

First Grade 2020 Unit #1: Math - Operations & Algebraic Thinking

Content Area: **Mathematics**
Course(s): **Math 1**
Time Period: **Marking Period 1**
Length: **about 10-12 weeks**
Status: **Published**

Established Goals/Standards

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.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.
MA.1.OA.B.3	Apply properties of operations as strategies to add and subtract.
MA.1.OA.B.4	Understand subtraction as an unknown-addend problem.
MA.1.OA.C.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
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.OA.D.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.
MA.1.OA.D.8	Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.

Essential Questions

- How can adding and subtracting help you solve or complete equations?
- What are ways to think about addition and subtraction?
- What strategies can you use for adding to 20?
- What strategies can you use while adding and subtracting?
- What strategies can you use while subtracting?

Enduring Understanding

- Addition is adding one part to another part. Addition is putting two parts together. Subtraction is taking one part away from the whole. Subtraction is comparing two groups.
- An open number line can help you count on to add. Doubles can help you find doubles-plus-1 facts.

Doubles can help you find doubles-plus-2 facts. Making 10 can help you add.

- Make 10 to subtract 20. Count on or back to subtract to 20. Use related facts in a fact family to subtract to 20. Use the inverse relationship between addition and subtraction to subtract to 20.
- Use the addition and subtraction relationship to find the missing number in an equation. Use addition and subtraction to determine if an equation is true or false. Solve addition problems with three addends. Solve problems about comparisons.
- You can count on from a number to help you add two numbers. Doubles can help you add to solve a problem. You can count back from a number to help you subtract. You can think addition to subtract.

Content

Students will be able to:

Cluster 1.OA.A Represent and solve problems involving addition and subtraction

- Add within 20 to solve word problems
- Subtract within 20 to solve word problems
- Solve word problems within 20 with three addends

Cluster 1.OA.B Understand and apply properties of operations and the relationship between addition and subtraction

- Apply properties of operations as strategies to add
- Apply properties of operations as strategies to subtract
- Understand subtraction as an unknown-addend problem

Cluster 1.OA.C Add and subtract within 20

- Relate counting to addition
- relate counting to subtraction
- Add with 20
- Subtract within 20
- Use the relationship between addition and subtraction

Cluster 1.OA.D Work with addition and subtraction and subtraction equations

- Understand the meaning of the equal sign
- Determine if equations involving addition are true or false
- Determine if equations involving subtraction are true or false
- Determine the unknown whole number in an addition equation
- Determine the unknown whole number in a subtraction equation

Assessment

Assessments for Operations and Algebraic Thinking Domain Include the following Topics:

- Topic 1 Understanding Addition and Subtraction
- Topic 2 Fluently Add and Subtract Within 10
- Topic 3 Addition Facts to 20: Use Strategies
- Topic 4 Subtraction Facts to 20: Use Strategies
- Topic 5 Work with Addition and Subtraction Equations

Assessment Sourcebook which includes:

- Assessment Guide
- Grade 1 Readiness Test
- Progress Monitoring Assessments
- Topic Assessments
- Topic Performance Tasks
- Basic-Facts Timed Tests
- Cumulative/Benchmark Assessments

savvasRealize.com Online Assessments

Resources

savvasRealize.com (Digital Resources online) which includes:

- Online Interactive Math Stories
- Solve and Share Online
- Visual Learning Animation Plus Online
- Convince Me! Online
- Practice Buddy Online

- Animated Glossary Online, Vocabulary Cards
- 3-ACT Math Videos

Student's Edition enVision Mathematics grade 12020

Teacher's Edition enVision Mathematics grade 12020

Teacher's Resource Masters which includes:

- Interactive Math Stories
- Home-School Connection Letter
- Pick a Project
- enVision STEM Activities
- Daily Review
- Reteach to Build Understanding
- Build Math Literacy
- Enrichment
- Fluency Practice/Assessment
- Teaching Tools

math literature

math manipulatives

Manipulative Kits

Additional Practice workbook for homework