

Kindergarten Mathematics

↑ Course Blocks

Arithmetic is the art of computing by numbers.

Numbers are everywhere! Kindergarten Mathematics seeks to capitalize on your youngster's curiosity with the world around him. The goal is to show your child the abstractness of numbers through concrete means.

In addition to discussions and explorations as they relate to Math, students will keep a Math notebook for their written work, and create various "books" as a way to document their learning.

Recommended materials:

- Rocks
- Popsicle sticks (or craft sticks)
- Twelve inch ruler
- Clock
- Penny, nickel, dime, quarter, dollar, five dollars
- Dot cards ([available in PDF here](#))
- Kindergarten Mathematics ([available in PDF here](#))

Course Organization:

- We recommend that students have a binder with dividers for different sections. Loose leaf paper can then be utilized for written work and filed in a Written Work section. Here are some suggested binder sections:
 - Mastery Practice
 - Definitions (use the words under Topics for the words in the Definitions section)
 - Written work
 - Explore More

Explanation of Daily Schedule: (not all of these sections will appear each week)

- Mastery Practice:
 - Mastery practice can be used by teachers in a variety of ways. Some teachers may choose to give these tasks in a speed test sort of fashion, but others may choose to simply have students put these items on flashcards for practice and review. Either way, these are items or processes that students should commit to memory and practice frequently.
- Written work:
 - Students should complete their written work in a notebook or binder of some sort.
- Define:
 - This area includes concepts from the text or related materials that students should commit to memory and frequently review. In addition to defining them on paper, we recommend that students also put these words on note cards to review with their Mastery Practice work. (In Kindergarten Mathematics, students will use the words under Topics for definitions)
- Notes:
 - These notes are for the teacher to aid in teaching the student.
- Explore More:
 - These projects help students apply a concept or learn more about a concept.

[Link to Kindergarten Mathematics text](#)

- Note: Use the page numbers in the bottom center of the pages of the text

[Link to Kindergarten Mathematics Answers](#)

 [News forum](#)

Week 1



Topics:

- One
- Circle
- Units



- This will be a topic to frequently bring up as it is essential for a child to understand one unit, then two is one unit added to one unit, etc. The basis for counting and all of Mathematics is the understanding of units.

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 9-10 (#11)

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Shape Book ([available in PDF here](#))

Suggested Daily Schedule:

Day 1: Discuss one.

- Where do we see ones in the house?
- Where do we see ones outside?
- Where do we see ones in church?
- If you happen to be out and about this week, keep an eye out for ones.

Day 2: Circle

- How many sides does a circle have? (That is kind of a trick question)
- Do you see any circles around the house?
- Do you see any circles outside?
- Do you see any circles at church?

Day 3:

- Written work
- Shape Book

Week 2



Topics:

- Two
- Pairs
- Opposites

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 10-12

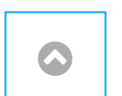
Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper

Suggested Daily Schedule:

Day 1: Discuss two.

- Where do we see twos in the house?
- Where do we see twos outside?
- Where do we see twos in church?



- If you happen to be out and about this week, keep an eye out for twos.

Day 2: Pairs/Opposites

- Do you see any pairs around the house?
- Do you see any opposites around the house?
- Do you see any pairs outside?
- Do you see any opposites outside?
- Do you see any pairs at church?
- Do you see any pairs outside?

Day 3:

- Written work

Week 3



Topics:

- Three
- Triangle
- Trinity

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 10-12

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Shape Book

Suggested Daily Schedule:

Day 1: Discuss three.

- Where do we see threes in the house?
- Where do we see threes outside?
- Where do we see threes in church?
- If you happen to be out and about this week, keep an eye out for threes.

Day 2: Triangle

- How many sides does a triangle have?
- Do you see any triangles around the house?
- Do you see any triangles outside?
- Do you see any triangles at church?

Day 3:

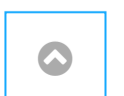
- Written work
- Shape Book

Week 4



Topics:

- Four
- Square
- Rectangle
- Four Gospels



Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 12-15

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Shape Book

Suggested Daily Schedule:

Day 1: Discuss four.

- Where do we see fours in the house?
- Where do we see fours outside?
- Where do we see fours in church?
- If you happen to be out and about this week, keep an eye out for fours.

Day 2: Square and Rectangle

- How many sides does a square have?
- How many sides does a rectangle have?
- How are squares and rectangles similar? How are they different?
- Do you see any squares and rectangles around the house?
- Do you see any squares and rectangles outside?
- Do you see any squares and rectangles at church?

Day 3:

- Written work
- Shape Book

Week 5



Topics:

- Five
- Pentagon

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 15-17

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Shape Book

Suggested Daily Schedule:

Day 1: Discuss five.

- Where do we see fives in the house?
- Where do we see fives outside?
- Where do we see fives in church?
- If you happen to be out and about this week, keep an eye out for fives.



Day 2: Pentagon

- How many sides does a pentagon have?
- Do you see any pentagons around the house?
- Do you see any pentagons outside?
- Do you see any pentagons at church?

Day 3:

- Written work
- Shape Book

Week 6



Topics:

- Six
- Hexagon

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 18-21

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Shape Book

Suggested Daily Schedule:

Day 1: Discuss six

- Where do we see sixes in the house?
- Where do we see sixes outside?
- Where do we see sixes in church?
- If you happen to be out and about this week, keep an eye out for sixes.

Day 2: Hexagon

- How many sides does a hexagon have?
- Do you see any hexagons around the house?
- Do you see any hexagons outside?
- Do you see any hexagons at church?

Day 3:

- Written work
- Shape Book

Week 7

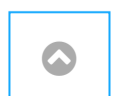


Topics:

- Seven
- Heptagon
- Days of the Week

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 21-23



Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Shape Book
- Days of the Week Book ([PDF available here](#))

Suggested Daily Schedule:

Day 1: Discuss seven

- Where do we see sevens in the house?
- Where do we see sevens outside?
- Where do we see sevens in church?
- If you happen to be out and about this week, keep an eye out for sevens.

Day 2: Heptagon

- How many sides does a heptagon have?
- Do you see any heptagons around the house?
- Do you see any heptagons outside?
- Do you see any heptagons at church?

Day 3:

- Written work
- Shape Book
- Days of the Week Book

Week 8



Topics:

- Eight
- Octagon

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 23-26

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Shape Book

Suggested Daily Schedule:

Day 1: Discuss eight

- Where do we see eights in the house?
- Where do we see eights outside?
- Where do we see eights in church?
- If you happen to be out and about this week, keep an eye out for eights.

Day 2: Octagon

- How many sides does an octagon have?



- Do you see any octagons around the house?
- Do you see any octagons outside?
- Do you see any octagons at church?

Day 3:

- Written work
- Shape Book

Week 9



Topics:

- Nine
- Latin and Greek prefixes

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 27-29

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper

Suggested Daily Schedule:

Day 1: Discuss nine

- Where do we see nines in the house?
- Where do we see nines outside?
- Where do we see nines in church?
- If you happen to be out and about this week, keep an eye out for nines.

Day 2: Latin and Greek prefixes

Number	Greek	Latin
one	mono-	uni-
two	duo-/di-	duo-/bi-
three	tri-	tri-
four	tetra-	quad-
five	penta-	quint-
six	hex-	sex-
seven	hept-	sept-
eight	oct-	oct-
nine	ennea-	non-
ten	dec-	dec-

- Learn the Greek Latin prefixes for one through ten
- Try to find words that start with these prefixes. Discuss how the meaning of the word relates to the prefix (example: a bicycle has two wheels)

Day 3:

- Written work

Week 10



Topics:

- Ten



- Ten Commandments
- Ordinal numbers

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 29-31

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- *Luther's Small Catechism*

Suggested Daily Schedule:

Day 1: Discuss ten

- Where do we see tens in the house?
- Where do we see tens outside?
- Where do we see tens in church?
- If you happen to be out and about this week, keep an eye out for tens.

Day 2: The Ten Commandments

- Read or say the Ten Commandments
- Discuss ordinal numbers (they tell the position of something in a list), especially as they relate to the Ten Commandments, but also as they relate to other things (finishing a race, doing tasks, making cookies, etc.)
 - First
 - Second
 - Third
 - Fourth
 - Fifth
 - Sixth
 - Seventh
 - Eighth
 - Ninth
 - Tenth

Day 3:

- Written work

Week 11



Topics:

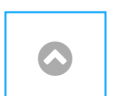
- Eleven

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 31-33

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper



Suggested Daily Schedule:

Day 1: Discuss eleven

- Where do we see elevens in the house?
- Where do we see elevens outside?
- Where do we see elevens in church?
- If you happen to be out and about this week, keep an eye out for elevens.

Day 2: On the field

- It is interesting to note that eleven is a common number of players on the field at the same time in different sports
 - Football
 - Cricket
 - Soccer
 - Field hockey
- Find a picture of each of the fields of each sport.
- What are some different ways the eleven players are arranged on the field?
- What jobs do different members of the team have?
- How is a family similar to a team? (Different people do different things, but they are all important parts, etc.)

Day 3:

- Written work

Week 12



Topics:

- Twelve
- Twelve apostles
- Twelve months of the year
- Twelve tribes of Israel

Textbook reference and written work:

- Kindergarten Mathematics p. 1-2, 31-33

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Months of the Year Book

Suggested Daily Schedule:

Day 1: Discuss twelve

- Where do we see twelves in the house?
- Where do we see twelves outside?
- Where do we see twelves in church?
- If you happen to be out and about this week, keep an eye out for twelves.

Day 2: Tribes and Disciples

- The Bible contains several twelves. Two of the more famous twelves are the Tribes of Israel and the Disciples
- Read [Genesis 49:1-28](#) and [Deuteronomy 33](#)
 - What are the names of the twelve tribes? Reuben, Simeon, Judah, Dan, Naphtali, Gad, Asher, Issachar, Zebulun, Benjamin, Ephraim, and Manasseh
- Read [Matthew 10:2-4](#)
 - What are the names of the twelve apostles?



Day 3:

- Written work
- Months of the Year Book ([PDF available here](#))

Week 13



Topics:

- Comparisons
- Longer
- Shorter

Textbook reference and written work:

- Kindergarten Mathematics p. 4

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper

Suggested Daily Schedule:

Day 1: Longer/Shorter

- Some things are long and some things are short. When we talk about something being long or short, we are making a comparison.
- Go exploring to find some long things (some might just be observed, some can be collected)
- Make a list of long things (some seen during exploration and some thought of during the list-making)
- If you collected any long things, put them in order of length (longest to shortest)

Day 2: Longer/Shorter

- Go exploring to find some short things (some might just be observed, some can be collected)
- Make a list of short things (some seen during exploration and some thought of during the list-making)
- If you collected any short things, put them in order of length (longest to shortest)
- Ask: How do you know if things are long or short? (we compare them)

Day 3:

- Written work

Week 14



Topics:

- Comparisons
- Larger
- Smaller

Textbook reference and written work:

- Kindergarten Mathematics p. 5

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks



- Dot cards
- Scissors
- Paper

Suggested Daily Schedule:

Day 1: Larger/Smaller

- Some things are large and some things are small. When we talk about something being large or small, we are making a comparison.
- Go exploring to find some large things (some might just be observed, some can be collected)
- Make a list of large things (some seen during exploration and some thought of during the list-making)
- If you collected any large things, put them in order of size (largest to smallest)

Day 2: Larger/Smaller

- Go exploring to find some small things (some might just be observed, some can be collected)
- Make a list of small things (some seen during exploration and some thought of during the list-making)
- If you collected any small things, put them in order of size (largest to smallest)

Day 3:

- Written work

Week 15



Topics:

- Comparisons
- Wider
- Higher

Textbook reference and written work:

- Kindergarten Mathematics p. 5

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper

Suggested Daily Schedule:

Day 1: Wider

- Three dimensional objects, such as cubes and pyramids, are often compared in terms of width and height.
- Go exploring to find some things that can be described using width (some might just be observed, some can be collected- furniture is a good example)
- Make a list of these and other things (some seen during exploration and some thought of during the list-making)
- If you collected any items, put them in order of size (most wide to least wide)

Day 2: Higher (Taller)

- Go exploring to find some things that can be described using height (Some might just be observed, some can be collected- trees are a good example of something that can be higher than something else, like a house, but we would describe it as taller. Be sure to help students work through this distinction)
- Make a list of these and other things (some seen during exploration and some thought of during the list-making)
- If you collected any tall things, put them in order of size (tallest to shortest)

Day 3:

- Written work



Week 16



Topics:

- Comparisons
- More
- Less
- Shape review

Textbook reference and written work:

- Kindergarten Mathematics p. 6

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Cube Template ([PDF available here](#))

Suggested Daily Schedule:

Day 1: More/Less

- Perhaps the first comparison we learn in life is More and Less. We generally want more of something we like and less of something we don't like. This seems to be a trend through all of life. It may be asked why this is one of the last comparisons we are learning in Math. Given the opportunity, young children might use more and less as their default comparison for all comparisons. Addressing More and Less later on the list allows children to build a glossary of comparative vocabulary prior to working with more and less.
- Go exploring to find some things that can be described using more or less. How are these things different than other things you have compared?
- Make a list of these and other things (some seen during exploration and some thought of during the list-making)
- If you collected any items, put them in order of amount (most to least)

Day 2: Shape review

- Use #6 on p. 6-7 to review shapes. You may use the cube template ([PDF here](#)), to make a cube.
- Go on a scavenger hunt to find squares, circles, triangles, cubes, spheres, and any other shapes the students have learned.

Day 3:

- Written work (p. 6 #5)

Week 17



Topics:

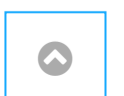
- Measuring
- Ruler
- Inch
- Half inch
- Quarter inch

Textbook reference and written work:

- Kindergarten Mathematics p. 8 (#8)

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards



- Scissors
- Paper
- Sticks
- Tape measure (or yard stick)
- Explore More-Ruler ([PDF available here](#))

Suggested Daily Schedule:

Day 1: Introduction to measuring

- Recall the comparisons from the previous weeks.
- Discuss: How did we know that one thing was longer, shorter, higher, wider, smaller, larger, etc.?
 - Sometimes we can just look at things and know they are different, but other times we need to know exactly how large, small, long, short, etc. something is.
 - Why is it important to sometimes know the exact size of something? (to know if it will fit somewhere, etc.)
 - What are some examples of situations in which we need to know the exact size? (building a house (or most anything else), framing a picture, pouring cement, making curtains, bringing something through a door, etc.)
 - What would happen if we did not know the exact size of things? (the house would fall down, the picture wouldn't fit in the frame, we would have too much or too little cement, the curtains might not cover the entire window, something might not fit through the door or we would break the thing or the door, etc.)
- Read: Genesis 6:9-22
- Discuss: Why was it important for Noah to measure? (God commanded he make the ark a certain size, so he could fit his family and all the animals, etc.)

Day 2: Introduction to rulers

- Discuss: A ruler has different lines and numbers. These lines and numbers give us information about the size of things.
- Explore: Look at a ruler. (These discussion questions may need modification depending on your ruler)
 - What numbers do you see?
 - What lines do you see?
 - A ruler is generally divided into 12 parts. Each part is called an inch. A ruler is divided into 12 inches.
 - Look at the length of the lines. Are some lines longer than others? Find all of the longest lines.
 - Do the longest lines have a number by them? Each long line tells us where an inch is. Count the inches on the ruler.
 - Just as each ruler has 12 parts called inches, each inch is also divided into parts. Half of one inch is called a half inch. Half of a half inch is called a quarter of an inch.
 - We will learn more about measuring and the parts of a ruler as time goes on.
- Explore more: Parts of a ruler
 - As we discussed, rulers are divided into parts. Using the Explore More-Ruler sheet, explore the following:
 - Part 1:
 - Cut out the four six-inch rectangles.
 - Have students measure one 6-inch section, then put two sections together and measure.
 - What happens if you add another section? How do you measure something longer than a ruler (12 inches)?
 - Show the students a tape measure and explain that if you have things longer than 12 inches you can measure them with a tape measure (or yard stick).
 - Part 2:
 - If you put two sections together, you have 12 inches. Cut two of the sections into 1-inch pieces. Practice putting them into different length sections, counting the inches, then measuring to confirm the counting.
 - Take one of the 1-inch sections and fold it in half. Measure to show which lines on the ruler correspond with a half inch.
 - If possible, fold the half in half so as to show where the quarter inches fall. Measure to show which lines on a ruler correspond with a quarter inch.

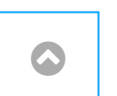
Day 3:

- Written work (p. 8 #8)

Week 18

Topics:

- Measuring
- Ruler
- Square inch
- Length
- Width



- Area (ORIGIN mid 16th cent. (in the sense 'space allocated for a specific purpose'): from Latin, literally 'vacant piece of level ground.')

Textbook reference and written work:

- Kindergarten Mathematics p. 8-9 (#9)

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Sticks
- Ruler
- Tape measure
- Explore More- Square Inches ([PDF available here](#))
- Explore More- Square Inch Grid ([PDF available here](#))

Suggested Daily Schedule:

Day 1: Introduction to measuring area

- Recall measuring lines.
- Discuss: It is one thing to measure how long or wide something is, but it is another thing to measure how long and wide something is.
 - Think about a table. If I want to put a table in a room, I need to know how long the table is and how wide the table is. If I don't know both the length and the width, what might happen? (It might not fit)
- Explore: Find some things with straight edges (bed, table, kitchen island, work bench, etc.). Measure the width and the length. Be sure to write down the measurements.
- Explore more: Square inches
 - Using the Explore More-Square Inches sheet, explore the following:
 - Part 1:
 - Measure the small squares.
 - How long and wide are they? (1-inch long and 1-inch wide)
 - Cut out the 1-inch squares.
 - How many 1-inch squares can you fit in different parts of the large square? (16 in a small square, 64 in the large square, 32 in two small squares)
 - Part 2:
 - What different shapes can you make with the 1-inch squares?
 - After you make a shape, measure it. Write down the measurements.
 - Count the number of 1-inch squares in your shape. Write down the number.
 - Part 3: Keep your 1-inch squares and the measurements and number of squares in the shape.

Day 2: Area

- Discuss:
 - When you measured furniture or the shapes you made, you had two measurements. One was the length and one was the width. Sometimes, such as when you measure the 1-inch square, the length and width were the same.
 - When you made shapes with your 1-inch squares, you had two measurements, but you also counted the number of 1-inch squares.
 - Look back at those measurements and numbers.
 - If necessary, make some shapes, measure and count again.
 - When you count the number of squares in the shape, you say there are, for example, 10 1-inch squares. You can also say that the shape is 10 square inches. (This could be a difficult concept, so feel free to work with the 1-inch squares and shapes until the student can see that saying it differently does not change what you are describing)
 - The square inches tell us more than just the measurements of length and width, they tell us the amount of space the whole shape takes.
 - The amount of space something takes up is called the area. Can you say area? What is area? (the amount of space something takes up)
 - Point out the Latin origin of area.



- Explore more: How much space does it take?
 - Pretend you want to rearrange a room:
 - Part 1:
 - Pretend the Explore More-Square Inch Grid is a room.
 - Using your 1-inch squares, put furniture, rugs, etc. in the room.
 - Help students see that a couch might take two or three (or six) squares since it is wide, but a chair might just take one square (or four). Experiment with the squares. Try different arrangements. Feel free to color the square inches so the floor plan looks more like a room.
 - Architects and interior designers use floor plans to figure out how much space things will take up in a room so the room doesn't get too crowded or so they can make sure a new piece of furniture will fit.
 - Part 2: (Optional)
 - Here is an interesting video on reading floor plans:



Day 3:

- Written work (p. 8-9 #9)

Week 19



Topics:

- Measuring
- Ruler
- Foot
- Yard
- Mile (ORIGIN Old English mīl, based on Latin mil(l)ia, plural of mille 'thousand' (the original Roman unit of distance was mille passus 'a thousand paces').)

Textbook reference and written work:

- Kindergarten Mathematics p. 9 (#10)

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Scissors
- Paper
- Sticks
- Ruler
- Tape measure
- State map (these are available free at most rest stops, for example)

Suggested Daily Schedule:

Day 1: One foot, two feet

- Up until now, we have mainly been looking at things that are smaller than a ruler.
- Discuss:



- How many inches are on a ruler? (Generally, 12)
- We call twelve inches a foot.
- Three feet are called a yard.
- 5,280 feet or 1,760 yards are called a mile. Note the Latin origin.
- Explore:
 - Make a three column list
 - Label one column Foot/Feet, one column Yard, and one column Mile
 - Think of or look up different things that are measured in feet, yards, and miles (ex. a table, a football field, the distance between two towns)
 - Note: Teachers may make a list and have students put the items in the correct list
 - Put those things in the correct column
 - Discuss: Why do we use different measurements for different things? In other words, why do we not measure everything in feet or everything in yards or everything in miles? (It would be confusing to measure distances in feet because the number would be extremely large)

Day 2: Inches to miles

- Discuss: We use maps to figure out not only where we are, but also where we are going.
- Explore: Look at a map.
 - Where is your town?
 - What do the different symbols mean? (Look at the Key)
 - Where do trains travel?
 - Where do trucks travel?
 - Where do tractors travel?
 - What bodies of water do you see?
 - While it is interesting to see all of the different things on a map, we generally use a map when we are traveling or planning a trip. One of the things we want to know is how far it is from one town to another.
 - Look at the scale on the map.
 - How many miles is one inch?
- Explore more: How far?
 - Find your town.
 - Find a town you would like to visit.
 - How many inches is it between the towns?
 - Using the map scale, convert the inches to miles.
 - How far is it between the towns in miles?
 - How many football fields is it between the towns? (multiply the number of miles by 1,760 and then divide by 100)
 - Note: It would be very good for the students to see the teacher work out this math rather than use a calculator. Math is beautiful!
 - Allow students to explore other distances on the map and help them convert inches to miles
 - Length of rivers
 - Distances between towns
 - Size of lakes
 - Etc.

Day 3:

- Written work (p. 9 #10)
- Note: much of this will be review

Week 20



Topics:

- $1 + 1 = 2$
- $2 - 1 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')



- Less (ORIGIN Old English læssa, of Germanic origin; related to Old Frisian lēssa, from an Indo-European root shared by Greek loisthos 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3 (only that which applies to 1), 9-10

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: One and one

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Explore:
 - Choose one item from each group
 - How many ___ do you have? How many ___ do you have? (Etc.)
 - If you have one carrot and put another carrot next to it, how many carrots do you have? (two)
 - Repeat this process. Have the student say "one ___ and one ___ are two ___." Have them physically move the items (units) as he says this.
- Discuss:
 - What did we call 12 inches? (1 foot)
 - We call one carrot and one carrot two carrots. Two is the name for one thing and one thing.
 - Instead of saying, "I have one carrot and one carrot," we say, "I have two carrots." Yet, even though we call it two carrots, we are using the word "two" to say "one and one."
- Explore:
 - Work with the units and the language until students are comfortable with understanding two is composed of one and one and/or two is the word we use to represent one and one.
 - Note: Be sure to share hints about these words from the Latin or other origin.

Day 2: Two less one

- Gather counting items. Have students count items into groups of twos.
- Explore:
 - Sometimes we have two things and we share one. How can we share one? (Because even though I call it two, it is one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Two carrots less one carrot is one carrot.
 - Sometimes we say two minus one is one.
 - Work with the counting items and language to help students understand two less one (or two minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'

Day 3:

- Written work p. 9-10 (#11)

Week 21



Topics:

- $2 + 1 = 3$
- $1 + 2 = 3$
- $3 - 1 = 2$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English bēon, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms am and is are from an Indo-European root shared by Latin sum and est. The forms was and were are from



Indo-European root meaning 'remain.' The forms be and been are from an Indo-European root shared by Latin fui 'I was,' fio 'I become' and Greek phuein 'bring forth, cause to grow.' The origin of are is uncertain.)

- Equals (ORIGIN late Middle English: from Latin aequalis, from aequus 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin addere, from ad- 'to' + the base of dare 'put.')
- Less (ORIGIN Old English læssa, of Germanic origin; related to Old Frisian lēssa, from an Indo-European root shared by Greek loisthos 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3, 10-12

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: One and three

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Review: (Optional)
 - Choose one item from each group
 - How many ___ do you have? How many ___ do you have? (Etc.)
 - If you have one carrot and put another carrot next to it, how many carrots do you have? (two)
 - Repeat this process. Have the student say "one ___ and one ___ are two ___." Have them physically move the items (units) as he says this.
- Explore:
 - Look at your groups of two items.
 - Choose one more item and put it next to the original two items.
 - Count the number of items in the group.
 - How many carrots in the new group? (three)
 - Repeat this process. Have the student say "two ___ and one ___ are three ___."
 - Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
- Discuss:
 - We call one carrot and one carrot two carrots. Two is the name for one thing and one thing.
 - We call one carrot and one carrot and one carrot three carrots.
 - Instead of saying, "I have one carrot and one carrot and one carrot," we say, "I have three carrots." Yet, even though we call it three carrots, we are using the word "three" to mean "one and one and one."
- Explore:
 - Work with the units and the language until students are comfortable with understanding three is composed of one and one and one and/or three is the word we use to represent one and one and one.
 - Note: Be sure to share hints about these words from the Latin or other origins.

Day 2: Three less one, three less two

- Gather counting items. Have students count items into groups of threes.
- Explore:
 - Sometimes we have three things and we share one. How can we share one? (Because even though I call it three, it is one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Three carrots less one carrot is two carrots.
 - Sometimes we say three minus one is two.
 - Work with the counting items and language to help students understand three less one (or three minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using three less two. Continue instilling the idea that three is one and one and one, two is one and one, etc. Thus, three less two is three ones minus two ones.

Day 3:



- Written work p. 10-12 (#12-15)

Week 22



Topics:

- $2 + 2 = 4$
- $3 + 1 = 4$
- $1 + 3 = 4$
- $4 - 1 = 3$
- $4 - 2 = 2$
- $4 - 3 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')
- Less (ORIGIN Old English *læssa*, of Germanic origin; related to Old Frisian *lëssa*, from an Indo-European root shared by Greek *loisthos* 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3, 12-15 (#16-20)

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: Three and one

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Review: (Optional)
 - Group/count the counting items into groups of three
- Explore:
 - Look at your groups of three items.
 - Choose one more item and put it next to the original three items.
 - Count the number of items in the group.
 - How many carrots in the new group? (four)
 - Repeat this process. Have the student say "three ____ and one ____ are four ____."
 - Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
 - Up until this point, we have only worked with adding one unit to a group.
 - Look at your group of four. We know that one and one and one and one are called four.
 - Four can also mean other things.
 - How many are one and one? (two)
 - How many are two twos? (four)
 - One and one plus one and one are four
- Explore:
 - Work with the units and the language until students are comfortable with understanding four is composed of four ones or three ones and one one or two ones and two ones.
 - Note: Be sure to share hints about these words from the Latin or other origins.
 - Note: Check to be sure when students are counting that they point to one item for each number they say. The idea of units should be continually reinforced.

Day 2: Four less one, four less two, four less three



- Gather counting items. Have students count items into groups of fours.
- Explore:
 - Sometimes we have four things and we share one. How can we share one? (Because even though I call it four, it is one and one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Four carrots less one carrot is three carrots.
 - Sometimes we say four minus one is three.
 - Work with the counting items and language to help students understand four less one (or four minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using four less two and four less three. Continue instilling the idea that four is one and one and one and one, three is one and one and one, etc. Thus, four less three is four ones minus three ones, etc.

Day 3:

- Written work p. 12-15 (#16-20)

Week 23



Topics:

- $4 + 1 = 5$
- $1 + 4 = 5$
- $2 + 3 = 5$
- $3 + 2 = 5$
- $5 - 1 = 4$
- $5 - 2 = 3$
- $5 - 3 = 4$
- $5 - 4 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')
- Less (ORIGIN Old English *læssa*, of Germanic origin; related to Old Frisian *lëssa*, from an Indo-European root shared by Greek *loisthos* 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3, 15-17 (#21-24)

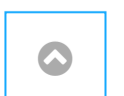
Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: Four and one, three and two

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Review:
 - Addition and subtraction facts for 1, 2, 3, and 4
- Explore:
 - Count items into groups of four
 - Choose one more item and put it next to the original four items.



- Count the number of items in the group.
- How many carrots in the new group? (five)
- Repeat this process. Have the student say "four ____ and one ____ are five ____."
- Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
- Look at your group of five. We know that one and one and one and one and one are called five.
- Five can also mean other things.
 - Divide the group of five ones into two groups. How many items are in each group?
 - Leave the initial group of five divided.
 - Divide another group of five ones into another two groups, but different sized groups than the first. (Example, if the first group of five ones is divided into two ones and three ones, the second group of five ones should be divided into four ones and one one.)
- Explore:
 - Work with the units and the language until students are comfortable with understanding five is composed of four ones and one one or two ones and three ones.
 - Note: Be sure to share hints about these words from the Latin or other origins.
 - Note: Check to be sure when students are counting that they point to one item for each number they say. The idea of units should be continually reinforced.

Day 2: Five less one, five less two, five less three, five less four

- Gather counting items. Have students count items into groups of five.
- Explore:
 - Sometimes we have five things and we share one. How can we share one? (Because even though I call it five, it is one and one and one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Five carrots less one carrot is four carrots.
 - Sometimes we say five minus one is four.
 - Work with the counting items and language to help students understand five less one (or five minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using five less two, five less three, and five less four. Continue instilling the idea that five is one and one and one and one and one, etc.

Day 3:

- Written work p. 15-17 (#21-24)

Week 24



Topics:

- $5 + 1 = 6$
- $1 + 5 = 6$
- $4 + 2 = 6$
- $2 + 4 = 6$
- $3 + 3 = 6$
- $6 - 1 = 5$
- $6 - 2 = 4$
- $6 - 3 = 3$
- $6 - 4 = 2$
- $6 - 5 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')
- Less (ORIGIN Old English *læssa*, of Germanic origin; related to Old Frisian *lëssa*, from an Indo-European root shared by Greek *loisthos* 'last.')

Textbook reference and written work:



- Kindergarten Mathematics p. 3, p. 18-21 (#25-28)

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: Five and one, four and two, three and three

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Review:
 - Addition and subtraction facts for 1, 2, 3, 4, and 5
- Explore:
 - Count items into groups of five
 - Choose one more item and put it next to the original five items.
 - Count the number of items in the group.
 - How many carrots in the new group? (six)
 - Repeat this process. Have the student say "five ____ and one ____ are six ____."
 - Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
 - Look at your group of six. We know that one and one and one and one and one and one are called six.
 - Six can also mean other things.
 - Divide the group of six ones into two groups. How many items are in each group?
 - Leave the initial group of six divided.
 - Divide another group of six ones into another two groups, but different sized groups than the first.
 - Leave the second group of six divided.
 - Divide another group of six ones into another two groups, but different sized groups than the first two.
- Explore:
 - Work with the units and the language until students are comfortable with understanding six is composed of various groups of ones
 - Note: Be sure to share hints about these words from the Latin or other origins.
 - Note: Check to be sure when students are counting that they point to one item for each number they say. The idea of units should be continually reinforced.

Day 2: Six less one, six less two, six less three, six less four, six less five

- Gather counting items. Have students count items into groups of six.
- Explore:
 - Sometimes we have six things and we share one. How can we share one? (Because even though I call it six, it is one and one and one and one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Six carrots less one carrot is five carrots.
 - Sometimes we say six minus one is five.
 - Work with the counting items and language to help students understand six less one (or six minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using six less two, six less three, six less four, and six less five. Continue instilling the idea that six is one and one and one and one and one and one, etc.

Day 3:

Written work p. 18-21 (#25-28)

Week 25

Topics:

- $6 + 1 = 7$
- $1 + 6 = 7$



- $5 + 2 = 7$
- $2 + 5 = 7$
- $4 + 3 = 7$
- $3 + 4 = 7$
- $7 - 1 = 6$
- $7 - 2 = 5$
- $7 - 3 = 4$
- $7 - 4 = 3$
- $7 - 5 = 2$
- $6 - 6 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')
- Less (ORIGIN Old English *læssa*, of Germanic origin; related to Old Frisian *lēssa*, from an Indo-European root shared by Greek *loisthos* 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3, p. 21-23 (#29-32)

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: Six and one, five and two, four and three

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Review:
 - Addition and subtraction facts for 1, 2, 3, 4, 5, and 6
- Explore:
 - Count items into groups of six
 - Choose one more item and put it next to the original six items.
 - Count the number of items in the group.
 - How many carrots in the new group? (seven)
 - Repeat this process. Have the student say "six ____ and one ____ are seven ____."
 - Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
 - Look at your group of seven. We know that one and one and one and one and one and one and one are called seven.
 - Seven can also mean other things.
 - Divide the group of seven ones into two groups. How many items are in each group?
 - Leave the initial group of seven divided.
 - Divide another group of seven ones into another two groups, but different sized groups than the first.
 - Leave the second group of seven divided.
 - Divide another group of seven ones into another two groups, but different sized groups than the first two.
- Explore:
 - Work with the units and the language until students are comfortable with understanding seven is composed of various groups of ones
 - Note: Be sure to share hints about these words from the Latin or other origins.
 - Note: Check to be sure when students are counting that they point to one item for each number they say. The idea of units should be continually reinforced.

Day 2: Seven less one, seven less two, seven less three, seven less four, seven less five, seven less six

- Gather counting items. Have students count items into groups of seven.



- Explore:
 - Sometimes we have seven things and we share one. How can we share one? (Because even though I call it seven, it is one and one and one and one and one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Seven carrots less one carrot is six carrots.
 - Sometimes we say seven minus one is six.
 - Work with the counting items and language to help students understand seven less one (or seven minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using seven less two, seven less three, seven less four, seven less five, and seven less six. Continue instilling the idea that seven is seven ones.

Day 3:

Written work p. 21-23 (#29-32)

Week 26



Topics:

- $7 + 1 = 8$
- $1 + 7 = 8$
- $6 + 2 = 8$
- $2 + 6 = 8$
- $5 + 3 = 8$
- $3 + 5 = 8$
- $4 + 4 = 8$
- $8 - 1 = 7$
- $8 - 2 = 6$
- $8 - 3 = 5$
- $8 - 4 = 4$
- $8 - 5 = 3$
- $8 - 6 = 2$
- $8 - 7 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')
- Less (ORIGIN Old English *læssa*, of Germanic origin; related to Old Frisian *lëssa*, from an Indo-European root shared by Greek *loisthos* 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3, p. 23-26 (#33-37)

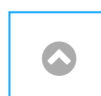
Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: Seven and one, six and two, five and three, four and four

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)



- Review:
 - Addition and subtraction facts for 1, 2, 3, 4, 5, 6, and 7
- Explore:
 - Count items into groups of seven
 - Choose one more item and put it next to the original seven items.
 - Count the number of items in the group.
 - How many carrots in the new group? (eight)
 - Repeat this process. Have the student say "seven ____ and one ____ are eight ____."
 - Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
 - Look at your group of eight. We know that one and one and one and one and one and one and one and one are called eight.
 - Eight can also mean other things.
 - Divide the group of eight ones into two groups. How many items are in each group?
 - Leave the initial group of eight divided.
 - Divide another group of eight ones into another two groups, but different sized groups than the first.
 - Leave the second group of eight divided.
 - Divide another group of eight ones into another two groups, but different sized groups than the first two.
 - Leave the third group of eight divided.
 - Divide another group of eight ones into another two groups, but different sized groups than the first three.
- Explore:
 - Work with the units and the language until students are comfortable with understanding eight is composed of various groups of ones
 - Note: Be sure to share hints about these words from the Latin or other origins.
 - Note: Check to be sure when students are counting that they point to one item for each number they say. The idea of units should be continually reinforced.

Day 2: Eight less one, eight less two, eight less three, eight less four, eight less five, eight less six, eight less seven

- Gather counting items. Have students count items into groups of eight.
- Explore:
 - Sometimes we have eight things and we share one. How can we share one? (Because even though I call it eight, it is one and one and one and one and one and one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Eight carrots less one carrot is seven carrots.
 - Sometimes we say eight minus one is seven.
 - Work with the counting items and language to help students understand eight less one (or eight minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using eight less two, eight less three, eight less four, eight less five, eight less six, and eight less seven. Continue instilling the idea that eight is eight ones.

Day 3:

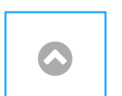
Written work p. 23-26 (#33-37)

Week 27



Topics:

- $8 + 1 = 9$
- $1 + 8 = 9$
- $7 + 2 = 9$
- $2 + 7 = 9$
- $6 + 3 = 9$
- $3 + 6 = 9$
- $5 + 4 = 9$
- $4 + 5 = 9$
- $9 - 1 = 8$
- $9 - 2 = 7$
- $9 - 3 = 6$
- $9 - 4 = 5$
- $9 - 5 = 4$
- $9 - 6 = 3$



- $9 - 7 = 2$
- $9 - 8 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')
- Less (ORIGIN Old English *læssa*, of Germanic origin; related to Old Frisian *lēssa*, from an Indo-European root shared by Greek *loisthos* 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3, p. 27-29 (#38-39)

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: Eight and one, seven and two, six and three, five and four

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Review:
 - Addition and subtraction facts for 1, 2, 3, 4, 5, 6, 7, and 8
- Explore:
 - Count items into groups of eight
 - Choose one more item and put it next to the original eight items.
 - Count the number of items in the group.
 - How many carrots in the new group? (nine)
 - Repeat this process. Have the student say "eight ____ and one ____ are nine ____."
 - Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
 - Look at your group of nine. We know that one and one and one and one and one and one and one and one and one are called nine.
 - Nine can also mean other things.
 - Divide the group of nine ones into two groups. How many items are in each group?
 - Leave the initial group of nine divided.
 - Divide another group of nine ones into another two groups, but different sized groups than the first.
 - Leave the second group of nine divided.
 - Divide another group of nine ones into another two groups, but different sized groups than the first two.
 - Leave the third group of nine divided.
 - Divide another group of nine ones into another two groups, but different sized groups than the first three.
- Explore:
 - Work with the units and the language until students are comfortable with understanding nine is composed of various groups of ones
 - Note: Be sure to share hints about these words from the Latin or other origins.
 - Note: Check to be sure when students are counting that they point to one item for each number they say. The idea of units should be continually reinforced.

Day 2: Nine less one, nine less two, nine less three, nine less four, nine less five, nine less six, nine less seven, nine less eight

- Gather counting items. Have students count items into groups of nine.
- Explore:
 - Sometimes we have nine things and we share one. How can we share one? (Because even though I call it nine, it is one and one and one and one and one and one and one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - nine carrots less one carrot is eight carrots.



- Sometimes we say nine minus one is eight.
- Work with the counting items and language to help students understand nine less one (or nine minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using nine less two, nine less three, nine less four, nine less five, nine less six, nine less seven, and nine less eight. Continue instilling the idea that nine is nine ones.

Day 3:

Written work p. 27-29 (#38-39)

Week 28



Topics:

- $9 + 1 = 10$
- $1 + 9 = 10$
- $8 + 2 = 10$
- $2 + 8 = 10$
- $7 + 3 = 10$
- $3 + 7 = 10$
- $6 + 4 = 10$
- $4 + 6 = 10$
- $5 + 5 = 10$
- $10 - 1 = 9$
- $10 - 2 = 8$
- $10 - 3 = 7$
- $10 - 4 = 6$
- $10 - 5 = 5$
- $10 - 6 = 4$
- $10 - 7 = 3$
- $10 - 8 = 2$
- $10 - 9 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')
- Less (ORIGIN Old English *læssa*, of Germanic origin; related to Old Frisian *lëssa*, from an Indo-European root shared by Greek *loisthos* 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3, p. 29-31 (#40-41)

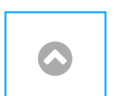
Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: Nine and one, eight and two, seven and three, six and four, five and five

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Review:



- Addition and subtraction facts for 1, 2, 3, 4, 5, 6, 7, 8, and 9
- Explore:
 - Count items into groups of nine
 - Choose one more item and put it next to the original nine items.
 - Count the number of items in the group.
 - How many carrots in the new group? (ten)
 - Repeat this process. Have the student say "nine ____ and one ____ are ten ____."
 - Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
 - Look at your group of ten. We know that one and one and one and one and one and one and one and one and one and one are called ten.
 - Ten can also mean other things.
 - Divide the group of ten ones into two groups. How many items are in each group?
 - Leave the initial group of ten divided.
 - Divide another group of ten ones into another two groups, but different sized groups than the first.
 - Leave the second group of ten divided.
 - Divide another group of ten ones into another two groups, but different sized groups than the first two.
 - Leave the third group of ten divided.
 - Divide another group of ten ones into another two groups, but different sized groups than the first three.
 - Leave the fourth group of ten divided.
 - Divide another group of ten ones into another two groups, but different sized groups than the first four.
- Explore:
 - Work with the units and the language until students are comfortable with understanding ten is composed of various groups of ones
 - Note: Be sure to share hints about these words from the Latin or other origins.
 - Note: Check to be sure when students are counting that they point to one item for each number they say. The idea of units should be continually reinforced.

Day 2: Ten less one, ten less two, ten less three, ten less four, ten less five, ten less six, ten less seven, ten less eight, ten less nine

- Gather counting items. Have students count items into groups of ten.
- Explore:
 - Sometimes we have ten things and we share one. How can we share one? (Because even though I call it ten, it is one and one and one and one and one and one and one and one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Ten carrots less one carrot is nine carrots.
 - Sometimes we say ten minus one is nine.
 - Work with the counting items and language to help students understand ten less one (or ten minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using ten less two, ten less three, ten less four, ten less five, ten less six, ten less seven, ten less eight, and ten less nine.

Day 3:

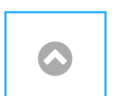
Written work p. 29-31 (#40-41)

Week 29



Topics:

- $10 + 1 = 11$
- $1 + 10 = 11$
- $9 + 2 = 11$
- $2 + 9 = 11$
- $8 + 3 = 11$
- $3 + 8 = 11$
- $7 + 4 = 11$
- $4 + 7 = 11$
- $6 + 5 = 11$
- $5 + 6 = 11$
- $11 - 1 = 10$
- $11 - 2 = 9$



- $11 - 3 = 8$
- $11 - 4 = 7$
- $11 - 5 = 6$
- $11 - 6 = 5$
- $11 - 7 = 4$
- $11 - 8 = 3$
- $11 - 9 = 2$
- $11 - 10 = 1$
- $11 + 1 = 12$
- $1 + 11 = 12$
- $10 + 2 = 12$
- $2 + 10 = 12$
- $9 + 3 = 12$
- $3 + 9 = 12$
- $8 + 4 = 12$
- $4 + 8 = 12$
- $7 + 5 = 12$
- $5 + 7 = 12$
- $6 + 6 = 12$
- $12 - 1 = 11$
- $12 - 2 = 10$
- $12 - 3 = 9$
- $12 - 4 = 8$
- $12 - 5 = 7$
- $12 - 6 = 6$
- $12 - 7 = 5$
- $12 - 8 = 4$
- $12 - 9 = 3$
- $12 - 10 = 2$
- $12 - 11 = 1$
- Plus (ORIGIN mid 16th cent.: from Latin, literally 'more.')
- Minus (ORIGIN late 15th cent.: from Latin, neuter of minor 'less.')
- Is (ORIGIN Old English *bēon*, an irregular and defective verb, whose full conjugation derives from several originally distinct verbs. The forms *am* and *is* are from an Indo-European root shared by Latin *sum* and *est*. The forms *was* and *were* are from an Indo-European root meaning 'remain.' The forms *be* and *been* are from an Indo-European root shared by Latin *fui* 'I was,' *fio* 'I become' and Greek *phuein* 'bring forth, cause to grow.' The origin of *are* is uncertain.)
- Equals (ORIGIN late Middle English: from Latin *aequalis*, from *aequus* 'even, level, equal.')
- Add (ORIGIN late Middle English: from Latin *addere*, from *ad-* 'to' + the base of *dare* 'put.')
- Less (ORIGIN Old English *læssa*, of Germanic origin; related to Old Frisian *lēssa*, from an Indo-European root shared by Greek *loisthos* 'last.')

Textbook reference and written work:

- Kindergarten Mathematics p. 3, p. 31-33 (#42-43)

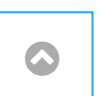
Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted

Suggested Daily Schedule:

Day 1: Ten and one, nine and two, eight and three, seven and four, six and five

- Gather items that can be counted (sticks, rocks, marbles, grapes, carrots, spoons, etc.)
- Review:
 - Addition and subtraction facts for 1, 2, 3, 4, 5, 6, 7, 8, and 10
- Explore:
 - Count items into groups of ten
 - Choose one more item and put it next to the original ten items.



- Count the number of items in the group.
- How many carrots in the new group? (eleven)
- Repeat this process. Have the student say "ten ____ and one ____ are eleven ____."
 - Note: Have students add only like items. In this way, you are reinforcing the idea of labeling things.
- Look at your group of eleven. We know that one and one and one and one and one and one and one and one and one and one and one are called eleven.
- Eleven can also mean other things.
 - Divide the group of eleven ones into two groups. How many items are in each group?
 - Leave the initial group of eleven divided.
 - Divide another group of eleven ones into another two groups, but different sized groups than the first.
 - Leave the second group of eleven divided.
 - Divide another group of eleven ones into another two groups, but different sized groups than the first two.
 - Leave the third group of eleven divided.
 - Divide another group of eleven ones into another two groups, but different sized groups than the first three.
 - Leave the fourth group of eleven divided.
 - Divide another group of eleven ones into another two groups, but different sized groups than the first four.
- Explore:
 - Work with the units and the language until students are comfortable with understanding eleven is composed of various groups of ones
 - Note: Be sure to share hints about these words from the Latin or other origins.
 - Note: Check to be sure when students are counting that they point to one item for each number they say. The idea of units should be continually reinforced.

Day 2: Eleven less one, eleven less two, eleven less three, eleven less four, eleven less five, eleven less six, eleven less seven, eleven less eight, eleven less nine, eleven less ten

- Gather counting items. Have students count items into groups of eleven.
- Explore:
 - Sometimes we have eleven things and we share one. How can we share one? (Because even though I call it eleven, it is one and one and one and one and one and one and one and one and one and one and one)
 - Look at your group of carrots. Share one carrot with someone. How many carrots do you have left?
 - Eleven carrots less one carrot is ten carrots.
 - Sometimes we say eleven minus one is ten.
 - Work with the counting items and language to help students understand eleven less one (or eleven minus one)
 - Note: Be sure to share hints about these words from the Latin or other origin. It is especially helpful to understand that 'minus' means 'less'
- Explore:
 - Repeat the above exercises, but using eleven less two, eleven less three, eleven less four, eleven less five, eleven less six, eleven less seven, eleven less eight, eleven less nine, and eleven less ten

Day 3:

Written work p. 31-33 (#42-43)

Week 30



Topics:

- Addition and Subtraction facts 1 through 12

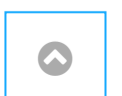
Textbook reference and written work:

- Math Facts 1-12 Quizzes ([PDF available here](#))

Materials

- Ruler
- Math Notebook
- Pencil
- Counting sticks
- Dot cards
- Sticks
- Items that can be counted
- Math Facts 1-12 Quizzes ([PDF available here](#))

Suggested Daily Schedule:



Day 1: Review Addition and Subtraction Facts One through Six

- Use flashcards
- Use flashcards and have students write down the answer (Ex. show the student $1 + 1$ and have him write down the answer before flipping the card to the answer side)

Day 2: Review Addition and Subtraction Facts Seven through Twelve

- Use flashcards
- Use flashcards and have students write down the answer

Day 3: Review Addition and Subtraction Facts One through Twelve

- Give more repetition to any facts with which the student has struggled
- (Optional) Math Facts 1-12 Quizzes ([PDF available here](#))

Week 31



Topics:

- Money (ORIGIN Middle English: from Old French moneie, from Latin moneta 'mint, money,' originally a title of the goddess Juno, in whose temple in Rome money was minted.)
- Cent (ORIGIN late Middle English (in the sense 'a hundred'): from French cent, Italian cento, or Latin centum 'hundred.')
- Penny
- Nickel
- Dime (ORIGIN late Middle English: from Old French disme, from Latin decima pars 'tenth part.' The word originally denoted a tithe or tenth part; the modern sense 'ten-cent coin' dates from the late 18th cent.)
- Quarter (ORIGIN Middle English: from Old French quartier, from Latin quartarius 'fourth part of a measure,' from quartus 'fourth,' from quattuor 'four.')
- Dollar (ORIGIN from early Flemish or Low German daler, from German T(h)aler, short for Joachimsthaler, a coin from the silver mine of Joachimsthal ('Joachim's valley'), now Jáchymov in the Czech Republic. The term was later applied to a coin used in the Spanish American colonies, which was also widely used in the British North American colonies at the time of the American Revolution, hence adopted as the name of the US monetary unit in the late 18th cent.)

Textbook reference and written work:

- Luther's Small Catechism

Materials

- Math Notebook
- Pencil
- Rocks, sticks, or other items to count
- 41 pennies
- 6 nickels
- 3 dimes
- 1 quarter
- Luther's Small Catechism
- How Can I Help? God's Calling for Kids (optional)
- Luther's Large Catechism (optional)

Suggested Daily Schedule:

Day 1: The language of money

- Say the Lord's Prayer together.
 - Look in Luther's Small Catechism: What is the Fourth Petition of the Lord's Prayer?
 - What is the meaning of the Fourth Petition?
 - Note: Teachers may want to read Luther's writing about the Fourth Petition in Luther's Large Catechism for their own edification. It is a good read!
 - What does God give us?
 - Note: This would be a good place to discuss vocation. *How Can I Help? God's Calling for Kids* by Mary Moerbe is a good resource for discussing vocation with youngsters.
 - Note: The 'Asking a Blessing' portion of the Daily Prayers in Luther's Small Catechism is also a fantastic thing to teach young people as it reminds them from whom all things come.
- Discuss:



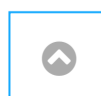
- What is money?
- For what do we use money?
- Where do we get money?

Day 2: Dollars and cents

- Explore:
 - Look at a penny. What do you notice? (Color, size, pictures, etc.)
 - Look at a nickel. What do you notice? (Color, size, pictures, etc.)
 - Look at a dime. What do you notice? (Color, size, pictures, etc.)
 - Look at a quarter. What do you notice? (Color, size, pictures, etc.)
 - Look at a dollar. What do you notice? (Color, size, pictures, etc.)
- Discuss:
 - Recall from previous weeks that we use words to name things. For example, instead of saying "one and one and one and one," we say "four." We learned that four names four ones.
 - The same is true for money. Different pieces of money name different amounts:
 - Give the student a penny. A penny names one cent.
 - Give the student a nickel. A nickel names five cents.
 - Give the student a dime. A dime names ten cents.
 - Give the student a quarter. A quarter names twenty-five cents.
 - Give the students a dollar. A dollar names one hundred cents.
 -
- Explore:
 - Count out one rock. Put a penny right above it.
 - Count out five rocks. Count out five pennies above the five rocks. Put a nickel right above them.
 - Count out ten rocks. Count out ten pennies above the ten rocks. Put a dime right above them.
 - Count out twenty-five rocks. Count out twenty-five pennies above the twenty-five rocks. Put a quarter right above them.
- Discuss:
 - Recall that we call twelve inches a foot, we call three feet a yard, and we call 5,280 feet a mile.
 - With money, we call one cent a penny, we call five cents a nickel, we call ten cents a dime, we call twenty-five cents a quarter, and we call one hundred cents a dollar.
 - Note: This is a good time to point out the meaning of cent.
 - Let's think about why we use different pieces of money and call them different things.
 - If I want to buy a pizza and it costs twelve dollars, I could pay for it in a variety of ways.
 - 1,200 pennies,
 - 240 nickels,
 - 120 dimes,
 - 48 quarters, or
 - 12 dollars
 - Which method would be the easiest? (Talk about how much the coins would weigh, how we would carry that many to the store, etc.)

Day 3: Review

- Review how different pieces of money are called.
- Discuss:
 - We know that twenty-five cents are called a quarter. We can make twenty-five cents three ways: (there are more combinations than the following, but these are the most basic)
 - one quarter,
 - two dimes and one nickel,
 - or twenty-five pennies
 - How many ways can we make ten cents? (there are more combinations than the following, but these are the most basic)
 - one dime,
 - two nickels,
 - or ten pennies
 - How many ways can we make five cents?
 - one nickel or
 - five pennies
 - How many ways can we make a dollar? (there are more combinations than the following, but these are the most basic)
 - one dollar,
 - four quarters,
 - ten dimes,
 - twenty nickels, or
 - one hundred pennies



Topics:

- Time
- Clock (ORIGIN late Middle English: from Middle Low German and Middle Dutch klokke, based on medieval Latin clocca 'bell.')
- Sundial
- Day
- Hour (ORIGIN Middle English: from Anglo-Norman French ure, via Latin from Greek hōra 'season, hour.')
- Ante Meridian (a.m.) (ORIGIN late Middle English: from Old French meridiem, from Latin meridianum (neuter, used as a noun) 'noon,' from medius 'middle' + dies 'day.')
- Post Meridian (p.m.) (ORIGIN from Latin post meridiem)
- Minute (ORIGIN late Middle English: via Old French from late Latin minuta, feminine (used as a noun) of minutus 'made small.' The senses 'period of sixty seconds' and 'sixtieth of a degree' derive from medieval Latin pars minuta prima 'first minute part.')
- Second (ORIGIN late Middle English: from medieval Latin secunda (minuta)'second (minute),' feminine (used as a noun) of secundus, referring to the "second" operation of dividing an hour by sixty.)

Textbook reference and written work:

- Time Book ([PDF available here](#))

Materials

- Math Notebook
- Pencil
- Rocks, sticks, or other items to count
- A clock (or Clock visual- [PDF available here](#))
- Hour Visual ([PDF available here](#))
- Paper plate
- Plastic straw
- Sharpened pencil
- Sticky tack
- Cardboard (the large side of a cereal box would work)
- Marker
- Time Book ([PDF available here](#))

Suggested Daily Schedule:

Day 1: Time

- Read: Genesis 1:1-3
- Discuss:
 - Where do you see "time" in creation the first day? (evening and morning)
 - We use time to communicate.
 - When do you talk about time? (when it is time to eat, sleep, etc.)
- Explore:
 - Walk around your house.
 - Where do you see "time" in your house? (clocks, watches, phones, coffee maker, microwave, oven, etc.)
 -
- Explore more: Make a sundial
 - Not everyone uses clocks to tell time.
 - Some people look up at the sky (on a sunny day) and know what time it is.
 - When the sun is straight above you, it is 12 o'clock. What do people generally do at 12 o'clock?
 - Other people, especially people long ago, used sundials to know more precise time.
 - Make a sundial:
 - Take a paper plate and write 1-12 on it as you would see on a clock. Feel free to use a ruler to get the numbers in the exact position as they would be on a clock.
 - Poke the sharpened pencil through the exact center of the plate.
 - Place the plastic straw in the hole.
 - Put some sticky tack on end of the straw under the sundial and stick the sundial to the piece of cardboard or piece of cereal box.
 - Take the sundial outside at noon on a sunny day and place it in the sun.
 - Position it so the shadow of the straw falls directly on the 12.

- As long as the sundial does not move, you will be able to tell the time of day by looking at the straw's shadow on the sundial.
-

Day 2: Day

- Discuss:
 - When God created the world, He divided the days into evening and morning. As time went on, people further delineated evening and morning with hours.
 - A day is divided into 24 hours.
 - Look at a clock (or the clock visual PDF). Are there 24 numbers? (no, only 12)
 - There are 12 hours before noon and 12 hours after noon. The 12 hours before noon are called ante meridian or a.m. and the 12 hours after noon are called post meridian or p.m.
 - Ante meridian refers to all of the hours from midnight to noon.
 - Post meridian refers to all of the hours from noon to midnight.
 - Just as God divided the day into evening and morning, we still divide the day into two 12 hour parts.
- Explore:
 - Look at the Hour Visual.
 - How many wedges are in the circle? (12)
 - Each wedge represents one hour.
 - Explore the language of time as it relates to hours. The numbers are intentionally placed at the center of the wedge arc so as to aid in explaining that the whole wedge is the 12 o'clock hour, the 1 o'clock hour, etc.
 - After explaining, point to a wedge and ask which hour the wedge represents.
 - Have the student point to a wedge and tell which hour the wedge represents.
- Explore more:
 - Once the student grasps the concept of an hour, do the same activity with a clock or clock visual.
 - Now, note, the numbers are in clock position rather than wedge position.

Day 3: Time Book

- Create a time book
- Time Book ([PDF available here](#))

Week 33



Topics:

- Time
- Hour (ORIGIN Middle English: from Anglo-Norman French ure, via Latin from Greek hōra 'season, hour.')
- Minute (ORIGIN late Middle English: via Old French from late Latin minuta, feminine (used as a noun) of minutus 'made small.' The senses 'period of sixty seconds' and 'sixtieth of a degree' derive from medieval Latin pars minuta prima 'first minute part.')
- Second (ORIGIN late Middle English: from medieval Latin secunda (minuta)'second (minute),' feminine (used as a noun) of secundus, referring to the "second" operation of dividing an hour by sixty.)

Textbook reference and written work:

•

Materials

- Math Notebook
- Pencil
- Rocks, sticks, or other items to count
- A clock
- Hour Visual ([PDF available here](#))
- Minute Visual ([PDF available here](#))

Suggested Daily Schedule:

Day 1: Time

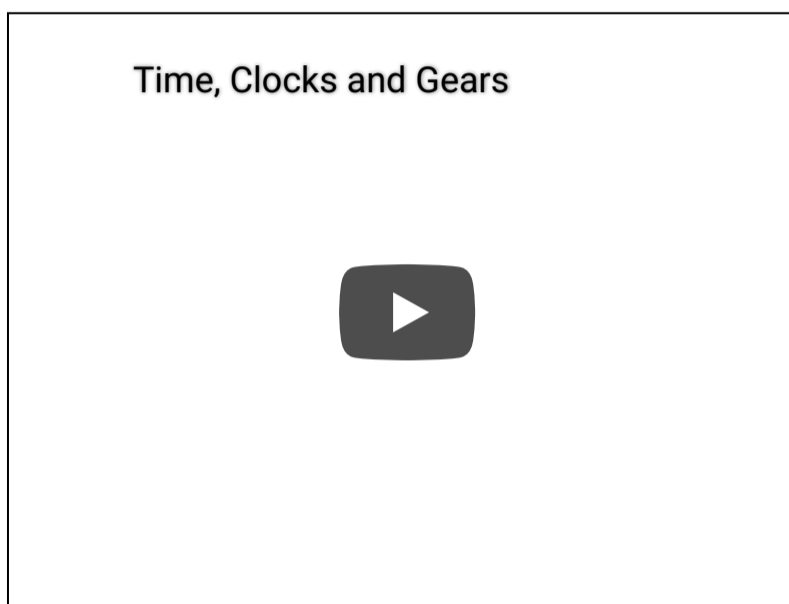
- We speak of time quite frequently, perhaps without even noticing.
- Pray the Lord's Prayer
 - When do we speak of time in the Lord's Prayer? (the 4th Petition: daily bread)
- From Luther's Small Catechism, under Daily Prayers, say the prayer for Asking a Blessing



- When do we speak of time when asking a blessing? ("You give them their food at the proper time...")
- Can you think of other prayers or even hymns in which we speak of time? (Jesus Christ is Risen Today; Today Your Mercy Calls Us; Isaiah, Mighty See in Days of Old, etc.)

Day 2: Minute

- Recall:
 - When we learned about measuring, we talked about feet and inches. How many inches are in a foot? (12) Feet in a yard? (3) Feet in a mile? (5,280)
 - Time also has different parts.
 - How many hours in a day?
- Discuss:
 - Hours are also divided into pieces
 - Look at the hour visual. Each wedge represents the part of a day called an hour.
 - But, notice on a clock there are at least two hands. The shorter hand shows us which hour it is and the longer hand shows us which minute it is.
 - Place the minute visual beside the hour visual. There are 60 minutes in an hour.
 - Note: Be sure to keep things simple, but encourage the student's curiosity about how clocks work. The main goal for these lessons is understanding that there are parts to a day (hours) and parts to an hour (minutes)
 - Here is a video about how clocks work. Students may find it interesting:



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Day 3: Review

- Review the different words we use to describe time and discuss:
 - There are 12 months in a year. (What are the months of the year?)
 - There are 7 days in a week. (What are the days of the week?)
 - There are 24 hours in a day
 - There are 12 hours before noon.
 - There are 12 hours after noon.
 - There are 60 minutes in each hour.

Week 34



Topics:

- Time
- Hour (ORIGIN Middle English: from Anglo-Norman French ure, via Latin from Greek hōra 'season, hour.')
- Minute (ORIGIN late Middle English: via Old French from late Latin minuta, feminine (used as a noun) of minutus 'made small.' The senses 'period of sixty seconds' and 'sixtieth of a degree' derive from medieval Latin pars minuta prima 'first minute part.')
- Second (ORIGIN late Middle English: from medieval Latin secunda (minuta)'second (minute),' feminine (used as a noun) of secundus, referring to the "second" operation of dividing an hour by sixty.)

Textbook reference and written work:

- Ordering Our Days in His Peace (optional) ([Available for purchase here](#))
- Lutheran Service Book p. x

Materials

- Math Notebook
- Pencil
- Rocks, sticks, or other items to count



- A clock
- Hour Visual ([PDF available here](#))
- Minute Visual ([PDF available here](#))
- Second Visual ([PDF available here](#))
- Church Year Visual ([PDF available here](#))
- Seasons Book ([PDF available here](#))

Suggested Daily Schedule:

Day 1: Time

- Discuss:
 - Just as years, months, weeks, days, and hours are divided into parts, so also is the church year divided into parts.
 - Look at the Church Year visual
 - Discuss the different seasons and days and what we do during those times
 - Look at Lutheran Service Book p. x for more information
 - Read Ordering Our Days In His Peace (optional)

Day 2: Second

- Recall:
 - How many hours are in a day?
 - How many minutes are in an hour?
 - Note: feel free to review other time delineations
- Discuss:
 - Minutes are also divided into pieces
 - Look at the second visual. Each wedge represents the part of a minute called a second.
 - Why does the Second Visual look exactly like the Minute visual? (because there are 60 seconds in a minute and 60 minutes in an hour)
 - When do we talk about seconds? (races, etc.)

Day 3: Seasons Book

- Make a [seasons book](#)

Week 35



Topics:

- Time
- Hour (ORIGIN Middle English: from Anglo-Norman French ure, via Latin from Greek hōra 'season, hour.')
- Minute (ORIGIN late Middle English: via Old French from late Latin minuta, feminine (used as a noun) of minutus 'made small.' The senses 'period of sixty seconds' and 'sixtieth of a degree' derive from medieval Latin pars minuta prima 'first minute part.')
- Second (ORIGIN late Middle English: from medieval Latin secunda (minuta)'second (minute),' feminine (used as a noun) of secundus, referring to the "second" operation of dividing an hour by sixty.)

Textbook reference and written work:

- Ordering Our Days in His Peace (optional) ([Available for purchase here](#))
- Lutheran Service Book p. x

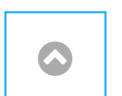
Materials

- Math Notebook
- Pencil
- Rocks, sticks, or other items to count
- Analog clock
- Hour Visual ([PDF available here](#))
- Minute Visual ([PDF available here](#))
- Second Visual ([PDF available here](#))
- Church Year Visual ([PDF available here](#))
- Seasons Book ([PDF available here](#))

Suggested Daily Schedule:

Day 1: Working with time

- Discuss:
 - We know what time we do things, but sometimes it is nice to know how long it is until something will take place.
 - What is something you enjoy doing? What time do you do that activity?



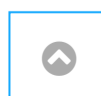
- Review:
 - Look at an analog clock.
 - What does the little hand stand for or signify? (hours)
 - What does the long hand stand for or signify? (minutes)
 - Count out the hours on the clock and point to the corresponding numbers. (1 o'clock, 2 o'clock, etc.)
 - Count out the minutes by 5s and point to the corresponding numbers. (1 is 5, 2 is 10, 3 is 15, etc.)
- Explore:
 - Look at an analog clock.
 - If it was time for the activity you just discussed, where would the little hand (hour hand) point?
 - Where would the long hand (minute hand) point?
 - If your mom said it was two hours until this activity, where would the hour hand point?
 - Where would the minute hand point?
 - If you started the activity two hours ago, where would the hour hand point?
 - Where would the minute hand point?
 - Choose another activity and repeat the process of determining where the hands on the clock would be at that time and where the hands would be a certain number of hours before and after that activity.

Day 2: Working with time

- Recall:
 - How many hours are in a day?
 - How many minutes are in an hour?
 - Note: feel free to review other time delineations
 - Count out the hours on the clock and point to the corresponding numbers. (1 o'clock, 2 o'clock, etc.)
 - Count out the minutes by 5s and point to the corresponding numbers. (1 is 5, 2 is 10, 3 is 15, etc.)
- Discuss:
 - A family has the following daily schedule:
 - 7 a.m. get up
 - 7:30 a.m. breakfast
 - 8 a.m. Matins
 - 8:30 a.m. lessons
 - 11 a.m. lunch/dinner
 - 12 p.m. play
 - 3 p.m. Vespers
 - 5 p.m. supper
 - 7 p.m. Evening Prayer
 - 7:15 p.m. bedtime
 - The teacher or child should choose items from the daily schedule and the child should find those times on the clock.
 - Choose another event during the day and have the child determine how many hours before or after another event the other event occurs.
 - Example: Matins is at 8 a.m. (the child finds 8 a.m. on the clock). How many hours ago did play time start? The child can use the clock to figure out that 12 p.m. was 4 hours ago by counting back from 8 to 12.
 - Be sure to have the child start on the eight. When he points to 7, that is one hour, when he points to 6, that is the second hour, and when he points to 12, that is the fourth hour.
 - Repeat this with other activities on the daily schedule.

Day 3: Working with time

- We have frequently discussed the idea that time names the order that God has given creation.
- Animals do not use clocks or watches, but their time is still ordered.
- If the child has a pet, observe the pet throughout a day. Make a list of the things the animal does. Are there things people do for the pet at a certain time?
- Alternatively, or in addition to observing a pet, observe animals outside around the house (squirrels, rabbits, birds, etc.). Do you see order in their activities? What kinds of things do animals do throughout the day?
- What are other things in creation that reflect the order of our Creator? After you think of some things, take a look at these videos:
 - Wheat



Wheat Field Timelapse - 2013



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- Corn

Corn Field Time Lapse



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- Rice

Rice-growing time-lapse--112-day grow...



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- Rose:

Blooming Red Rose Timelapse

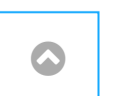


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Week 36

Topics:

- Time



- Hour (ORIGIN Middle English: from Anglo-Norman French *ure*, via Latin from Greek *hōra* 'season, hour.')
- Minute (ORIGIN late Middle English: via Old French from late Latin *minuta*, feminine (used as a noun) of *minutus* 'made small.' The senses 'period of sixty seconds' and 'sixtieth of a degree' derive from medieval Latin *pars minuta prima* 'first minute part.')
- Second (ORIGIN late Middle English: from medieval Latin *secunda* (*minuta*) 'second (minute),' feminine (used as a noun) of *secundus*, referring to the "second" operation of dividing an hour by sixty.)

Words to Remember:

- Analog: showing the time by means of hands rather than displayed digits. ORIGIN early 19th cent.: from French, from Greek *analogon*, neuter of *analogos* 'proportionate.'
- Digital: showing the time by means of displayed digits rather than hands or a pointer. ORIGIN late 15th cent.: from Latin *digitalis*, from *digitus* 'finger, toe.'

Textbook reference and written work:

- Ordering Our Days in His Peace (optional) ([Available for purchase here](#))
- Lutheran Service Book p. x

Materials

- Math Notebook
- Pencil
- Rocks, sticks, or other items to count
- Analog clock
- Calendar
- Hour Visual ([PDF available here](#))
- Minute Visual ([PDF available here](#))
- Second Visual ([PDF available here](#))
- Church Year Visual ([PDF available here](#))
- Seasons Book ([PDF available here](#))
- Small pieces of paper or note cards
- [Numberless clock](#)

Suggested Daily Schedule:

Day 1: Working with time

- Discuss:
 - Sometimes we plan things out far in advance. What are some things you plan far in advance that do not occur each year? (Special trips, etc.)
 - Sometimes things do occur each year. What are some things that occur the same day each year? (birthdays, anniversaries, Feast Days in the Church Year, etc.)
- Review:
 - How many days are in a week?
 - What is the name of each day?
 - How many months are in each year?
 - What is the name of each month?
- Explore:
 - Make a list of events that occur throughout the year, both in your family and in the Church.
 - Put each event on a separate piece of paper
 - Go through the stack of events and find each event on the calendar.
 - Be sure to save your stack of events.
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Day 2: Working with time

- Recall:
 - How many hours are in a day?
 - How many minutes are in an hour?
 - Note: feel free to review other time delineations
 - Count out the hours on the clock and point to the corresponding numbers. (1 o'clock, 2 o'clock, etc.)
 - Count out the minutes by 5s and point to the corresponding numbers. (1 is 5, 2 is 10, 3 is 15, etc.)
- Explore:
 - Put your stack of events in a bucket or bag.
 - Pull out an event and find it on the calendar.
 - Pull out another event and find that event on the calendar.
 - Now, how far away from the first event is the second event? Example: First event- Grandma's birthday is July 30. Second event- The Annunciation of Our Lord is March 25. Thus, The Annunciation of Our Lord is 8 months **after** Grandma's birthday. You could also do the reverse and say that The Annunciation of Our Lord is 4 month **before** Grandma's birthday.



- The proximity of events will determine if you approximate their distance apart using months, weeks, or days.
- Feel free to point out interesting things like the months before and after should add up to 12 since there are twelve months in a year, etc.

Day 3: Working with time

- Review:
 - What does the hour hand on a clock tell us?
 - What does a minute hand on a clock tell us?
 - How many minutes are in an hour?
 - How many hours are in a day?
- Explore:
 - Sometimes clocks do not have numbers. When this happens, how do we know the time?
 - Take a look at [this clock](#)
 - How do you know the time on the clock?
 - Count out the minutes around the clock.
 - Count out the hours around the clock.
 - What time is the clock showing?
- Explore:
 - Just as some clocks don't have numbers, other clocks do not have hands.
 - Look at the Words to Remember.
 - A clock with hands is called analog. Look at the origin of the word analog. Think back to our diagrams of the sections of a clock. Those diagrams showed the proportion of each section of the clock to other sections. Each minute on an analog clock takes up the same amount of space. Each five minutes on an analog clock take up the same amount of space, etc.
 - A clock without hands is called digital.
- 
- The number or numbers in front of the colon (:) are the hours. The numbers after the colon are the minutes.
- What is the time on the above digital clock?

