reasoning orally and/or in writing. Provide tech support for recording oral or video answers Provide breaks between tasks, use positive reinforcement, use proximity Assure students have experiences that are on the Concrete- Pictorial- Abstract spectrum by using manipulatives Use any suggestions provided by the specific text for a curriculum 	 Use manipulatives to promote conceptual understanding and enhance vocabulary usage Provide graphic representations, gestures, drawings, equations, realia, and pictures during all segments of instruction During i-Ready lessons, click on "Español" to hear specific words in Spanish Utilize graphic organizers which are concrete, pictorial ways of constructing knowledge and organizing information Use sentence frames and questioning strategies so that students will explain their thinking/ process of how to solve word problems Utilize program translations (if available) for L1/ L2 students Reword questions in simpler language Make use of the ELL Mathematical Language Routines (click here for additional information) Scaffolding instruction for ELL Learners Use any suggestions provided by the specific text for a curriculum

Gifted and Talented Students At Risk For Failure Elevated contextual complexity (use Assure students have experiences that leveled books via tech resources such as are on the Concrete- Pictorial- Abstract NEWSELA) spectrum Inquiry based or open ended assignments Modify Instructional Strategies, reading and projects aloud text, graphic organizers, one-onone instruction, class website (Google Add in inquiry-based questions and research opportunities to existing projects Classroom), inclusion of more visuals and More time to study concepts with greater manipulatives, Field Trips, Google depth through independent study or Expeditions, Peer Support, one on one genius hour projects instruction Promote the synthesis of concepts and Assure constant parental/ quardian making real world connections contact throughout the year with Provide students with enrichment successes and challenges opportunities and experiences suggested Design and provide academic contracts to students and guardians with clear goals by the curriculum Provide opportunities for competitions and deadlines (math, science, writing, art, etc) Create an interactive notebook with · Alternative instruction pathways available samples, key vocabulary words, student goals/ objectives. Always plan to address students at risk in your learning tasks, instructions, and directions. Try to anticipate where the needs will be and then address them prior to lessons. Use the programs intended for remediation ancillary to the curriculum (i.e. IXL or iReady for math)

*Strategies for Students with 504 Plans

The goal of 504 plans is for students to be educated in regular classrooms along with the services, accommodations, or educational aids they might need. Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:

- · walk, breathe, eat, or sleep
- · communicate, see, hear, or speak
- · read, concentrate, think, or learn
- · stand, bend, lift, or work



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General program accommodations/adjustments or services are always made on a case-by-case basis and individualized. Accommodations are to be reasonable and are intended to provide persons with disabilities compensation for their functional limitation(s) due to a mental or physical impairment. Where Section 504 is concerned, accommodations are made to bring a student with a disability to the same starting point as a non-disabled student. Consequently, the accommodations defined in a Section 504 plan are those interventions that are not typically available to all students.

Environmental Strategies

- · Provide a structured learning environment
- Make separate "space" for different types of tasks
- Possible adapting of non-academic times such as lunch, recess, and physical education
- Change student seating
- Utilize a study carrel
- Alter location or personal or classroom supplies for easier access or to minimize distraction
- Provide sensory breaks
- · Provide a written or picture schedule

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- Write out homework assignments, check student's recording of assignments
- · Tailor homework assignments toward student strengths
- Set time expectations for assignments
- Provide clues such as clock faces indicating beginning and ending times
- Teach study/organizational skills
- Schedule before or after school tutoring/homework assistance

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- Implement behavioral/academic contracts
- Utilize positive verbal and/or nonverbal reinforcements
- Utilize logical consequences
- Confer with the student's parents (and student as appropriate)
- Establish a home/school communication system for behavior monitoring
- Post rules and consequences for classroom behavior
- Put student on daily/weekly progress report/contract
- Reinforce self-monitoring and self-recording of behaviors

Presentation Strategies

- · Record lessons so the student can listen to them again; allow students to record lessons
- Use computer-aided instruction and other audiovisual equipment
- Select alternative digital/audio textbooks, workbooks, or provide books
- · Highlight main ideas and supporting details in the book
- Provide copied material for extra practice (i.e. outlines, study guides)
- Prioritize drill and practice activities for relevance



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- Vary the method of lesson presentation using multi-sensory techniques:
 - a) lecture plus overhead/board demonstration support
 - b) small groups required to produce a written product
 - c) large groups required to demonstrate a process
 - d) computer-assisted instruction
 - e) peer tutors or cross-age tutors
 - f) demonstrations, simulations
 - g) experiments
 - h) games
- Ask student to repeat/paraphrase context to check understanding
- Arrange for a mentor to work with student in his or her interest area or area of greatest strength
- Provide peer tutoring
- Simplify and repeat instructions about in-class and homework assignments
- Vary instructional pace
- · Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, "spell check"
- · Vary kind of instructional materials used
- · Assess whether the student has the necessary prerequisite skills.
- Reinforce study skill strategies (survey, read, recite, review)
- · Introduce definition of new terms/vocabulary and review to check for understanding
- Be aware of student's preferred learning style and provide matching instruction materials
- Pre-teach and/or re-teach important concepts
- Prepare advanced organizers/study guides for new material

Assignments

- Modify the amount of homework
- Use written directions to supplement oral directions
- · Reduce paper and pencil tasks
- · Allow for assignments to be word processed
- · Lower reading level of assignments
- Break assignments into a series of smaller assignments
- Use highlighted texts

Evaluation Methods

- Limit amount of material presented on a single page
- Provide a sample or practice test
- Provide for oral testing
- · Provide tests in segments so that student hands in one segment before receiving the
- next part
- Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- · Modify weights of tests when grading

*Adapted from Orange Public Schools Curriculum Guide

