# Grade 1 Unit 7

Content Area:	Math
Course(s):	
Time Period:	Trimester 3
Length:	4 weeks
Status:	Published

## **Course Pacing Guide**

Unit	<b>MP/Trimester</b>	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 explore the relationship between addition and subtraction, compare different subtraction strategies, and continue to work on fact fluency. They also explore the defining and nondefining attributes of 2-dimensional shapes and continue their work telling time to the nearest hour, using analog and digital clocks.

- Lesson 7-1 : Fact Families
- Lesson 7-2: More Fact Families
- Lesson 7-3: Relating Special Addition and Subtraction Facts
- Lesson 7-4: More Subtraction Fact Strategies
- Lesson 7-5: Attributes of Shapes
- Lesson 7-6: Exploration
- Lesson 7-7: Defining and Nondefining Attributes
- Lesson 7-8: Finding Unknowns "What's My Rule?"
- Lesson 7-9: Open Response (2-Days)
- Lesson 7-10:Addition Facts "What's My Rule?"
- Lesson 7-11: Digital Clocks

## **Enduring Understandings**

There is a relationship between addition and subtraction.

Shapes have attributes.

Time can be represented by digital and analog clocks.

## **Essential Questions**

How can addition help with subtraction? How can subtraction help with addition?

What is an attribute?

What is a digital clock?

# New Jersey Student Learning Standards (No CCS)

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.OA.B	Understand and apply properties of operations and the relationship between addition and subtraction.
	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.)
	For example, subtract $10-8$ by finding the number that makes 10 when added to 8.
MA.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 $6 + 6 + 1 = 12 + 1 = 13$ ).
MA.1.MD.B.3	Tell and write time in hours and half-hours using analog and digital clocks.

MA.1.G.A	Reason with shapes and their attributes.
MA.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.
MA.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.

#### **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.SL.1.1	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
LA.SL.1.1.A	Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
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.

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

## **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
- Guided Math

## **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
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## **Formative Assessments**

Mental Math Responses

Lesson Practice Book Pages

Math Boxes

Exit Slips

**Responses to Questions** 

Completed Homework

Ancehdotal notes

Gudied Math notes

## **Summative Assessment**

EM4 Unit 7 Progress Check

## **Benchmark Assessments**

End-of- the-Year Cummulative 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**

Technology:

connectED.mheducation.com

Trade Books:

If You Were a Polygon by Marcie Aboff

Elevator Magic by Stuart J. Murphy

#### **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

# **Special Education**

- 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.

#### 504

- 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