

1st Grade Mathematics Instructional Toolkit

The 1st Grade Mathematics Instructional Toolkit is intended to assist teachers with planning lessons aligned to the Florida Standards. This toolkit is not intended to replace your district's curriculum, but rather it serves to support the teaching and learning of the 1st grade Mathematics Florida Standards. This toolkit includes a breakdown of the standards, standards aligned resources and information related to mathematics instruction. The resources presented in this document may only cover portions of the aligned standard and represent only a small sample of those available on [CPALMS](#).

[CPALMS: Official Source of Florida Standards](#)

This section features information and tools that are found on CPALMS. These resources include course descriptions, formative assessment resources, mathematical practices, depth of knowledge ratings and FloridaStudents.org resources.

[1st Grade Mathematics Course Description](#)

Course descriptions provide an overview for a course and designate which standards are in that course. The 1st grade mathematics course description includes resources for all 36 standards within the 1st grade mathematics course.

[Mathematics Formative Assessment System \(MFAS\)](#)

One resource available on CPALMS that has been designed specifically for mathematics instruction is the Mathematics Formative Assessment System (MFAS). The system includes a task or problem that teachers can implement with their students. It also includes various levels of rubrics that help the teacher interpret students' responses. In addition to using the MFAS tasks as formative assessments, these tasks can be used to plan lessons that are closely aligned to the standards.

[Mathematical Practices](#)

The Mathematical Practices are habits of mind that describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. The Mathematical Practices should be infused during the 1st grade mathematics course. More information about each Mathematical Practice can be found by clicking on the links below.

[MAFS.K12.MP.1.1](#) Make sense of problems and persevere in solving them.

[MAFS.K12.MP.2.1](#) Reason abstractly and quantitatively.

[MAFS.K12.MP.3.1](#) Construct viable arguments and critique the reasoning of others.

[MAFS.K12.MP.4.1](#) Model with mathematics.

[MAFS.K12.MP.5.1](#) Use appropriate tools strategically.

[MAFS.K12.MP.6.1](#) Attend to precision.

[MAFS.K12.MP.7.1](#) Look for and make use of structure.

[MAFS.K12.MP.8.1](#) Look for and express regularity in repeated reasoning.

[Depth of Knowledge](#)

Florida has adopted Webb’s four-level Depth of Knowledge (DOK) model of content complexity as a means of classifying the cognitive demand presented by the Florida Standards. Content complexity increases as the levels progress from Level 1 Recall to Level 4 Extended Thinking. The DOK Levels are identified for each standard throughout this document. Please visit the [CPALMS Content Complexity](#) page for more information about the DOK complexity for standards.

[Florida Students](#)

Resources specifically designed with students in mind are available on Florida Students. Florida Students is an interactive site that provides educational resources aligned to the Florida Standards.

1st Grade Mathematics Resources

This section features links to resources and tools for mathematics educators in Florida. There are resources for teachers, parents and students.

Teacher, Student and Parent Resources

- [Standards Coding Scheme](#)
- [1st Grade Mathematics Parent Guide](#)
- [1st Grade Mathematics Student Resources](#)

Instructional Resources

- [Elementary Mathematics Resources](#)
- [Elementary Standards Progressions](#)
- [Literacy for Learning in the Content Areas](#)
- [English Language Learners Assistance](#)
- [Khan Academy 1st Grade Math Mission](#)

Operations and Algebraic Thinking

[MAFS.1.OA.1](#) Represent and solve problems involving addition and subtraction.

[MAFS.1.OA.1.1](#)

DOK Level 2: Basic Application of Skills & Concepts

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 (Students are not required to independently read the word problems.)

Resources:

[Exercising Gorillas](#)

Resource Type: Tutorial

In this tutorial video from Khan Academy, a word problem is solved with unit cubes, as well as with a missing addend addition equation and a subtraction equation.

[Result Unknown- Subtraction Word Problem](#)

Resource Type: Tutorial

In this tutorial, you will learn how to solve a result unknown word problem: $10 - 2 = ?$.

[Addition Stories at the Food Store](#)

Resource Type: Lesson Plan

In this lesson, students will solve addition word problems (within 20) with real-world scenarios by using manipulatives, drawings or equations.

[Cookie Subtraction](#)

Resource Type: Lesson Plan

In this lesson, the teacher shares the book, "Mmm... Cookie Simple Subtraction". The students follow along by representing the problems in the book with cookie manipulatives and recording the equations for each problem. The lesson incorporates a variety of subtraction problem types.

[Boys and Girls](#)

Resource Type: Problem-Solving Task

Students may use either addition or subtraction to solve these types of word problems, with addition related to the action of putting together and subtraction related to the action of taking apart. Depending on how students think about these word problems, either is appropriate for the "addend unknown" problems. Seeing it both ways emphasizes the relationship between addition and subtraction.

[Add To \(Change Unknown\) Word Problems](#)

Resource Type: MFAS Formative Assessment

Students are asked to solve two add to (change unknown) word problems using pencil and paper or other appropriate manipulatives.

[Compare \(Difference Unknown\) Word Problems](#)

Resource Type: MFAS Formative Assessment

Students are asked to solve two compare (difference unknown) word problems within 20 using pencil and paper or other appropriate manipulatives.

[MAFS.1.OA.1.2](#)

DOK Level 2: Basic Application of Skills & Concepts

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.

Resources:

[Three's a Charm: 3-Number Addition](#)

Resource Type: Lesson Plan

In this lesson, students will solve word problems that will require them to add 3 whole numbers together whose sum is less than or equal to 20.

[Mission Addition](#)

Resource Type: Lesson Plan

This activity introduces and provides practice for combining three whole numbers and includes three center activities for independent practice.

[Daisies in Vases](#)

Resource Type: Problem-Solving Task

This instructional task asks students to consider all the decompositions of a number into three addends.

[Adding Three Whole Numbers](#)

Resource Type: MFAS Formative Assessment

Students are asked to solve word problems that call for addition of three addends.

[Canned Food Drive](#)

Resource Type: MFAS Formative Assessment

Students are asked to solve word problems that call for addition of three addends.

[MAFS.1.OA.2](#) Understand and apply properties of operations and the relationship between addition and subtraction.

[MAFS.1.OA.2.3](#)

DOK Level 2: Basic Application of Skills & Concepts

Apply properties of operations as strategies to add and subtract. 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.)

Resources:[Adding 5 + 3 + 6](#)

Resource Type: Tutorial

In this Khan Academy video tutorial, students will learn how to add $5 + 3 + 6$.

[My Fact Family](#)

Resource Type: Lesson Plan

Students will use cut out people shapes and number cards to create two addition problems and two subtraction problems using the same three numbers of a fact family to explore the commutative property.

[Related Equations](#)

Resource Type: Lesson Plan

Students will understand how addition and subtraction are related. Student will recognize and create the Commutative property of addition. Students will be engaged in fun art activities to show the Commutative property of addition.

[Does it Work for Subtraction?](#)

Resource Type: MFAS Formative Assessment

Students discuss if the Commutative Property holds for subtraction.

[Lemons and Oranges](#)

Resource Type: MFAS Formative Assessment

Students are given pairs of word problems that can be solved using the Commutative (and/or Associative) Property of addition.

[MAFS.1.OA.2.4](#)

DOK Level 2: Basic Application of Skills & Concepts

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

Resources:[Let's Find the Missing Addend](#)

Resource Type: Lesson Plan

This lesson will move students thinking that numbers can be moved around to solve a subtraction sentence. The students will use a related addition fact and a part, part, whole mat to help them find the missing addend in a subtraction equation.

[Mystery Bag to 12](#)

Resource Type: Lesson Plan

This lesson deals with counting up and counting back strategies when looking for a missing addend. It utilizes the part-part-whole organizer and manipulatives to support the learning of students.

[Use Addition to Solve Subtraction](#)

Resource Type: MFAS Formative Assessment

Students are given a subtraction problem and asked to solve the problem using a related addition fact.

[Using Inverse Operations](#)

Resource Type: MFAS Formative Assessment

Students identify an addition equation that can be used to solve a subtraction problem.

[MAFS.1.OA.3 Add and subtract within 20.](#)

[MAFS.1.OA.3.5](#)

DOK Level 1: Recall

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

Resources:

[Adding 7 + 6 Using a Number Line and Objects to Count](#)

Resource Type: Tutorial

In this tutorial, you will learn how to add $7 + 6$ using a number line and objects to count.

[Ants, Hot Dogs, and Fish....Oh, My!](#)

Resource Type: Lesson Plan

The learner will relate counting to addition and subtraction by using the strategies "counting up" and "counting down".

[One More Up on Top](#)

Resource Type: Lesson Plan

Students will be able to describe how adding by one is like counting up or on.

[Beans on a Necklace](#)

Resource Type: MFAS Formative Assessment

Students are guided to use counting to find the sum of two numbers.

[Skyler's Dog Biscuits](#)

Resource Type: MFAS Formative Assessment

Students use a counting strategy to find the difference between two numbers.

[MAFS.1.OA.3.6](#)

DOK Level 2: Basic Application of Skills & Concepts

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 $6 + 6 + 1 = 12 + 1 = 13$).

Resources:[Creature Island](#)

Resource Type: Lesson Plan

This interactive lesson outlines a game that is a fun and engaging to practice, make a ten strategy, within 20.

[Using the Make-a-Ten Strategy to Add](#)

Resource Type: Lesson Plan

In this lesson, students will use the "make-a-ten" strategy to add two whole numbers within 20. Students will utilize a ten frame and 2-color counters to complete this activity.

[Making a Ten](#)

Resource Type: Problem-Solving Task

This task is designed to help students visualize where the 10's are on a single digit addition table and explain why this is so. This knowledge can then be used to help them learn the addition table.

[Use Strategies to Add and Subtract](#)

Resource Type: MFAS Formative Assessment

Students solve addition and subtraction problems by making tens, using a known fact, and by using a subtraction fact.

[More than One Way to Solve a Problem](#)

Resource Type: MFAS Formative Assessment

Students solve an addition and a subtraction problem in more than one way.

[MAFS.1.OA.4 Work with addition and subtraction equations.](#)

MAFS.1.OA.4.7

DOK Level 2: Basic Application of Skills & Concepts

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? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.

Resources:[Terms with the Same Amount](#)

Resource Type: Original Tutorial

Learn how to tell whether an equation is true or false based on what you know about the equal sign as you complete this interactive tutorial.

[Balance the Equations!](#)

Resource Type: Lesson Plan

In this lesson the students will determine if two numbers, two addition and/or subtraction equations are the same as or equal to each other. This is a real balance act that will have the students understanding the meaning of an equal sign.

[True or False?](#)

Resource Type: Lesson Plan

In this lesson, students will explore true and false addition and subtraction equations through a variety of hands-on learning activities. Detailed center ideas are also covered in this lesson.

[Valid Equalities?](#)

Resource Type: Problem-Solving Task

The purpose of this task is to help broaden and deepen students' understanding of the equal sign and equality. This task helps students attend to precision (Mathematical Practice 6) by helping them explicitly attend to the meaning of mathematical notation and carefully analyze whether it is being used correctly.

[Equal or Not Equal](#)

Resource Type: MFAS Formative Assessment

The student determines if a given equation is true or false.

[Is the Equation True or False?](#)

Resource Type: MFAS Formative Assessment

Students are given sets of equations and asked to circle the equations that are true.

[MAFS.1.OA.4.8](#)

DOK Level 2: Basic Application of Skills & Concepts

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 $8 + ? = 11$, $5 = [] - 3$, $6 + 6 = []$.

Resources:

[Addition- Using Equations and Symbols to Find an Unknown](#)

Resource Type: Tutorial

In this Khan Academy video tutorial, you will learn to use symbols to record an unknown whole number in an addition equation relating to three whole numbers.

[Subtraction- Using Equations and Symbols to Find an Unknown](#)

Resource Type: Tutorial

In this tutorial, you will learn to use symbols to record an unknown whole number in a subtraction equation relating to three whole numbers.

[Ladybug Missing Numbers](#)

Resource Type: Lesson Plan

This lesson will introduce the concept of missing numbers in equations.

[The Whole Part](#)

Resource Type: Lesson Plan

Students will participate in a variety of activities and use part-part-whole graphic organizers to discover missing numbers in addition and subtraction story problems.

[Find the Missing Number](#)

Resource Type: MFAS Formative Assessment

Students are given equations with a missing number and asked to find the missing number.

[Unknowns in Equations](#)

Resource Type: MFAS Formative Assessment

Students are asked to find the unknown in three different equations and explain their reasoning.

Number and Operations in Base Ten

[MAFS.1.NBT.1](#) Extend the counting sequence.

[MAFS.1.NBT.1.1](#)

DOK Level 1: Recall

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.

Resources:

[Filling in a 120 Chart!](#)

Resource Type: Original Tutorial

Learn how to count to 120 and fill in the missing number on a chart to 120.

[Lining Up](#)

Resource Type: Lesson Plan

In this lesson, students will use counting strategies to help them line up in numerical order using numbers from 1 to 120. They will also use hundred charts to help find missing numbers in a number sequence.

[Number of the Day](#)

Resource Type: Problem-Solving Task

This activity provides a connection between the counting sequence and an experience from students' daily lives. This task also reinforces many skills related to understanding and representing numbers, such as using tally marks, the word form, expanded form, and place value.

[Where Do I Go?](#)

Resource Type: Problem-Solving Task

This activity is designed to be a short, repeatable activity to build student flexibility with the number sequence. Begin by randomly giving each student in the classroom one card from one of the sets you have made. Challenge the students to get themselves into order as quickly as they can.

[Basket of Apples](#)

Resource Type: MFAS Formative Assessment

Students count 57 apples grouped in tens, and write the numeral that represents how many apples they counted. Students also read and write three-digit numbers.

[Counting to 120](#)

Resource Type: MFAS Formative Assessment

Students are asked to read a numeral and then start counting from that number up to 120.

[Reading and Writing Numerals](#)

Resource Type: MFAS Formative Assessment

Students are asked to read and write numerals within 120.

[MAFS.1.NBT.2 Understand place value.](#)

[MAFS.1.NBT.2.2](#)

DOK Level 2: Basic Application of Skills & Concepts

Understand that the two digits of a two-digit number represent amounts of tens and ones.

- a. 10 can be thought of as a bundle of ten ones — called a “ten.”
- b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- 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).
- d. Decompose two-digit numbers in multiple ways (e.g., 64 can be decomposed into 6 tens and 4 ones or into 5 tens and 14 ones).

Resources:

[Monkeys for a Party](#)

Resource Type: Tutorial

In this tutorial video from Khan Academy, explore place value relationships with tens and ones within 20.

[Fill the Bus](#)

Resource Type: Lesson Plan

Students will practice and explore base ten concepts and 2-digit numbers by filling ten frame buses with counters and then describing the totals in terms of tens and ones. After initial guided practice, they will play a game to fill ten buses.

[Decompose Two-Digit Numbers](#)

Resource Type: MFAS Formative Assessment

Students are asked to decompose two-digit numbers in three different ways.

[How Many Tens and Ones Are There?](#)

Resource Type: MFAS Formative Assessment

Students are asked to determine how many tens and ones there are in three different two-digit numbers.

[MAFS.1.NBT.2.3](#)

DOK Level 2: Basic Application of Skills & Concepts

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

Resources:

[Fishing for Tens and Ones](#)

Resource Type: Lesson Plan

In this small group or paired activity, students will explore two digit numbers and how they are composed of tens and ones, and compare two digit numbers.

[Who Has More?](#)

Resource Type: Lesson Plan

The students will be able to create and compare two digit numbers using the symbols $<$, $>$, $=$.

[Inequalities with Base Ten Blocks](#)

Resource Type: MFAS Formative Assessment

Students count two sets of base ten blocks, write the number for each set, and then use symbols (inequality or equality) to compare the two numbers.

[Laps Around the Track](#)

Resource Type: MFAS Formative Assessment

Students compare two two-digit numbers that have the same ones-digit.

[MAFS.1.NBT.3](#) Use place value understanding and properties of operations to add and subtract.

[MAFS.1.NBT.3.4](#)

DOK Level 2: Basic Application of Skills & Concepts

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 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.

Resources:[Adding by Getting to Group of 10 First](#)

Resource Type: Tutorial

In this tutorial video from Khan Academy, explore how making a ten can help to make thinking about addition easier. This video includes an example of adding a one-digit number to a two-digit number by decomposing the one-digit number.

[Ten-Hut!](#)

Resource Type: Lesson Plan

This lesson allows students to gain insight into how to use place value when adding larger numbers. The focus is on students using both their bodies as well as math manipulatives to solve real-life addition problems with larger numbers.

[Adding Tens to Numbers](#)

Resource Type: MFAS Formative Assessment

Students add a multiple of 10 to a two-digit number and are asked to relate the strategy used to a written method.

[Muffins](#)

Resource Type: MFAS Formative Assessment

Students add a one-digit number to a two-digit number that requires composing a ten.

[MAFS.1.NBT.3.5](#)

DOK Level 2: Basic Application of Skills & Concepts

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

Resources:[Cross it Out](#)

Resource Type: Lesson Plan

This lesson helps students develop their 'counting on' and 'counting back' strategies. It also lays a strong foundation for working with the base ten system. Teach your students how to play the game "Cross It Out" where they will be able to pick any number on a 120 chart that is greater than 11 and less than 110, and then count on 1 more and 10 more than their number and 1 less and 10 less than their number.

[Mentally Adding and Subtracting Tens](#)

Resource Type: Lesson Plan

Students will learn strategies to mentally add and subtract 10 from a given number. The lesson begins concretely using base-ten blocks, then to the representational using a hundred chart. Ultimately, the lesson moves to the abstract level where students mentally add or subtract ten from a given number.

[Keisha's Shells](#)

Resource Type: MFAS Formative Assessment

Students mentally add ten to a given number of shells.

[Pages in a Book](#)

Resource Type: MFAS Formative Assessment

Students are asked to solve a word problem by mentally subtracting 10.

[MAFS.1.NBT.3.6](#)

DOK Level 2: Basic Application of Skills & Concepts

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.

Resources:

[Adding and Subtracting Ten with Justen Frog](#)

Resource Type: Lesson Plan

The students will use manipulatives to identify the ones digit and tens digit in a number and identify an efficient strategy for adding and subtracting ten. Although the aligned standards include adding and subtracting multiples of ten, this introductory lesson focuses on adding and subtracting "just ten".

[Disappearing Tens](#)

Resource Type: Lesson Plan

Students learn to subtract multiples of tens from multiples of ten by playing a game.

[Hundreds Chart](#)

Resource Type: Educational Tool

A printable hundreds chart featuring a 10x10 table numbered 1 to 100.

[Subtracting Forty](#)

Resource Type: MFAS Formative Assessment

Students subtract 40 from 80 using linking cubes as a model.

[Subtracting Multiples of Ten](#)

Resource Type: MFAS Formative Assessment

Students find the difference between two multiples of 10.

Measurement and Data

[MAFS.1.MD.1](#) Measure lengths indirectly and by iterating length units.

[MAFS.1.MD.1.1](#)

DOK Level 2: Basic Application of Skills & Concepts

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

Resources:[Zoo School](#)

Resource Type: Original Tutorial

Students will explore the zoo to learn about ordering and comparing objects. After this lesson, you will be able to order three objects by their lengths.

[Fishy Lengths- Which Fish is Right?](#)

Resource Type: Lesson Plan

Students explore lengths of fish to determine if fish are too long to fit in different sized aquariums. Students will use non-standard units and measuring tools to compare the lengths of fish and boxes without being able to directly hold the fish near the boxes.

[Line Lengths](#)

Resource Type: MFAS Formative Assessment

Students are asked determine which line is longer using cubes, string, a pencil, a ruler, or another measuring strategy.

[What's the Length of the Third Set?](#)

Resource Type: MFAS Formative Assessment

Students compare the lengths of two cube trains indirectly by using a third cube train. Teachers need 12 red connecting cubes, 13 blue connecting cubes, and 14 yellow connecting cubes to complete this formative assessment.

[MAFS.1.MD.1.a](#)

DOK Level 2: Basic Application of Skills & Concepts

Understand how to use a ruler to measure length to the nearest inch.

- a. Recognize that the ruler is a tool that can be used to measure the attribute of length.
- b. Understand the importance of the zero point and end point and that the length measure is the span between two points.
- c. Recognize that the units marked on a ruler have equal length intervals and fit together with no gaps or overlaps. These equal interval distances can be counted to determine the overall length of an object.

Resources:[Measuring with Inches](#)

Resource Type: Lesson Plan

In this engaging introductory lesson to measuring with a ruler, students will learn that a ruler is a tool to measure in inches. They will be moving around the room to measure classroom objects to gather a concrete idea how to measure with a ruler and that they need to start with zero.

[Inch by Inch](#)

Resource Type: Lesson Plan

In this lesson students will be able to recognize the ruler as a tool to measure length, and understand the use of the beginning and end points when measuring the length of an item. This lesson addresses part a and b of the standard.

[How Long](#)

Resource Type: Problem-Solving Task

The purpose of this task is to help students learn how to take measurements.

[Measuring Michael's Toy Car- Part 1](#)

Resource Type: MFAS Formative Assessment

Students are asked to explain a method for measuring length and to identify an appropriate tool.

[Measuring Michael's Toy Car- Part 2](#)

Resource Type: MFAS Formative Assessment

Students are asked to consider the zero point (origin) and end point when measuring the length of objects to the nearest inch.

[MAFS.1.MD.2](#) Work with time and money.

[MAFS.1.MD.2.3](#)

DOK Level 1: Recall

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

Resources:

[Hickory Dickory Dock](#)

Resource Type: Original Tutorial

In this tutorial, you will learn to tell time to the hour on an analog clock and a digital clock.

[Do You Have the Time?](#)

Resource Type: Lesson Plan

This lesson plan introduces students to telling time both with analog and digital clocks. Students have multiple opportunities to practice setting clocks to the correct half hour and hour. Some web-based tutorials supplement this lesson as well.

[What Time is It?](#)

Resource Type: Lesson Plan

Students will learn to tell time to the hour and half hour using analog and digital clocks.

[After School](#)

Resource Type: MFAS Formative Assessment

Students read and write times shown on three different analog clocks.

[What Time is Lunch?](#)

Resource Type: MFAS Formative Assessment

Students are asked to draw the hands on an analog clock and write time on a digital clock that corresponds to a given time.

[MAFS.1.MD.2.a](#)

DOK Level 2: Basic Application of Skills & Concepts

Identify and combine values of money in cents up to one dollar working with a single unit of currency.

- a. Identify the value of coins (pennies, nickels, dimes, and quarters).
- b. Compute the value of combinations of coins (pennies and/or dimes).
- c. Relate the value of pennies, dimes, and quarters to the dollar (e.g., There are 100 pennies or ten dimes or four quarters in one dollar.) (Students are not expected to understand the decimal notation for combinations of dollars and cents.)

Resources:

[A Pot of Pennies](#)

Resource Type: Lesson Plan

This lesson focuses on the importance of knowing the value of various coins and being able to add them together to determine the total amount. It uses two great picture books to introduce counting, adding coins and understanding their value. It is a collaborative and interactive lesson using coin manipulatives, journals, and instant feedback.

[How Many Ways Can You Make Combinations of Pennies and Dimes?](#)

Resource Type: Lesson Plan

In this lesson, the students will use real world situational problems, ten frames, base ten blocks, pennies, and dimes to add combinations. This lesson starts with whole group, moves to guided practice, then progresses to independent practice. The lesson ends with a summative assessment and a rubric for you to use when grading.

[How Much Money?](#)

Resource Type: MFAS Formative Assessment

Students are asked to determine the values of combinations of pennies and dimes.

[Relating Coins to a Dollar](#)

Resource Type: MFAS Formative Assessment

Students are asked to relate the values of a penny and a dime to one dollar.

[MAFS.1.MD.3 Represent and interpret data.](#)

[MAFS.1.MD.3.4](#)

DOK Level 3: Strategic Thinking & Complex Reasoning

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.

Resources:

[What's the Weather?](#)

Resource Type: Original Tutorial

By the end of this tutorial, you will be able to organize data in three categories as well as represent and interpret the data.

[Graphing with Tally O'Malley](#)

Resource Type: Lesson Plan

Students will learn how to classify, tally and record information to make a bar graph.

[Favorite Ice Cream Flavor](#)

Resource Type: Problem-Solving Task

The purpose of this task is for students to practice collecting and interpreting data.

[Sort it Out](#)

Resource Type: MFAS Formative Assessment

Students sort classroom objects and then record how many are in each category. Then, students answer questions about the numbers of objects in each category.

[What's for Lunch?](#)

Resource Type: MFAS Formative Assessment

Students organize and interpret data about lunch preferences.

Geometry

[MAFS.1.G.1 Reason with shapes and their attributes.](#)

[MAFS.1.G.1.1](#)

DOK Level 2: Basic Application of Skills & Concepts

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.

Resources:

[Being Shapely!](#)

Resource Type: Lesson Plan

In this lesson, students will work collaboratively to identify and draw shapes with defining and non-defining attributes.

[Shape Sorting and Building](#)

Resource Type: Lesson Plan

In this lesson students will identify attributes of triangles, rectangles, squares and trapezoids and identify these shapes by their attributes. Given the name of one of these shapes, students will use their knowledge of the shape's attributes to represent the shape with a drawing, toothpicks, straws or spaghetti pasta.

[Draw Triangles](#)

Resource Type: MFAS Formative Assessment

Students draw two triangles and are prompted to describe the triangles in terms of defining attributes.

[Is it Still a Rectangle?](#)

Resource Type: MFAS Formative Assessment

Students discuss the defining and non-defining attributes of rectangles.

[MAFS.1.G.1.2](#)

DOK Level 2: Basic Application of Skills & Concepts

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.

Resources:

[Build a New Shape](#)

Resource Type: Lesson Plan

Build a New Shape is a lesson for building composite shapes from triangle(s), square(s) and trapezoid(s). This lesson uses a story and certain pattern block manipulatives to help students gain this skill.

[Fun with Shapes](#)

Resource Type: Lesson Plan

In this lesson students explore the composing of new shapes with other shapes. The students will utilize math standard(s) as they analyze math solutions and explain their solutions. Since the lesson uses composing, it is also a good lesson to use to show decomposing (taking a shape apart).

[Make Your Own Puzzle](#)

Resource Type: Problem-Solving Task

The purpose of this task is to give students a hands-on experience with composing and decomposing geometric figures and is meant as an instructional task.

[Building with Three Dimensional Shapes](#)

Resource Type: MFAS Formative Assessment

Students use different three dimensional shapes to compose a composite shape.

[Compose Shapes with Triangles and a Trapezoid](#)

Resource Type: MFAS Formative Assessment

Students compose new shapes from equilateral triangles and a trapezoid.

[MAFS.1.G.1.3](#)

DOK Level 2: Basic Application of Skills & Concepts

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.

Resources:

[Equal Shares Heroes](#)

Resource Type: Original Tutorial

By the end of this tutorial you should be able to separate circles and rectangles into equal shares and describe the equal shares as halves or half of.

[Equal Shares Heroes Find Fourths](#)

Resource Type: Original Tutorial

By the end of this tutorial, you will be able to partition circles and rectangles into equal shares. You will be able to describe equal shares using the words fourths and quarters.

[A Quarter of That?](#)

Resource Type: Lesson Plan

Students will partition circles and squares into equal shares of four. This is a foundational building block of fractions. Students should also develop an understanding of the idea of the whole.

[Partition the Pizza](#)

Resource Type: MFAS Formative Assessment

Students fold a picture of a circular pizza into four equal parts and then are asked to describe each part.

[Which is Less?](#)

Resource Type: MFAS Formative Assessment

Students are asked to share a rectangular cake between two people and then among four people and decide which results in smaller pieces.