Course Blocks

2nd Grade Mathematics

Arithmetic is the art of computing by numbers. In 2nd Grade Mathematics, students continue mastering the concepts and skills that will aid them in further mathematical pursuits.

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
  - Written work
  - Explore More

Explanation of Daily Schedule:

- 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.
- 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.

If parents need access to any of the previous texts used in the Wittenberg Academy Grammar School Mathematics series so as to review, please email mrsbenson@wittenbergacademy.org

Here is a link to the text: **2nd Grade Mathematics**

Here is a link to the answer key: **2nd Grade Mathematics Answer Key**

News forum

Week 1

Topics:

- Units
- Tens
- Notation

Words to Remember:

- Notation: writing numbers (ORIGIN late 16th cent.: from Latin notatio(n-), from the verb notare, from nota ‘mark.’)
- Numeration: reading numbers (ORIGIN late Middle English: from Latin numeratio(n-) ‘payment’ (in late Latin‘numbering’), from the verb numerare ‘to number.’)
- Figure (ORIGIN Middle English (in the senses ‘distinctive shape of a person or thing,’‘representation of something material or immaterial,’ and ‘numerical symbol,’ among others): from Old French figure (noun), figurer (verb), from Latin figura ‘shape, figure, form’; related to fingere ‘form, contrive.’)
- Cipher (ORIGIN late Middle English (in the senses ‘symbol for zero’ and ‘Arabic numeral’): from Old French cifre, based on Arabic ṣifr ‘zero.’)

Textbook reference and written work:

- 2nd Grade Mathematics p. 1

Materials

- Math Notebook
- Math Facts flashcards

- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Review:
  - Notation: writing numbers (ORIGIN late 16th cent.: from Latin notatio(n-), from the verb notare, from nota ‘mark.’)
  - Numeration: reading numbers (ORIGIN late Middle English: from Latin numeratio(n-) ‘payment’ (in late Latin‘numbering’), from the verb numerare ‘to number.’)
  - Figure (ORIGIN Middle English (in the senses ‘distinctive shape of a person or thing,’‘representation of something material or immaterial,’ and ‘numerical symbol,’ among others): from Old French figure (noun), figurer (verb), from Latin figura ‘shape, figure, form’; related to fingere ‘form, contrive.’)
  - Cipher (ORIGIN late Middle English (in the senses ‘symbol for zero’ and ‘Arabic numeral’): from Old French cifre, based on Arabic ṣifr ‘zero.’)
- Discuss:
  - What are the distinctions between the notation, numeration, figure, and cipher?
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 1 (Lesson XXVIII)
    - Note: There are no written exercises in this lesson, but students should be encouraged to write out the indicated numbers.
- Notes:
  - The language of mathematics is like any language: in order to speak the language, one must know the vocabulary. In Lesson I and all subsequent lessons, take great care to learn well the vocabulary of mathematics so students may speak mathematics fluently.
- Explore More:
  - Have students review their Roman numerals by writing the Roman numeral for each number they wrote for Lesson XXVIII

Day 2:

- Mastery Practice:
  - Math Facts for 1-6 (use flashcards or math facts sheets)
- Written work:

  2nd Grade Mathematics p. 1 (Lesson XXVIII, through "How many in 36?")
  - Note: students should be encouraged to write out the answers and then also speak them aloud to the teacher or classmates

Day 3:

- Mastery Practice:
  - Math Facts for 1-6 (use flashcards or math facts sheets)
- Written work:

  2nd Grade Mathematics p. 1 (Lesson XXVIII, finish)
  - Note: students should be encouraged to write out the answers and then also speak them aloud to the teacher or classmates

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Week 2

Topics:

- Addition

Textbook reference and written work:

- 2nd Grade Mathematics p. 2

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Define:
  - and: used to connect two numbers to indicate that they are being added together ORIGIN Old English and, ond, of Germanic origin; related to Dutch en and German und .
- Discuss:
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 2 (Lesson XXX)
- Notes:
  - Have students show their work for Lesson XXX
- Explore More:
  -

Day 2:

- Mastery Practice:
  - Math Facts for 1-6 (use flashcards or math facts sheets)
- Discuss:
  - Have students work through Lesson XXX orally
- Explore:
  -
- Written work:

Day 3:

- Mastery Practice:
  - Math Facts for 1-6 (use flashcards or math facts sheets)
- Discuss:
  -
- Explore:
  -
- Written work:

  2nd Grade Mathematics p. 2 (Lesson XXXI)
  - Note: students should be encouraged to write out the answers

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Week 3

Topics:

- Addition

Textbook reference and written work:

- 2nd Grade Mathematics p. 3

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Define:
  - and: used to connect two numbers to indicate that they are being added together ORIGIN Old English and, ond, of Germanic origin; related to Dutch en and German und .
- Discuss:
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 3 (Lesson XXXII)
- Notes:
  - Have students show their work for Lesson XXXII
- Explore More:
  -

Day 2:

- Mastery Practice:
  - Math Facts for 1-6 (use flashcards or math facts sheets)
- Discuss:
  - Have students work through Lesson XXXI and XXXII orally
- Explore:
  -
- Written work:

Day 3:

  - Mastery Practice:
    - Math Facts for 1-6 (use flashcards or math facts sheets)
  - Discuss:
    -
  - Explore:
    -
  - Written work:
    - 2nd Grade Mathematics p. 3 (Lesson XXXIII)
  - Note: students should be encouraged to write out the answers

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Week 4

Topics:

- Addition

Textbook reference and written work:

- 2nd Grade Mathematics p. 4

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Define:
  - and: used to connect two numbers to indicate that they are being added together ORIGIN Old English and, ond, of Germanic origin; related to Dutch en and German und .
- Discuss:
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 4 (Lesson XXXIV)
- Notes:
  - Have students show their work for Lesson XXXIV
- Explore More:
  -

Day 2:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  - Have students work through Lesson XXXIII and XXXIV orally
- Explore:
  -
- Written work:

Day 3:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  -
- Explore:

    -
- Written work:
    - 2nd Grade Mathematics p. 4 (Lesson XXXV)
- Note: students should be encouraged to write out the answers

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Week 5

Topics:

- Addition

Textbook reference and written work:

- 2nd Grade Mathematics p. 5

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Define:
    - and: used to connect two numbers to indicate that they are being added together ORIGIN Old English and, ond, of Germanic origin; related to Dutch en and German und .
- Discuss:
- Explore:
- Written work:
    - 2nd Grade Mathematics p. 5 (Lesson XXXVI)
- Notes:
    - Have students show their work for Lesson XXXVI
- Explore More:
    -

Day 2:

- Mastery Practice:
    - Math Facts for 7-12 (use flashcards)
- Discuss:
    - Have students work through Lesson XXXV and XXXVI orally
- Explore:
    -
- Written work:

Day 3:

- Mastery Practice:
    - Math Facts for 7-12 (use flashcards)
- Discuss:
    -
- Explore:
    -
- Written work:
    - 2nd Grade Mathematics p. 5 (Lesson XXXVII)
- Note: students should be encouraged to write out the answers

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Week 6

Topics:

- Addition
- Subtraction

Textbook reference and written work:

- 2nd Grade Mathematics p. 6

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Define:
  - and: used to connect two numbers to indicate that they are being added together ORIGIN Old English and, ond, of Germanic origin; related to Dutch en and German und .
  - from: indicating separation or removal
- Discuss:
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 6 (Lesson LXI)
- Notes:
  - Have students show their work for Lesson LXI
- Explore More:
  - Think of all the instances we use the word "from." (I came from church. I am from Iowa. Etc.)
  - When you use the word "from," what are you indicating?
  - How does the word from help us understand what happens during subtraction?

Day 2:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  - Have students work through Lesson XXXVII orally
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 6 (Lesson LXII)
- Notes:
  - Have students show their work for Lesson LXII

Day 3:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 6 (Lesson LXIII)
- Note: students should be encouraged to write out the answers

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Week 7

Topics:

- Addition
- Subtraction

Textbook reference and written work:

- 2nd Grade Mathematics p. 7

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Define:
  -
- Discuss:
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 7 (Lesson LXIV #1-4)
- Notes:
  - Have students show their work for Lesson LXIV
- Explore More:
  - We use very basic measurements today, but in the past, people measured things in a wide variety of ways.
  - Look this chart: http://www.almanac.com/sites/new.almanac.com/files/160_11OFA_TblMeasure.pdf
    - What are some familiar measures? Unfamiliar?
  - Work to figure out how much butter and flour was purchased by today's measurement standards? How much would that much butter and flour cost at today's prices? (estimate)

Day 2:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  -
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 7 (Lesson LXIV #5-8)
- Notes:
  -
- Explore More:
  - Have students use currency to work through the act of counting out money and counting back change.

Day 3:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  -
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 7 (Lesson LXIV #9-13)
- Notes:
  - Have students show their work for Lesson LXIV
- Explore More:
  - Find out what a quince is.

Week 8

Topics:

- Addition
- Subtraction

Textbook reference and written work:

- 2nd Grade Mathematics p. 8

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Review:
  -
  - Less
  - And

    - Are
- Discuss:
- Explore:
- Written work:
    - 2nd Grade Mathematics p. 8 (Lesson LXV)
- Notes:
    - Have students show their work for Lesson LXV.
    - They many write out the individual problems vertically or horizontally.
- Explore More:
    -

Day 2:

- Mastery Practice:
    - Math Facts for 7-12 (use flashcards)
- Discuss:
    -
- Explore:
- Written work:
    - 2nd Grade Mathematics p. 8 (Lesson LXVI)
- Notes:
    - Have students show their work for Lesson LXVI.
    - They many write out the individual problems vertically or horizontally.
- Explore More:

Day 3:

- Mastery Practice:
    - Math Facts for 7-12 (use flashcards)
- Discuss:
    -
- Explore:
- Written work:
    - 2nd Grade Mathematics p. 8 (Lesson LXV and LXVI)
- Notes:
    - Have students work through Lessons LXV and LXVI orally
- Explore More:

Week 9

Topics:

- Addition
- Subtraction

Textbook reference and written work:

- 2nd Grade Mathematics p. 9

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Review:
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- Discuss:
- Explore:
- Written work:
    - 2nd Grade Mathematics p. 9 (Lesson LXVII #1-4)
- Notes:
    - Have students show their work for Lesson LXVII.
    - They many write out the individual problems vertically or horizontally.

- Explore More:
  -

Day 2:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  -
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 9 (Lesson LXVII #5-8)
- Notes:
  - Have students show their work for Lesson LXVII.
  - They many write out the individual problems vertically or horizontally.
- Explore More:

Day 3:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  -
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 9 (Lesson LXVII #9-11)
- Notes:
  -
- Explore More:

Week 10

Topics:

- Addition
- Subtraction

Textbook reference and written work:

- 2nd Grade Mathematics p. 10

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Review:
  - What do we mean when we say "add" in Math? (put numbers together to find the sum or total of the numbers)
  - What do we mean when we say "and" in Math? (used to connect two numbers to indicate that they are being added together)
  - What do we mean when we say "from" in Math? (we are going to be subtracting)
  - What do we mean when we say "take" in Math? (remove one amount from another amount)
- Discuss:
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 10 (Lesson LXVIII the first two lines)
- Notes:
  - Have students show their work for Lesson LXVII.
  - They many write out the individual problems vertically or horizontally.
- Explore More:
  - Have students work the first two lines of problems orally

Day 2:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  -
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 10 (Lesson LXVIII the third and fourth lines)
- Notes:
  - Have students show their work for Lesson LXVIII.
  - They many write out the individual problems vertically or horizontally.
- Explore More:
  - Have students work the third and fourth lines orally

Day 3:

- Mastery Practice:
  - Math Facts for 7-12 (use flashcards)
- Discuss:
  -
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 10 (Lesson LXVIII the fifth and sixth lines)
- Notes:
  -
- Explore More:
  - Have students work the fifth and sixth lines orally.

Week 11

Topics:

- Addition
- Subtraction

Textbook reference and written work:

- 2nd Grade Mathematics p. 11

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards

Suggested Daily Schedule:

Day 1:

- Review:
  -
- Discuss:
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 11 (Lesson LXIX #1-4)
- Notes:
  - Have students write out and work each
  - Be sure to have students label answers correctly.
- Explore More:
  - Have students demonstrate any problems that are reasonable to demonstrate (counting out change, for example)
  - Have students draw a picture to demonstrate other problems.
    - Discuss why using numbers and labels is much more efficient than drawing pictures to solve math problems. (It is easier to add 50 to 25 than draw 50 trees and 25 trees and then count all of them, for example)

Day 2:

- Mastery Practice:
  - Math Facts for 1-6 (use flashcards)
- Discuss:

    -
- Explore:
- Written work:
    - 2nd Grade Mathematics p. 11 (Lesson LXIX #5-8)
- Notes:
    - Have students write out and work each
    - Be sure to have students label answers correctly.
- Explore More:
    - Have students demonstrate any problems that are reasonable to demonstrate (counting out change, for example)
    - Have students draw a picture to demonstrate other problems.
        - Discuss why using numbers and labels is much more efficient than drawing pictures to solve math problems. (It is easier to add 50 to 25 than draw 50 trees and 25 trees and then count all of them, for example)

Day 3:

- Mastery Practice:
    - Math Facts for 1-6 (use flashcards)
- Discuss:
    -
- Explore:
- Written work:
    - 2nd Grade Mathematics p. 11 (Lesson LXIX #9-11)
- Notes:
- Explore More:
    - Have students demonstrate any problems that are reasonable to demonstrate (counting out change, for example)
    - Have students draw a picture to demonstrate other problems.
        - Discuss why using numbers and labels is much more efficient than drawing pictures to solve math problems. (It is easier to add 50 to 25 than draw 50 trees and 25 trees and then count all of them, for example)

Week 12

Topics:

- Addition
- Subtraction

Words to Remember:

- Addition: the method of finding the total number of units contained in two or more numbers and expressing them in one number, called the amount, or sum
- Sum: total amount ORIGIN Middle English: via Old French from Latin summa ‘main part, sum total,’ feminine of summus ‘highest.’
- Units: the digit before the decimal point in decimal notation, representing an integer less than ten (ORIGIN late 16th cent. (as a mathematical term): from Latin unus)

Textbook reference and written work:

- 2nd Grade Mathematics p. 12

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards
- Markers
- Sticky notes
- Coins
- Paper money

Suggested Daily Schedule:

Day 1:

- Note:
    - In the coming weeks, we will work with the symbols used in Math, rather than the words they represent (+ instead of add or and, etc.). As such, a good review is beneficial.
    - Page 12 in 2nd Grade Mathematics was seen in 1st Grade Mathematics.

- Review:
  - Units
  - Tens
  - Hundreds
- Define (put in Math notebook):
  - Addition:
  - Sum:
  - Rule on p. 12
- Explore:
  If students have a solid grasp of units and tens, explaining carrying over the remainder from the ones column will be relatively straight forward. Nevertheless, children may benefit from seeing units carrying over illustrated.
  - On a sheet of paper, draw 4 columns. Label the one on the right units, the next tens, the next hundreds, and the one on the left thousands.
  - Write 15 above 17 and a line below the 17 on a separate piece of paper.
    Discuss that only ones can go in the Ones column.
    - If we add 7 and 5, we get 12 *units*. Another way to write 12 *units* is 1 *ten* and 2 *units*.
      Put the 1 and 2 in their respective columns- the 1 should go at the top of the tens column.
      - Think back to Roman numerals. How did we write 12 in Roman notation? (One X (ten)and two II (units)- sound familiar?)
    - Now, add the tens column.
      - Do all of the tens fit in the column? (Yes)

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  - Have students write 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 on sticky notes
  - Have the students create numbers
    - For example, the 2 sticky note to the left of the 5 sticky note would be the number 25.
  - Have students identify the units, tens, and hundreds in the numbers they form
- Written work:
  -
- Notes:
  -
- Explore More:
  - Have students group together to add their created numbers, putting emphasis on units, tens, and hundreds (units go above units, tens go above tens, etc.)

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  - Put coins and paper money in a bag, hat, or box
  - Have students choose, without looking, three or four pieces of currency
  - Identify how many units, tens, and hundreds are represented in the various amounts of money
  - Repeat
- Written work:
  -
- Notes:
- Explore More:
  -

Week 13

Topics:

- Addition
- Subtraction
- Symbols

Words to Remember:

- Addition: the method of finding the total number of units contained in two or more numbers and expressing them in one number, called the amount, or sum
- Sum: total amount ORIGIN Middle English: via Old French from Latin summa ‘main part, sum total,’ feminine of summus ‘highest.’
- Units: the digit before the decimal point in decimal notation, representing an integer less than ten (ORIGIN late 16th cent. (as a mathematical term): from Latin unus)

Textbook reference and written work:

- 2nd Grade Mathematics p. 13

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards
- Markers
- Sticky notes
- Coins
- Paper money

Suggested Daily Schedule:

Day 1:

- Review:
  - Units
  - Tens
  - Hundreds
- Define (put in Math notebook):
  -
- Written work: 2nd Grade Mathematics p. 13 #1-6
- Explore:

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 13 #7-12
- Notes:
  -
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 13 #13-17
- Notes:
- Explore More:
  -

Topics:

- Addition
- Subtraction
- Symbols

Words to Remember:

- Addition: the method of finding the total number of units contained in two or more numbers and expressing them in one number, called the amount, or sum
- Sum: total amount ORIGIN Middle English: via Old French from Latin summa ‘main part, sum total,’ feminine of summus ‘highest.’
- Units: the digit before the decimal point in decimal notation, representing an integer less than ten (ORIGIN late 16th cent. (as a mathematical term): from Latin unus)

Textbook reference and written work:

- 2nd Grade Mathematics p. 14

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards
- Markers
- Sticky notes
- Coins
- Paper money

Suggested Daily Schedule:

Day 1:

- Review:
  - Units
  - Tens
  - Hundreds
- Define (put in Math notebook):
  -
- Written work: 2nd Grade Mathematics p. 14 #1-3
- Notes:
  - Write out the problems and use proper symbols. Show all work.
- Explore:

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 14 #4-6
- Notes:
  - Write out the problems and use proper symbols. Show all work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 14 #7-9

- Notes:
  - Write out the problems and use proper symbols. Show all work.
- Explore More:
  -

Week 15

Topics:

- Subtraction

Words to Remember:

- Remainder: the number found by taking a less number from a greater
- Difference: the number found by taking a less number from a greater; shows how many the greater number exceeds the less
- Subtrahend: the less number; a quantity to be subtracted from another ORIGIN late 17th cent.: from Latin subtrahendus ‘to be taken away,’ gerundive of subtrahere
- Minuend: the greater number; quantity or number from which another is to be subtracted ORIGIN early 18th cent.: from Latin minuendus, gerundive of minuere ‘diminish.’
- Units: the digit before the decimal point in decimal notation, representing an integer less than ten (ORIGIN late 16th cent. (as a mathematical term): from Latin unus)

Textbook reference and written work:

- 2nd Grade Mathematics p. 15

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Note cards
- Markers
- Sticky notes
- Coins
- Paper money

Suggested Daily Schedule:

Day 1:

- Review:
  - Units
  - Tens
  - Hundreds
- Define (put in Math notebook):
  - Greater
  - Less
  - Remainder
  - Difference
  - Subtrahend
  - Minuend
- Written work: 2nd Grade Mathematics p. 15
  - Definitions
- Notes:
  -
- Explore:

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 15

Illustration. — A merchant purchased 765 yards of cloth, and has since sold 523 yards of it; what number of yards has he remaining unsold?

765 No. of yards purchased.
523 No. of yards sold.
242 No. of yards unsold.

We first write down the greater number; then we write the less number under the greater, placing units under units, tens under tens, and hundreds under hundreds. We then take 3 units from 5 units, and 2 units remain, which we write directly under the units. Then 2 tens from 6 tens, and 4 tens remain, which we write under the tens. Lastly, 5 hundred from 7 hundred, and 2 hundred remain, which we write under the hundreds. The whole remainder or difference is 242.

- Notes:
  - Write out the examples and use proper symbols. Show all work. Be sure to label answers as it is warranted.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 15

When any figure of the less number is larger than the corresponding figure of the greater number, the following question and its illustration will show the method of performing the operation: —

A man borrowed 94 dollars, and has paid 46 dollars; how many dollars remain unpaid?

Borrowed 94 dollars.
Paid 46 dollars.
Unpaid 48 dollars.

We cannot take 6 units from 4 units; and as 10 units of any *lower order* are equal to 1 unit of the next *higher order*, we add 10 units to 4 units, and the sum is 14 units; and 6 units from 14 units leave 8 units. We now add 1 (*ten*) to the 4 tens, and the sum is 5 tens, and 5 tens from 9 tens leave 4 tens; therefore 48 dollars remain unpaid. The reason of this method of performing subtraction depends upon a self-evident truth, viz., *that if two unequal numbers be equally increased, their difference remains the same.*

- Notes:
  - Write out the problems and use proper symbols. Show all work. Be sure to label answers as it is warranted.
- Explore More:

Week 16

Topics:

- Subtraction
- Symbols of subtraction

Words to Remember:

- Remainder: the number found by taking a less number from a greater
- Difference: the number found by taking a less number from a greater; shows how many the greater number exceeds the less
- Subtrahend: the less number; a quantity to be subtracted from another ORIGIN late 17th cent.: from Latin subtrahendus ‘to be taken away,’ gerundive of subtrahere
- Minuend: the greater number; quantity or number from which another is to be subtracted ORIGIN early 18th cent.: from Latin minuendus, gerundive of minuere ‘diminish.’
- Units: the digit before the decimal point in decimal notation, representing an integer less than ten (ORIGIN late 16th cent. (as a mathematical term): from Latin unus)
- Rule on p. 16

Textbook reference and written work:

- 2nd Grade Mathematics p. 16

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate subtraction
- Note cards
- Markers
- Sticky notes
- Coins
- Paper money

Suggested Daily Schedule:

Day 1:

- Review:
  - Units
  - Tens
  - Hundreds
- Define (put in Math notebook):
  - Rule from p. 16
- Written work: 2nd Grade Mathematics p. 16
  - Discuss Rule from p. 16
- Notes:
  -
- Explore:

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Symbols of Subtraction (p. 16)
- Explore:
  - Go on a walk (around the house or outside). Gather groups of things. Set up subtraction problems using like items.
  - Example: 4 oranges minus 3 oranges equals 1 orange
  - Talk through the problem with the objects. Have the student say "4 minus 3 equals 1." Then, write the problem on paper using the correct symbols.
  - Do this with multiple groups of objects (marbles, toy trucks, blocks, etc.).
- Written work:
  - 2nd Grade Mathematics p. 16
  -
- Notes:
  - It may be important to point out that we can only add and subtract like items. You cannot, for example, subtract 3 apples from 4 oranges.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 16 #1-12
  -
  -
- Notes:
  - Write out the problems and use proper symbols. Show all work. Be sure to label answers as it is warranted.
  - Have students speak through their work, too.
- Explore More:

Week 17

Topics:

- Subtraction

Words to Remember:

- Remainder: the number found by taking a less number from a greater
- Difference: the number found by taking a less number from a greater; shows how many the greater number exceeds the less
- Subtrahend: the less number; a quantity to be subtracted from another ORIGIN late 17th cent.: from Latin subtrahendus ‘to be taken away,’ gerundive of subtrahere
- Minuend: the greater number; quantity or number from which another is to be subtracted ORIGIN early 18th cent.: from Latin minuendus, gerundive of minuere ‘diminish.’
- Units: the digit before the decimal point in decimal notation, representing an integer less than ten (ORIGIN late 16th cent. (as a mathematical term): from Latin unus)
- Rule on p. 16

Textbook reference and written work:

- 2nd Grade Mathematics p. 17

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate subtraction
- Note cards
- Markers
- Sticky notes
- Coins
- Paper money

Suggested Daily Schedule:

Day 1:

- Review:
  - Words to Remember
- Define (put in Math notebook):
  -
- Written work: 2nd Grade Mathematics p. 17 #1-4
  -
- Notes:
  - Write out all problems and label correctly. If necessary, have students speak through the problem.
- Explore:

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Symbols of Subtraction (p. 16)
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 17 #5-8
  -
- Notes:
  - Write out the problems and use proper symbols. Show all work. Be sure to label answers as it is warranted.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:

-
- Written work:
  - 2nd Grade Mathematics p. 17 #9-12
  -
  -
- Notes:
  - Write out the problems and use proper symbols. Show all work. Be sure to label answers as it is warranted.
  - Have students speak through their work, too.
- Explore More:
  - Think of a daily situation (going to the grocery store, eating supper, etc.)
  - Work to create and solve a subtraction problem.
  - Example: There are six people in our family. Dad grills 12 cheeseburgers. 6 cheeseburgers are eaten at supper. How many cheeseburgers are left? Is that enough cheeseburgers for supper the next day if everyone eats 1?

Week 18

Topics:

- Subtraction
- Addition

Words to Remember:

-

Textbook reference and written work:

- 2nd Grade Mathematics p. 18

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate subtraction
- Note cards
- Markers
- Sticky notes
- Coins
- Paper money

Suggested Daily Schedule:

Day 1:

- Review:
  - Words to Remember
- Define (put in Math notebook):
  -
- Written work: 2nd Grade Mathematics p. 18 #1-4
  -
- Notes:
  - Write out all problems and label correctly. If necessary, have students speak through the problem.
- Explore:

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 18 #5-8
  -
- Notes:
  - Write out the problems and use proper symbols. Show all work. Be sure to label answers as it is warranted.

- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 18 #8-12
  -
  -
- Notes:
  - Write out the problems and use proper symbols. Show all work. Be sure to label answers as it is warranted.
  - Have students speak through their work, too, if further understanding is needed.
- Explore More:
  -

Week 19

Topics:

- Signs of operations

Words to Remember:

- +: sign of addition, read "and" or "added to"
- -: sign of subtraction, read "less" or "minus"
- x: sign of multiplication, read "times" or "multiplied by"
- ÷: sign of division, read "divided by"
- =: sign of equality, read "equal" or "are equal to"

Textbook reference and written work:

- 2nd Grade Mathematics p. 19

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p.
  -
- Notes:
  -
- Explore:
  - Using the sticky notes or note cards, create or have students create problems.
  - Have the student correctly read each statement. Statements may be read in a variety of ways.
    - Ex. 1 + 1 = 2 formed with the cards would read "one and one are equal to two"

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)

- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 19 Lesson LXXIV
  -
- Notes:
  - Be sure students both read and write the statements.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 19 LXXV
  -
  -
- Notes:
  - Be sure students both read and write the statements.
- Explore More:
  -

Week 20

Topics:

- Signs of operations

Words to Remember:

- +: sign of addition, read "and" or "added to"
- -: sign of subtraction, read "less" or "minus"
- x: sign of multiplication, read "times" or "multiplied by"
- ÷: sign of division, read "divided by"
- =: sign of equality, read "equal" or "are equal to"

Textbook reference and written work:

- 2nd Grade Mathematics p. 20

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p.
  -
- Notes:

-
- Explore:
  - Using the sticky notes or note cards, create or have students create problems.
  - Have the student correctly read each statement. Statements may be read in a variety of ways.
    - Ex. 1 + 1 = 2 formed with the cards would read "one and one are equal to two"
  - Labeling practice:
    - Using sticky notes, have students label groups of items in the house or classroom. Have them identify both the quantity and the kind.
      - Example: 7 bananas

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 20 Lesson LX
  -
- Notes:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 20 LXI
  -
  -
- Notes:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.
- Explore More:
  -

Week 21

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 20

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)

- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 21 Lesson LXII
  -
- Notes:
  - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (2 in 2, once, etc.)
  - See further notes in the Explore section
- Explore:
  - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXII.
  - With the division squares sheet, cut the grey squares into groups of two. Use the grey groups of two to demonstrate how many twos go in a particular group. There is no need to cut out the grouped squares that are not grey.
  - Discuss how many groups of two can go into 2 using the blank group of two:
    - How many groups of two can go into this group of two? (One)
    - So, 2 goes into 2 how many times? (Once)
  - Continue on with groups of two going into 4, etc. using the same dialogue.

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - If I have 10 pennies, how many times can I put 1 penny in before I have covered all 10 pennies? (10 times)
    - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
  - So, 1 times 10 equals 10.
  - Here I have 10 pennies. Into how many groups of 1 can the 10 pennies be divided? [have student demonstrate] (10)
  - So, 10 divided by 1 equals 10.
  - Sometimes it is more efficient to group items by two instead of 1.
  - Here I have 10 pennies. Into how many groups of 2 can the 10 pennies be divided? [have student demonstrate] (5)
  - So, 10 divided by 2 is 5
  -
- Explore:
  - Use even-numbered groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) to work with finding how many twos are in each group (division) or how many twos it takes to make a certain group size (multiplication).
  - Examples:

2 in 2, once	2 times 1 are how many?
2 in 4, 2 times	2 times 2 are how many?
2 in 6, 3 times	3 times 2 are how many?
2 in 8, 4 times	4 times 2 are how many?
2 in 10, 5 times	5 times 2 are how many?
2 in 12, 6 times	6 times 2 are how many?
2 in 14, 7 times	7 times 2 are how many?
2 in 16, 8 times	8 times 2 are how many?
2 in 18, 9 times	9 times 2 are how many?
2 in 20, 10 times	10 times 2 are how many?

- Written work:
- Notes:
  - Be sure students label their answers correctly.
  - Have students speak through the problems as they work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 21 LXII (the questions at the bottom of the lesson)
  -
  -
- Notes:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.
- Explore More:
  -

Week 22

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 21

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 21 Lesson LXII
  -
- Notes:
  - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (3 in 3, once, etc.)
  - See further notes in the Explore section
- Explore:
  - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXIII.
  - With the division squares sheet, cut the grey squares into groups of three. Use the grey groups of three to demonstrate how many threes go in a particular group. There is no need to cut out the grouped squares that are not grey.
  - Discuss how many groups of three can go into 3 using the blank group of three:
    - How many groups of three can go into this group of three? (One)
    - So, 3 goes into 3 how many times? (Once)

    - Continue on with groups of three going into 6, etc. using the same dialogue.

Day 2:

- Mastery Practice:
    - Math Facts for 1-12 (use flashcards)
- Discuss:
    - If I have 6 pennies, how many times can I put 1 penny in before I have covered all 6 pennies? (6 times)
        - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
    - So, 1 times 6 equals 6.
    - Here I have 6 pennies. Into how many groups of 1 can the 6 pennies be divided? [have student demonstrate] (6)
    - So, 6 divided by 1 equals 6.
    - Sometimes it is more efficient to group items by three instead of 1.
    - Here I have 6 pennies. Into how many groups of 3 can the 6 pennies be divided? [have student demonstrate] (2)
    - So, 6 divided by 3 is 2
    -
- Explore:
    - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) in multiples of three (3, 6, 9, 12, etc.) to work with finding how many threes are in each group (division) or how many threes it takes to make a certain group size (multiplication).
    - Examples:
3 in 3, once	Once 3 are how many?
3 in 6, 2 times	2 times 3 are how many?
3 in 9, 3 times	3 times 3 are how many?
3 in 12, 4 times	4 times 3 are how many?
3 in 15, 5 times	5 times 3 are how many?
3 in 18, 6 times	6 times 3 are how many?
3 in 21, 7 times	7 times 3 are how many?
3 in 24, 8 times	8 times 3 are how many?
3 in 27, 9 times	9 times 3 are how many?
3 in 30, 10 times	10 times 3 are how many?
- Written work:
- Notes:
    - Be sure students label their answers correctly.
    - Have students speak through the problems as they work.
- Explore More:
    -

Day 3:

- Mastery Practice:
    - Math Facts for 1-12 (use flashcards)
- Discuss:
    - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
    - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
    -
- Written work:
    - 2nd Grade Mathematics p. 21 LXIII (the questions at the bottom of the lesson)
    -
    -
- Notes:
    - Be sure students label correctly.
    - Have students speak through at least some of the problems as they work.
- Explore More:
    -

Week 23

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 22

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 22 Lesson LXIV
  -
- Notes:
  - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (4 in 4, once, etc.)
  - See further notes in the Explore section
- Explore:
  - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXIV.
  - With the division squares sheet, cut the grey squares into groups of four. Use the grey groups of four to demonstrate how many fours go in a particular group. There is no need to cut out the grouped squares that are not grey.
  - Discuss how many groups of four can go into 4 using the blank group of four:
    - How many groups of 4 can go into this group of four? (One)
    - So, 4 goes into 4 how many times? (Once)
  - Continue on with groups of four going into 8, etc. using the same dialogue.

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - If I have 8 pennies, how many times can I put 1 penny in before I have covered all 8 pennies? (8 times)
    - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
  - So, 1 times 8 equals 8.
  - Here I have 8 pennies. Into how many groups of 1 can the 8 pennies be divided? [have student demonstrate] (8)
  - So, 8 divided by 1 equals 8.
  - Sometimes it is more efficient to group items by four instead of 1.
  - Here I have 8 pennies. Into how many groups of 4 can the 8 pennies be divided? [have student demonstrate] (2)
  - So, 8 divided by 4 is 2
  -
- Explore:
  - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) in multiples of four (4, 8, 12, 16, etc.) to work with finding how many fours are in each group (division) or how many fours it takes to make a certain group size (multiplication).
  - Examples:

4 in 4, once	Once 4 are how many?
4 in 8, 2 times	2 times 4 are how many?
4 in 12, 3 times	3 times 4 are how many?
4 in 16, 4 times	4 times 4 are how many?
4 in 20, 5 times	5 times 4 are how many?
4 in 24, 6 times	6 times 4 are how many?
4 in 28, 7 times	7 times 4 are how many?
4 in 32, 8 times	8 times 4 are how many?
4 in 36, 9 times	9 times 4 are how many?
4 in 40, 10 times	10 times 4 are how many?

- Written work:
- Notes:
  - Be sure students label their answers correctly.
  - Have students speak through the problems as they work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 22 LXIV (the questions at the bottom of the lesson)
  -
  -
- Notes:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.
- Explore More:
  -

Week 24

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 22

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 22 Lesson LXV
  -
- Notes:
  - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (5 in 5, once, etc.)
  - See further notes in the Explore section
- Explore:
  - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXV.
  - With the division squares sheet, cut the grey squares into groups of five. Use the grey groups of five to demonstrate how many fives go in a particular group. There is no need to cut out the grouped squares that are not grey.
  - Discuss how many groups of five can go into 5 using the blank group of five:
    - How many groups of 5 can go into this group of five? (One)
    - So, 5 goes into 5 how many times? (Once)
  - Continue on with groups of five going into 10, etc. using the same dialogue.

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - If I have 10 pennies, how many times can I put 1 penny in before I have covered all 10 pennies? (10 times)
    - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
  - So, 1 times 10 equals 10.
  - Here I have 10 pennies. Into how many groups of 1 can the 10 pennies be divided? [have student demonstrate] (10)
  - So, 10 divided by 1 equals 10.
  - Sometimes it is more efficient to group items by five instead of 1.
  - Here I have 10 pennies. Into how many groups of 5 can the 10 pennies be divided? [have student demonstrate] (2)
  - So, 10 divided by 5 is 2
  -
- Explore:
  - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) in multiples of five (5, 10, 15, etc.) to work with finding how many fives are in each group (division) or how many fives it takes to make a certain group size (multiplication).
  - Examples:

5 in 5, once	Once 5 are how many?
5 in 10, 2 times	2 times 5 are how many?
5 in 15, 3 times	3 times 5 are how many?
5 in 20, 4 times	4 times 5 are how many?
5 in 25, 5 times	5 times 5 are how many?
5 in 30, 6 times	6 times 5 are how many?
5 in 35, 7 times	7 times 5 are how many?
5 in 40, 8 times	8 times 5 are how many?
5 in 45, 9 times	9 times 5 are how many?
5 in 50, 10 times	10 times 5 are how many?

- Written work:
- Notes:
  - Be sure students label their answers correctly.
  - Have students speak through the problems as they work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.

    - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
    -
- Written work:
    - 2nd Grade Mathematics p. 22 LXV (the questions at the bottom of the lesson)
    -
    -
- Notes:
    - Be sure students label correctly.
    - Have students speak through at least some of the problems as they work.
- Explore More:
    -

Week 25

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 23

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
    - Words to Remember
- Define (put in Math notebook):
    - Words to Remember
- Written work: 2nd Grade Mathematics p. 23 Lesson LXVI
    -
- Notes:
    - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (6 in 6, once, etc.)
    - See further notes in the Explore section
- Explore:
    - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXVI.
    - With the division squares sheet, cut the grey squares into groups of six. Use the grey groups of six to demonstrate how many sixes go in a particular group. There is no need to cut out the grouped squares that are not grey.
    - Discuss how many groups of six can go into 6 using the blank group of six:
        - How many groups of 6 can go into this group of six? (One)
        - So, 6 goes into 6 how many times? (Once)
    - Continue on with groups of six going into 12, etc. using the same dialogue.

Day 2:

- Mastery Practice:

- Math Facts for 1-12 (use flashcards)
- Discuss:
  - If I have 12 pennies, how many times can I put 1 penny in before I have covered all 12 pennies? (12 times)
    - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
  - So, 1 times 12 equals 12.
  - Here I have 12 pennies. Into how many groups of 1 can the 12 pennies be divided? [have student demonstrate] (12)
  - So, 12 divided by 1 equals 12.
  - Sometimes it is more efficient to group items by six instead of 1.
  - Here I have 12 pennies. Into how many groups of 6 can the 12 pennies be divided? [have student demonstrate] (2)
  - So, 12 divided by 6 is 2
  -
- Explore:
  - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) in multiples of six (6, 12, 18, etc.) to work with finding how many sixes are in each group (division) or how many sixes it takes to make a certain group size (multiplication).
  - Examples:

6 in 6, once	Once 6 are how many?
6 in 12, 2 times	2 times 6 are how many?
6 in 18, 3 times	3 times 6 are how many?
6 in 24, 4 times	4 times 6 are how many?
6 in 30, 5 times	5 times 6 are how many?
6 in 36, 6 times	6 times 6 are how many?
6 in 42, 7 times	7 times 6 are how many?
6 in 48, 8 times	8 times 6 are how many?
6 in 54, 9 times	9 times 6 are how many?
6 in 60, 10 times	10 times 6 are how many?

- Written work:
- Notes:
  - Be sure students label their answers correctly.
  - Have students speak through the problems as they work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 23 LXVI (the questions at the bottom of the lesson)
  -
  -
- Notes:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.
- Explore More:
  -

Week 26

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else

- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 23

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 23 Lesson LXVII
  -
- Notes:
  - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (7 in 7, once, etc.)
  - See further notes in the Explore section
- Explore:
  - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXVII.
  - With the division squares sheet, cut the grey squares into groups of seven. Use the grey groups of seven to demonstrate how many sevens go in a particular group. There is no need to cut out the grouped squares that are not grey.
  - Discuss how many groups of seven can go into 7 using the blank group of seven:
    - How many groups of 7 can go into this group of seven? (One)
    - So, 7 goes into 7 how many times? (Once)
  - Continue on with groups of seven going into 14, etc. using the same dialogue.

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - If I have 14 pennies, how many times can I put 1 penny in before I have covered all 14 pennies? (14 times)
    - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
  - So, 1 times 14 equals 14.
  - Here I have 14 pennies. Into how many groups of 1 can the 14 pennies be divided? [have student demonstrate] (14)
  - So, 14 divided by 1 equals 14.
  - Sometimes it is more efficient to group items by seven instead of 1.
  - Here I have 14 pennies. Into how many groups of 7 can the 14 pennies be divided? [have student demonstrate] (2)
  - So, 14 divided by 7 is 2
  -
- Explore:
  - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) in multiples of seven (7, 14, 21, etc.) to work with finding how many sevens are in each group (division) or how many sevens it takes to make a certain group size (multiplication).
  - Examples:

7 in 7, once	Once 7 are how many?
7 in 14, 2 times	2 times 7 are how many?
7 in 21, 3 times	3 times 7 are how many?
7 in 28, 4 times	4 times 7 are how many?
7 in 35, 5 times	5 times 7 are how many?
7 in 42, 6 times	6 times 7 are how many?
7 in 49, 7 times	7 times 7 are how many?
7 in 56, 8 times	8 times 7 are how many?
7 in 63, 9 times	9 times 7 are how many?
7 in 70, 10 times	10 times 7 are how many?

- Written work:
- Notes:
  - Be sure students label their answers correctly.
  - Have students speak through the problems as they work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 23 LXVII (the questions at the bottom of the lesson)
  -
  -
- Notes:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.
- Explore More:
  -

Week 27

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 24

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 24 Lesson LXVIII
  -
- Notes:
  - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (8 in 8, once, etc.)
  - See further notes in the Explore section
- Explore:
  - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXVIII.
  - With the division squares sheet, cut the grey squares into groups of eight. Use the grey groups of eight to demonstrate how many eights go in a particular group. There is no need to cut out the grouped squares that are not grey.
  - Discuss how many groups of eight can go into 8 using the blank group of eight:
    - How many groups of 8 can go into this group of eight? (One)
    - So, 8 goes into 8 how many times? (Once)
  - Continue on with groups of eight going into 16, etc. using the same dialogue.

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - If I have 16 pennies, how many times can I put 1 penny in before I have covered all 16 pennies? (16 times)
    - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
  - So, 1 times 16 equals 1.
  - Here I have 16 pennies. Into how many groups of 1 can the 16 pennies be divided? [have student demonstrate] (16)
  - So, 16 divided by 1 equals 16.
  - Sometimes it is more efficient to group items by eight instead of 1.
  - Here I have 16 pennies. Into how many groups of 8 can the 16 pennies be divided? [have student demonstrate] (2)
  - So, 16 divided by 8 is 2
  -
- Explore:Written work:
  - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) in multiples of eight (8, 16, 24, etc.) to work with finding how many eights are in each group (division) or how many eights it takes to make a certain group size (multiplication).
  - Examples:
    -

8 in 8, once	Once 8 are how many?
8 in 16, 2 times	2 times 8 are how many?
8 in 24, 3 times	3 times 8 are how many?
8 in 32, 4 times	4 times 8 are how many?
8 in 40, 5 times	5 times 8 are how many?
8 in 48, 6 times	6 times 8 are how many?
8 in 56, 7 times	7 times 8 are how many?
8 in 64, 8 times	8 times 8 are how many?
8 in 72, 9 times	9 times 8 are how many?
8 in 80, 10 times	10 times 8 are how many?

- Notes:
  - Be sure students label their answers correctly.
  - Have students speak through the problems as they work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.

    - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
    -
- Written work:
    - 2nd Grade Mathematics p. 24 LXVIII (the questions at the bottom of the lesson)
    -
    -
- Notes:Explore More:
    - Be sure students label correctly.
    - Have students speak through at least some of the problems as they work.
-

Week 28

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 24

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
    - Words to Remember
- Define (put in Math notebook):
    - Words to Remember
- Written work: 2nd Grade Mathematics p. 24 Lesson LXIX
    -
- Notes:
    - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (9 in 9, once, etc.)
    - See further notes in the Explore section
- Explore:
    - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXIX.
    - With the division squares sheet, cut the grey squares into groups of nine. Use the grey groups of nine to demonstrate how many nines go in a particular group. There is no need to cut out the grouped squares that are not grey.
    - Discuss how many groups of nine can go into 9 using the blank group of nine:
        - How many groups of 9 can go into this group of nine? (One)
        - So, 9 goes into 9 how many times? (Once)
    - Continue on with groups of nine going into 18, etc. using the same dialogue.

Day 2:

- Mastery Practice:
    - Math Facts for 1-12 (use flashcards)

- Discuss:
  - If I have 18 pennies, how many times can I put 1 penny in before I have covered all 18 pennies? (18 times)
    - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
  - So, 1 times 18 equals 18.
  - Here I have 18 pennies. Into how many groups of 1 can the 18 pennies be divided? [have student demonstrate] (18)
  - So, 18 divided by 1 equals 18.
  - Sometimes it is more efficient to group items by nine instead of 1.
  - Here I have 18 pennies. Into how many groups of 9 can the 18 pennies be divided? [have student demonstrate] (2)
  - So, 18 divided by 9 is 2
  -
- Explore:Written work:
  - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) in multiples of nine (9, 18, 27, etc.) to work with finding how many nines are in each group (division) or how many nines it takes to make a certain group size (multiplication).
  - Examples:
    -

9 in 9, once	Once 9 are how many?
9 in 18, 2 times	2 times 9 are how many?
9 in 27, 3 times	3 times 9 are how many?
9 in 36, 4 times	4 times 9 are how many?
9 in 45, 5 times	5 times 9 are how many?
9 in 54, 6 times	6 times 9 are how many?
9 in 63, 7 times	7 times 9 are how many?
9 in 72, 8 times	8 times 9 are how many?
9 in 81, 9 times	9 times 9 are how many?
9 in 90, 10 times	10 times 9 are how many?

-
- Notes:
  - Be sure students label their answers correctly.
  - Have students speak through the problems as they work.
- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 24 LXIX (the questions at the bottom of the lesson)
  -
  -
- Notes:Explore More:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.
-

Week 29

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 25

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 25 Lesson LXX
- Notes:
  - On Day 1 of this lesson, simply work through a demonstration of the statements at the beginning of the lesson (10 in 10, once, etc.)
  - See further notes in the Explore section
- Explore:
  - Using wooden cubes or the division squares sheet, demonstrate the statements at the top of Lesson LXX.
  - With the division squares sheet, cut the grey squares into groups of ten. Use the grey groups of ten to demonstrate how many tens go in a particular group. There is no need to cut out the grouped squares that are not grey.
  - Discuss how many groups of ten can go into 10 using the blank group of ten:
    - How many groups of 10 can go into this group of ten? (One)
    - So, 10 goes into 10 how many times? (Once)
  - Continue on with groups of ten going into 20, etc. using the same dialogue.

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - If I have 20 pennies, how many times can I put 1 penny in before I have covered all 20 pennies? (20 times)
    - Note: you are counting the action, not the total number of pennies. This is similar to the Day 1 activity with squares or cubes
  - So, 1 times 20 equals 20.
  - Here I have 20 pennies. Into how many groups of 1 can the 20 pennies be divided? [have student demonstrate] (20)
  - So, 20 divided by 1 equals 20.
  - Sometimes it is more efficient to group items by ten instead of 1.
  - Here I have 20 pennies. Into how many groups of 10 can the 20 pennies be divided? [have student demonstrate] (2)
  - So, 20 divided by 10 is 2
  -
- Explore:Written work:
  - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) in multiples of ten (10, 20, 30, etc.) to work with finding how many tens are in each group (division) or how many tens it takes to make a certain group size (multiplication).
  - Examples:

10 in 10 once	Once 10 are how many?
10 in 20 2 times	2 times 10 are how many?
10 in 30 3 times	3 times 10 are how many?
10 in 40 4 times	4 times 10 are how many?
10 in 50 5 times	5 times 10 are how many?
10 in 60 6 times	6 times 10 are how many?
10 in 70 7 times	7 times 10 are how many?
10 in 80 8 times	8 times 10 are how many?
10 in 90 9 times	9 times 10 are how many?
10 in 100 10 times	10 times 10 are how many?

-
- Notes:

    - Be sure students label their answers correctly.
    - Have students speak through the problems as they work.
- Explore More:
    -

Day 3:

- Mastery Practice:
    - Math Facts for 1-12 (use flashcards)
- Discuss:
    - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
    - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
    -
- Written work:
    - 2nd Grade Mathematics p. 25 LXX (the questions at the bottom of the lesson)
    -
    -
- Notes:Explore More:
    - Be sure students label correctly.
    - Have students speak through at least some of the problems as they work.
-

Week 30

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 25

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet
- Multiplication table

Suggested Daily Schedule:

Day 1:

- Discuss:
    - We have spoken in that past about numbers communicating order.
    - Let us explore the patterns we can see in the numbers of a multiplication table
- Define (put in Math notebook):
    - Words to Remember
- Written work: 2nd Grade Mathematics
    -
- Notes:
    -
- Explore:

- Look at the Multiplication table.
- What patterns do you notice?
  - Look at the tens place and the ones/units place.
  - Look vertically
  - Look horizontally
  - Look diagonally
- Discuss your observations

Day 2:

- Mastery Practice:
  - Math Facts for 1-10 multiplication (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
- Written work:
  - 2nd Grade Mathematics p. 25 LXXI- the first 3 problem (the questions at the bottom of the lesson)
- Notes:Explore More:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 25 LXXI- the last three problems (the questions at the bottom of the lesson)
  -
  -
- Notes:
  - Be sure students label correctly.
  - Have students speak through at least some of the problems as they work.
- Explore More:
-

Week 31

Topics:

- Review "places"
- Division
- Multiplication

Words to Remember:

- ones/units: the digit before the decimal point in decimal notation, representing an integer less than ten ORIGIN late 16th cent. (as a mathematical term): from Latin unus, probably suggested by digit.
- integer: a whole number; a number that is not a fraction.
- tens: a group of ten people or things ORIGIN Old English tēn, tīen, of Germanic origin; related to Dutch tien and German zehn, from an Indo-European root shared by Sanskrit daśa,Greek deka, and Latin decem
- digit: any of the numerals from 0 to 9 ORIGIN late Middle English: from Latin digitus ‘finger, toe’
- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by
- half: either of two equal or corresponding parts into which something is or can be divided ORIGIN Old English half, healf, of Germanic origin; related to Dutch half and German halb (adjectives). The earliest meaning of the Germanic base was ‘side,’ also a noun sense in Old English.

Textbook reference and written work:

- 2nd Grade Mathematics p. 26

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet
- HTO Places Chart

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
  - Heretofore we have progressed to the multiplication and division of numbers through 10.
  - Following, we will return to our study of units and tens and then proceed in our study of multiplication and division of numbers through 12.
  -
- Define (put in Math notebook):
  - Words to Remember
- Review:
  - Ones/units:
    - What is an example of a unit? (a stick, a banana, a block, etc.)
    - How many units is 2? 3? 4? etc.
    - How many units is 10?
  - Tens:
    - We can have 1 unit, 2 units, etc. up through 9 units and we only have to write one digit
      - What is a digit?
    - Once we get to ten units, we have to write two digits, 1 and 0. The one, logically, goes in what we call the tens place and the zero goes in what we call the ones or units place.
    - Let us explore tens a bit to help us understand that a digit is a mark of communication and the units/ones and tens places help define the digits.
- Explore:
  - When you read a word, the letters all have a particular place in the word. If the letters were in a different place, it would be a different word and would mean something different. For example, the word **dad** means what? Now, if we use the same letters, but put them in different places, we have a word like **add**. We used the same letters, but we put them in different places, and thus the second word means something different than the first word.
    - You can use other examples, too: car/arc, break/brake, team/tame/mate, etc.
  - Similarly, different letters can have different sounds. What different sounds can the letter 'a' make? Something that we call 'a' can have different jobs.
  - The same thing applies to numbers. We can put digits in different places and they will mean different things. Likewise, something we call '1'
  - Take a look at the HTO Places Chart.
  - Name the digits in the ones place. Another way of saying these numbers, as you know, is one one, two ones, three ones, four ones, etc. But, to be more efficient, we just say one, two, three, four, etc., but we know that when we say four we are talking about four ones.
  - Once the digits move to the tens place, we are communicating something different. Because the one is in the tens place, it no longer means one, it means ten ones. If there is a two in the tens place, it means twenty ones or two tens. We know that ten ones and ten ones are twenty ones. Instead of saying twenty ones, we just say twenty.
  - What do we call the 3 in the tens place? (30), etc.
- Written work:
  -
  - Use the blank HTO chart to write digits in the ones and tens places. Then, name the number you have written. Aside from that name, how are other ways to describe that number?
    - Example: the student puts a 1 in the tens place and a 5 in the ones place. We call this fifteen. Other ways to describe that number are one ten and five ones or fifteen ones.

- Notes:
  -
- Explore:
  -

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Explore:
  - Using your sticky notes or note cards with digits 0-9, form numbers and discuss what they mean.
    - Example: the 2 card is placed to the right of the 1 card. We call this twenty-one.
  - Create and discuss as many combinations as time and motivation allow.
  -
- Explore more:
  - Use groups of objects (bananas, marbles, blocks, rocks, leaves, etc.) to prove the discussions you had about the numbers formed in the Explore section.
    -
-

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Review the discussions from the past days.
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 26 LXX
  -
  -
- Notes:
  - Have students write all of the problems and speak through at least some of the problems as they work.

Week 32

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by
- multiply: obtain from (a number) another that contains the first number a specified number of times
- half: either of two equal or corresponding parts into which something is or can be divided ORIGIN Old English half, healf, of Germanic origin; related to Dutch half and German halb (adjectives). The earliest meaning of the Germanic base was ‘side,’ also a noun sense in Old English.
- Equal: being the same in quantity, size, degree, or value ORIGIN late Middle English: from Latin aequalis, from aequus ‘even, level, equal.’

Textbook reference and written work:

- 2nd Grade Mathematics p. 26

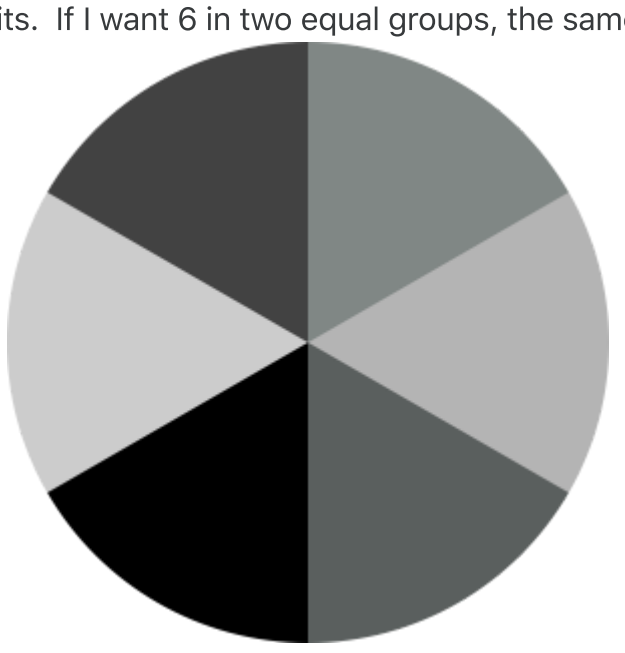
Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Discuss:
- Written work:
  -
- Notes:
  - Explore addresses the first questions in Lesson LXXI and Discuss addresses the second questions in Lesson LXXI.
  -
  - See further notes in the Explore section
- Explore:
  - If I say 2 times 2 are how many, what am I saying?
    - Two is two units.
    - Times means multiplied by
    - To multiply 2 times 2, I am saying I want to groups of 2 (or two groups of two ones).
    - Two is 2 ones (write hash marks on the board or use sticks to demonstrate).
    - How many units are in two groups of 2? (4)
- Discuss:
  - If I cut something in half, how many pieces do I have? (2)
  - In geography, we talk about hemispheres. What is a hemisphere? (half of a sphere or half of the earth).
  - So, when we talk about half, we are talking about two equal parts. What does equal mean? (same)
  - We know that if we have a number like 20, we can describe it in multiple ways. What are some ways we can describe 20?
    - two 10s (two groups of ten units)
    - four 5s (four groups of five units)
    - twenty 1s (twenty units)
    - five 4s (five groups of four units)
  - Feel free to demonstrate these with objects.
  - If I want half of twenty, how many parts do I need? (2)
  - So, another way to think about 1 half 20 is 20 divided into 2 parts or 20 divided by 2.
  - When I ask the question What is 1 half of 6?, I am asking how many units I have in each group if I divide 6 by 2.
  - Let us divide 6 by 2.
    - We know 6 is 6 units. If I want 6 in two equal groups, the same number of units must be in each group.
    - Look at this visual:



    - If I cut this circle with 6 wedges (units) in half, how many wedges (units) will I have in each half? (3)
  - Continue this discussion with all of the "half" questions in Lesson XXI.

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  - Review the discussion from the previous session.
  -
- Explore:
- Written work: 2nd Grade Mathematics p. 26 Lesson LXXI
-
- Notes:
  -

- Explore More:
  -

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Discuss:
  -
- Explore:
  -
- Written work:
  - 2nd Grade Mathematics p. 26 LXXII (the questions at the bottom of the lesson)
  -
  -
- Notes:Explore More:
  - Have students speak through at least some of the problems as they work.
-

Week 33

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 27

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 27 Lesson LXXIII (#1-2)
  -
- Notes:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
  - Be sure students write out their calculations and label the answer correctly.
- Explore:
  -

Day 2:

- Mastery Practice:

- Math Facts for 1-12 (use flashcards)
- Written work: 2nd Grade Mathematics p. 27 Lesson LXXIII (#3-5)
- Notes:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
  - Be sure students write out their calculations and label the answer correctly.

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Explore:
  -
  - Have students read through problems 1-5 on p. 27
  - Have students gather items to demonstrate the problems.
  - Have students demonstrate #1-5 with the items they gathered.
-

Week 34

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 24

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 27 Lesson LXXIII (#6-7)
  -
- Notes:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
  - Be sure students write out their calculations and label the answer correctly.
- Explore:
  -

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Written work: 2nd Grade Mathematics p. 27 Lesson LXXIII (#8-10)
- Notes:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
  - Be sure students write out their calculations and label the answer correctly.

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Explore:
  -
  - Have students read through problems 6-10 on p. 27
  - Have students gather items to demonstrate the problems.
  - Have students demonstrate #6-10 with the items they gathered.
-

Week 35

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 27

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 27 Lesson LXXIII (#11-12)
  -
- Notes:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
  - Be sure students write out their calculations and label the answer correctly.
- Explore:
  -

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Written work: 2nd Grade Mathematics p. 27 Lesson LXXIII (#13-15)
- Notes:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
  - Be sure students write out their calculations and label the answer correctly.

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Explore:
  -
  - Have students read through problems 11-15 on p. 27
  - Have students gather items to demonstrate the problems.
  - Have students demonstrate #11-15 with the items they gathered.
-

Week 36

Topics:

- Division
- Multiplication

Words to Remember:

- in: expressing the situation of something that is or appears to be enclosed or surrounded by something else
- times: multiplied by

Textbook reference and written work:

- 2nd Grade Mathematics p. 27

Materials

- Math Notebook
- Math Facts flashcards
- Math Facts sheets (optional)
- Groups of items to demonstrate
- Note cards
- Sticky notes or note cards with +, -, x, ÷, and = (one sign on each card)
- Sticky notes or note cards with 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Sticky notes
- Pennies
- Wooden blocks (cube) or division squares sheet

Suggested Daily Schedule:

Day 1:

- Discuss:
  - Words to Remember
- Define (put in Math notebook):
  - Words to Remember
- Written work: 2nd Grade Mathematics p. 27 Lesson LXXIII (#16-17)
  -
- Notes:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
  - Be sure students write out their calculations and label the answer correctly.
- Explore:
  -

Day 2:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Written work: 2nd Grade Mathematics p. 27 Lesson LXXIII (#18-20)
- Notes:
  - Look at the problems. Have students identify the information they know from the problem and the information they need to know from the question.
  - The process of asking what they know and what they need to know is an important habit to establish. It will help students become attuned to information
  - Be sure students write out their calculations and label the answer correctly.

Day 3:

- Mastery Practice:
  - Math Facts for 1-12 (use flashcards)
- Explore:
  -
  - Have students read through problems 16-20 on p. 27
  - Have students gather items to demonstrate the problems.
  - Have students demonstrate #16-20 with the items they gathered.
-