

Unit 2: Add and Subtract within 20

Content Area: **Mathematics**
Course(s):
Time Period: **Generic Time Period**
Length: **6 weeks**
Status: **Published**

Standards

MA.1.1.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.1.1.OA.D.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.
MA.1.1.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.
TECH.8.1.2.E	Students apply digital tools to gather, evaluate, and use information.
MA.1.1.OA.D.8	Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.
LA.1.RI.1.1	Ask and answer questions about key details in a text.
MA.1.1.OA.B.3	Apply properties of operations as strategies to add and subtract.
LA.1.RF.1.4.A	Read grade-level text with purpose and understanding.
LA.1.RI.1.4	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
LA.1.RI.1.5	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
MA.1.1.OA.B.4	Understand subtraction as an unknown-addend problem.
LA.1.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).
LA.1.SL.1.1.B	Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
LA.1.SL.1.1.C	Ask questions to clear up any confusion about the topics and texts under discussion.
LA.1.RL.1.1	Ask and answer questions about key details in a text.
MA.1.1.OA.C.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
MA.1.1.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 $6 + 6 + 1 = 12 + 1 = 13$).
TECH.8.1.2.A.1	Identify the basic features of a digital device and explain its purpose.
TECH.8.1.2.A.CS1	Understand and use technology systems.

Learning Objectives

Chapter 3 Learning Objective: Students will be able to understand addition strategies

Lesson 3.1 Learning Objective: SWBAT understand and use the commutative property of addition for sums within 20

Lesson 3.2 Learning Objective: SWBAT count on 1, 2, or 3 as a strategy to find sums within 20

Lesson 3.3 Learning Objective: SWBAT use doubles as a strategy to solve addition facts with sums within 20

Lesson 3.4 Learning Objective: SWBAT use doubles to create equivalent but easier sums

Lesson 3.5 Learning Objective: SWBAT use doubles plus 1 and doubles minus 1 as strategies to find sums within 20

Lesson 3.6 Learning Objective: SWBAT use the strategies count on, doubles, doubles plus 1, and doubles minus 1 to practice addition facts within 20

Lesson 3.7 Learning Objective: SWBAT use a ten frame to add 10 and an addend less than 10

Lesson 3.8 Learning Objective: SWBAT use make ten as a strategy to find sums within 20

Lesson 3.9 Learning Objective: SWBAT use numbers to show how to use the make ten strategy to add

Lesson 3.10 Learning Objective: SWBAT use the associative property of addition to add three addends

Lesson 3.11 Learning Objective: SWBAT understand and apply the associative property or commutative property of addition to add three addends

Lesson 3.12 Learning Objective: SWBAT solve adding to and putting together situations using the strategy draw a picture

Chapter 4 Learning Objective: How can we solve subtraction problems?

Lesson 4.1 Learning Objective: SWBAT use count back 1, 2, or 3 as a strategy to subtract

Lesson 4.2 Learning Objective: SWBAT recall addition facts to subtract numbers within 20

Lesson 4.3 Learning Objective: SWBAT use addition as a strategy to subtract numbers within 20

Lesson 4.4 Learning Objective: SWBAT use make ten as a strategy to subtract

Lesson 4.5 Learning Objective: SWBAT subtract by breaking apart to make ten

Lesson 4.6 Learning Objective: SWBAT solve subtraction situations using the strategy act it out

Chapter 5 Learning Objectives: Students will be able to understand the relationship between addition and subtraction to master facts through 20.

Lesson 5.1 Learning Objective: SWBAT solve addition and subtraction problem situations using the strategy make a model

Lesson 5.2 Learning Objective: SWBAT record related facts within 20

Lesson 5.3 Learning Objective: SWBAT identify related addition and subtraction facts within 20

Lesson 5.4 Learning Objective: SWBAT apply the inverse relationship of addition and subtraction

Lesson 5.5 Learning Objective: SWBAT use related facts to determine unknown numbers

Lesson 5.6 Learning Objective: SWBAT use a related fact to subtract

Lesson 5.7 Learning Objective: SWBAT choose an operation and strategy to solve an addition or subtraction word problem

Lesson 5.8 Learning Objective: SWBAT represent equivalent forms of numbers using sums and differences within 20

Lesson 5.9 Learning Objective: SWBAT determine if an equation is true or false

Essential Questions

Chapter 3 Essential Question: How can we solve addition problems?

Lesson 3.1 Essential Question: What happens if you change the order of the addends you add?

Lesson 3.2 Essential Question: How can we count on 1, 2, or 3?

Lesson 3.3 Essential Question: What are doubles facts?

Lesson 3.4 Essential Question: How can we use doubles to help us add?

Lesson 3.5 Essential Question: How can we use what we know about doubles to find other sums?

Lesson 3.6 Essential Question: What strategies can you use to solve addition fact problems?

Lesson 3.7 Essential Question: How can we use a ten frame to add ten and some more?

Lesson 3.8 Essential Question: How can we use the make ten strategy to add?

Lesson 3.9 Essential Question: How can you make ten to help you add?

Lesson 3.10 Essential Question: How can we add three addends?

Lesson 3.11 Essential Question: How can we group three numbers to add three addends?

Lesson 3.12 Essential Question: How can we solve addition word problems by drawing a picture?

Chapter 4 Essential Question: How can we solve subtraction problems?

Lesson 4.1 Essential Question: How can we count back 1, 2, or 3?

Lesson 4.2 Essential Question: How can we use addition facts to find the answer to subtraction facts?

Lesson 4.3 Essential Question: How can we use addition to help us find the answer to a subtraction fact?

Lesson 4.4 Essential Question: How can we make ten to help us subtract?

Lesson 4.5 Essential Question: How can we break apart a number to subtract?

Lesson 4.6 Essential Question: How can acting out a problem help us solve the problem?

Chapter 5 Essential Question: How can relating addition and subtraction help you to learn and understand facts within 20?

Lesson 5.1 Essential Question: How can making a model help you solve a problem?

Lesson 5.2 Essential Question: How do related facts help you to find missing numbers?

Lesson 5.3 Essential Question: How do you know if addition and subtraction facts are related?

Lesson 5.4 Essential Question: How can we use addition to check subtraction?

Lesson 5.5 Essential Question: How can we use a related fact to find an unknown number?

Lesson 5.6 Essential Question: How can we use a related fact to find an unknown number?

Lesson 5.7 Essential Question: How do you choose when to add and when to subtract to solve a problem?

Lesson 5.8 Essential Question: How can you add and subtract in different ways to make the same number?

Lesson 5.9 Essential Question: How can we decide if a number sentence is true or false?

Materials

Print Resources

Student Edition Chapter 3

Student Edition Chapter 4

Student Edition Chapter 5

Chapter 3 Resources (including reteach and enrich)

Chapter 4 Resources (including reteach and enrich)

Chapter 5 Resources (including reteach and enrich)

Grab and Go Center Kit

Practice and Homework in Student Edition (lesson checks and spiral reviews)

Connecting Cubes, Counters, vocabulary cards

Math Boards

Technology/ Digital Resources:

-iStudent Edition

-eTeacher Edition

- Interactive Student Edition

-Personal Math Trainer

-Math on the Spot Videos

-HMH Mega Math

- Digital Management System
- Animated Math Models
- iTools
- multimedia eGlossary
- digital assessments
- professional development videos

Achieve the Core:

<http://achievethecore.org/page/2853/go-math-k-5-guidance-documents>

Activities

Vocabulary Reader: Animals in Our World

Project: My Animal Stories (Same as unit 1: used for chapters 1-5)

Chapter 3 Activites

Lesson 3.1 algebra- add in any order

Lesson 3.2 count on (Vocabulary- count on)

Lesson 3.3 hands on- add doubles (Vocabulary- doubles)

Lesson 3.4 hands on- use doubles to add

Lesson 3.5 hands on- doubles plus 1 and doubles minus 1 (Vocabulary- doubles plus one, doubles minus one)

Lesson 3.6 practice the strategies

Lesson 3.7 hands on- add 10 and more

Lesson 3.8 hands on- make a 10 to add (Vocabulary-make a ten)

Lesson 3.9 use make a 10 to add

Lesson 3.10 hands on algebra- add 3 numbers

Lesson 3.11 algebra- add 3 numbers

Lesson 3.12 problem solving- use addition strategies

Chapter 4 Activities

Lesson 4.1 count back (Vocabulary- count back)

Lesson 4.2 hands on- think addition to subtract

Lesson 4.3 use think addition to subtract

Lesson 4.4 hands on- use 10 to subtract

Lesson 4.5 break apart to subtract

Lesson 4.6 problem solving- use subtraction strategies

Chapter 5 Activities

Lesson 5.1 problem solving- add or subtract

Lesson 5.2 hands on- record related facts (Vocabulary- related facts)

Lesson 5.3 identify related facts

Lesson 5.4 use addition to check subtraction

Lesson 5.5 hands on- algebra- unknown numbers

Lesson 5.6 algebra- use related facts

Lesson 5.7 choose an operation

Lesson 5.8 hands on/ algebra- ways to make numbers to 20

Lesson 5.9 algebra- equal and not equal

Other Activities:

[1.OA.A.1 School Supplies](#)

[1.OA.D.7 Valid Equalities?](#)

[1.OA.D.8 Find the Missing Number](#)

[1.OA.B.3 Doubles?](#)

[1.OA.C.6 \\$20 Dot Map](#)

[1.OA.A.2 Daisies in vases](#)

[1.NBT.B.2 Roll & Build](#)

[1.NBT.B.3 Ordering Numbers](#)

[**1.NBT.A.1 Start/Stop Counting**](#)

Assessment

MAP Assessment

-Show What You Know

-Share and Show

-On Your Own Activities

-ThinkSmarter

-Math Journals

-Response to Essential Questions

-Practice and Homework Activities (Lesson Check and Spiral Review for each lesson)

-Diagnostic Interview Task

-Digital Personal Math Trainer

-Lesson Quick Check

-Mid-Point Chapter Checkpoint

-Chapter Reviews

-Chapter Tests

-Performance Assessment Tasks

Fact Fluency

- Games (Student Edition)
- Fluency Standard Lessons (Student Edition)
- Fluency Builder(Teacher Edition)
- Strategies and Practice for Skills and Facts Fluency- Primary, GK-3
- Teacher Resource Book
- HMH Mega Math
- Personal Math Trainer: Standards Quizzes
- Animated Math Models
- Fastt Math
- Flash Cards
- Mad Minutes
- Xtra Math

Accommodations and Modifications

Materials and Resources that provide opportunities to accommodate and modify include:

*Personal Math Trainer (adaptive assessment and intervention system)

*Interactive Student Edition

*Leveled Quizzes, Tests, and Performance Tasks

*Grab & Go Differentiated Centers

*Intensive Intervention Resource

*Strategic Intervention Resource

*Reteach Activities

*RTI Tiered Resources and Activities

*Math on the Spot Videos

*Extra Math/ Fastt Math

Others/ Notes
