

Grade 1 Unit 1

Content Area: **Math**
Course(s):
Time Period: **Trimester 1**
Length: **3 weeks**
Status: **Published**

Course Pacing Guide

Unit	MP/Trimester	Weeks
Unit 1 Counting	1	3
Unit 2 Introducing Addition	1	4
Unit 3 Number Stories	1	4
Unit 4 Length and Addition Facts	2	4
Unit 5 Place Value and Comparison	2	4
Unit 6 Addition Fact Strategies	2	4
Unit 7 Subtraction Fact Strategies and Attributes of Shapes	3	4
Unit 8 Geometry	3	3
Unit 9 Two-Digit Addition and Subtraction and Review	3	4

Unit Overview

In this unit, children will work in an active, collaborative environment to learn both mathematics content and mathematical practices. Children's learning will focus on adding and subtracting within 20, extending the counting sequence, and representing and interpreting data.

Lesson 1-1 Introducing First Grade Everyday Mathematics

Lesson 1-2 Investigating the Number Line

Lesson 1-3 Tools for Doing Mathematics

Lesson 1-4 Open Response (2-Day lesson)

Lesson 1-5 1 More, 1 Less

Lesson 1-6 Comparing Numbers

Lesson 1-7 Organizing Data in a Tally Chart

Lesson 1-8 More Organizing Data

Lesson 1-9 Exploring Math Materials

Lesson 1-10 Number Stories

Enduring Understandings

- Numbers can represent quantity, position, location, and relationships.
- Data can be represented in many ways.

Essential Questions

- Why are numbers important?
- How can we represent and interpret data?

New Jersey Student Learning Standards (No CCS)

MA.1.OA.A	Represent and solve problems involving addition and subtraction.
MA.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.
MA.1.NBT.A	Extend the counting sequence.
MA.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.
MA.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.

Amistad Integration

Just a Minute: A Trickster Tale and Counting Book by Yuyi Morales

Round is a Mooncake- Roseanne Thong (Geometry)

LA.RI.11-12.10b

By the end of grade 12, read and comprehend literary nonfiction at grade level text-complexity or above.

SEL.PK-12.1.2

Recognize the impact of one's feelings and thoughts on one's own behavior

Holocaust/Genocide Education

- Teach district mandated diversity lessons
- Incorporate Responsive Classroom Program into classroom community

Interdisciplinary Connections

LA.RI.1.4

Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

LA.RF.1.4.A

Read grade-level text with purpose and understanding.

PFL.9.1.12.A.8

Analyze different forms of currency and how currency is used to exchange goods and services.

Technology Standards

TECH.8.1.2

Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

TECH.8.1.2.B

Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.

TECH.8.1.2.C

Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

21st Century Themes/Careers

HPE.2.2.8.A.2

Demonstrate the use of refusal, negotiation, and assertiveness skills when responding to peer pressure, disagreements, or conflicts.

Financial Literacy Integration

<http://www.scholastic.com/browse/article.jsp?id=3758372>

Instructional Strategies & Learning Activities

- Mental Math
- Daily Calendar/Weather/ School Day Count Routines
- Math Message
- Math Message Follow-up
- Focus Activities
- Assessment Check-In
- Practice Activity ~ Practice Page or Game
- Math Boxes ~ Spiral Review
- Home Link ~ At-Home Practice

Differentiated Instruction

- Curriculum Map
- Inquiry/Problem-Based Learning
- Learning preferences integration (visual, auditory, kinesthetic)
- Sentence & Discussion Stems
- Tiered Learning Targets
- Learning through play
- Meaningful Student Voice & Choice
- Self-Directed Learning
- Choice Boards
- Mastery Learning (feedback toward goal)
- Goal-Setting & Learning Contracts
- Game-Based Learning
- Grouping
- Rubrics
- Learning Menus
- Learning Through Workstations
- Concept Attainment
- Flipped Classroom
- Mentoring
- Assessment Design & Backwards Planning
- Student Interest & Inventory Data

Formative Assessments

Mental Math Responses

Lesson Practice Book Pages

Math Boxes

Exit Slips

Responses to Questions

Completed Homework

Anecdotal notes

Summative Assessment

EM4 Unit 1 Progress Check

Benchmark Assessments

End-of- the-Year Cumulative First Grade Math Assessment

Alternate Assessments

Presentations, and require that each and every student participate. It is important that each and every student become comfortable talking about mathematics. Allow collaborative groups, but hold each student accountable by requiring them to take an active part in the presentation.

Involve students in the development of rubrics. It may motivate students to create the guidelines used to score their performances. Using rubrics both outlines the expectations for students and eliminates subjective grading practices.

Interview your students. This is particularly useful to assess the progress of individual students, specifically to identify early misconceptions. Ask a couple students each class to solve a problem for you while describing his or her steps out loud. (This can take place as you walk around checking for homework completion as the students talk to peers about problems they had questions about.) You can then address the common misconceptions with the class as a whole before they are held accountable for the material in a summative assessment. Don't try to reach each and every student at once. Keep track and make sure that you have individually spoken to all of your students a few times before the end of the semester.

Resources & Technology

Trade Books:

Anno, Mitsumasa

Anno's Counting Book

HarperCollins, 1986

Base, Graeme

The Water Hole

Puffin Books, 2004

Ehlert, Lois

Color Zoo

HarperCollins, 1989

Giganti, Paul, Jr.

How Many Snails? A Counting Book

Greenwillow Books, 1995

Harvey, Jayne

Busy Bugs: A Book About Patterns

Penguin Young Readers, 2003

Johnson, Stephen T.

City by Numbers

Viking, 2003

Technology:

connectED.mheducation.com

BOE Approved Texts

McGraw Hill Education - Everyday Math Manual - Volumes 1 and 2

Closure

- Snowstorm - Students write down what they learned on a piece of scratch paper and wad it up. Given a signal, they throw their paper snowballs in the air. Then each learner picks up a nearby response and reads it aloud.
- Parent Hotline - Give students an interesting question about the lesson without further discussion. Email their guardians the answer so that the topic can be discussed over dinner.
- Gallery Walk - On chart paper, small groups of students write and draw what they learned. After the completed works are attached to the classroom walls, others students affix post-its to the posters to extend on the ideas, add questions.
- Ask a question. Give students ten seconds to confer with peers before you call on a random student to answer. Repeat.
- Have kids orally describe a concept, procedure, or skill in terms so simple that a child in first grade would get it.
- Direct kids to raise their hands if they can answer your questions. Classmates agree (thumbs up) or disagree (thumbs down) with the response.
- Have kids create a cheat sheet of information that would be useful for a quiz on the day's topic.
- Ask students to write what they learned, and any lingering questions on an "exit ticket". Before they leave class, have them put their exit tickets in a folder or bin labeled either "Got It," "More Practice, Please," or "I Need Some Help!"
- After writing down the learning outcome, ask students to take a card, circle one of the following options, and return the card to you before they leave: "Stop (I'm totally confused. Go (I'm ready to move on.)" or "Proceed with caution (I could use some clarification on . . .)"

ELL

- Alternate Responses
- Extended Time
- Teacher Modeling
- Simplified Written and Verbal Instructions
- Frequent Breaks
- Google Translate

- Shorten assignments to focus on mastery of key concepts.
- Shorten spelling tests to focus on mastering the most functional words.
- Substitute alternatives for written assignments (clay models, posters, panoramas, collections, etc.)
- Specify and list exactly what the student will need to learn to pass.
- Evaluate the classroom structure against the student's needs (flexible structure, firm limits, etc.).
- Keep workspaces clear of unrelated materials.
- Keep the classroom quiet during intense learning times.
- Reduce visual distractions in the classroom (mobiles, etc.).
- Provide a computer for written work.
- Seat the student close to the teacher or a positive role model.
- Use a study carrel. (Provide extras so that the student is not singled out.)
- Provide an unobstructed view of the chalkboard, teacher, movie screen, etc.
- Keep extra supplies of classroom materials (pencils, books) on hand.
- Maintain adequate space between desks.
- Give directions in small steps and in as few words as possible.
- Number and sequence the steps in a task.
- Have student repeat the directions for a task.
- Provide visual aids.
- Go over directions orally.
- Provide a vocabulary list with definitions.
- Permit as much time as needed to finish tests.
- Allow tests to be taken in a room with few distractions (e.g., the library).
- Have test materials read to the student, and allow oral responses.
- Divide tests into small sections of similar questions or problems.
- Allow the student to complete an independent project as an alternative test.
- Give progress reports instead of grades.
- Grade spelling separately from content.
- Allow take-home or open-book tests.
- Show a model of the end product of directions (e.g., a completed math problem or finished quiz).
- Stand near the student when giving directions or presenting a lesson.
- Mark the correct answers rather than the incorrect ones.
- Permit a student to rework missed problems for a better grade.
- Average grades out when assignments are reworked, or grade on corrected work.
- Use a pass-fail or an alternative grading system when the student is assessed on his or her own growth.

- preferential seating
- extended time on tests and assignments
- reduced homework or classwork
- verbal, visual, or technology aids

- modified textbooks or audio-video materials
- behavior management support
- adjusted class schedules or grading
- verbal testing
- excused lateness, absence, or missed classwork
- pre-approved nurse's office visits and accompaniment to visits
- occupational or physical therapy

At Risk

- Use of mnemonics
- Have student restate information
- Provision of notes or outlines
- Concrete examples
- Use of a study carrel
- Assistance in maintaining uncluttered space
- Weekly home-school communication tools (notebook, daily log, phone calls or email messages)
- Peer or scribe note-taking
- Lab and math sheets with highlighted instructions
- Graph paper to assist in organizing or lining up math problems
- Use of manipulatives
- No penalty for spelling errors or sloppy handwriting
- Follow a routine/schedule
- Teach time management skills
- Verbal and visual cues regarding directions and staying on task
- Adjusted assignment timelines
- Visual daily schedule
- Immediate feedback
- Work-in-progress check
- Pace long-term projects
- Preview test procedures
- Film or video supplements in place of reading text
- Pass/no pass option
- Cue/model expected behavior
- Use de-escalating strategies
- Use peer supports and mentoring
- Have parent sign homework/behavior chart
- Chart progress and maintain data

Gifted and Talented

Focus on effort and practice

Offer the Most Difficult First

Offer choice

Speak to Student Interests

Allow G/T students to work together

Encourage risk taking