Curriculum Map

Name of Teacher <u>Ismath</u>

Subject Gr-5 Math

Month of October 2019

Unit/	Γheme
-------	-------

Dividing by 1-digit Divisors

Enduring Understandings : Students will be able to

- 1. Find the quotient of a division problem whose dividend is a multiple of 10, where division involves a basic fact.
- 2. understand basic facts and how place value patterns can be used to divide multiples of 10,100, and so forth by one digit numbers.
- 3. share interpretation of division and money can be used to model the standard division algorithm.
- 4. understand that there is more than one way to estimate a quotient.
- 5. substituting compatible numbers is an efficient technique for estimating quotients.
- 6. find answers to the problems and should always check for reasonableness and this can be done in different ways.
- 7. use two ways to estimate and to check the answer to the question in the problem.
- 8. use information in a problem to show diagram and solve the problem.
- 9. understand that some problems can be solved by writing and completing a number sentence or equation.

Essential Questions

- 1. What is the standard procedure for division and why does it work?
- 2. How to make a model for division?
- 3. How to divide mentally?
- 4. How to estimate quotients?
- 5. How to use the distributive property to find quotients of three digit dividends and one digit divisors?
- 6. How to use models to solve problems?
- 7. How to use fact families and patterns to solve division problems?
- 8. How to estimate the solutions of division problems?
- 9. How can you use compatible numbers to estimate quotients?
- 10. How can you check that your answer is reasonable?
- 11. when you divide a 3-digit number by a 1 digit number, how do you know where to put the first 3 digit in the quotient?
- 12. When do you write a zero in the quotient?
- 13. How can you use estimation to decide if your quotient is reasonable?
- 14. How can you draw a picture to help choose an operation?
- 15. How does drawing a bar diagram help you write an equation to solve a problem?
- 16. How is repeated subtraction the same thing as division?

- Vocabulary Activity
- Division Game
- Leveled Division Practice

Assessments

Formative (Throughout)

- Classroom observation
- Homework- envision common core workbook
- Guided practice
- Topic1 test
- Performance task

Summative (End of Year)

Standardized tests and quizzes

Time Frame/Month: 21 days

Resources/Websites(Primary/Secondary)

- https://www.engageny.org/resource/grade-5-mathematics-module-1
- https://grade5commoncoremath.wikispaces.hcpss.org/home
- https://learnzillion.com/common core/math/5
- https://www.illustrativemathematics.org/content-standards/5/NBT
- http://www.free-test-online.com/ccss/grade5/grade5 base ten.html
- http://www.k-5mathteachingresources.com/5th-grade-number-activities.html

Textbook Name (Chapters/Pages): envision Math Common core CH:4 Pages:79-104.

Subject _Gr-5 Math

November

Unit/Theme

Ch: 5 Dividing by 2-digit divisors.

Enduring Understandings

Students will be able to:

- 1. Use basic facts and patterns can be helpful in dividing by multiples of 10.
- 2. Use area models and arrays can help students understand the algorithm for dividing by 2-digit divisors.
- 3. Understand that some real-world quantities have a mathematical relationship; the value of one quantity can be found if you know the value of the other quantity.
- 4. use Patterns can sometimes be used to identify the relationship between quantities.
- 5. understand that there is more than one way to estimate a quotient.
- 6. Substitute compatible numbers in as efficient technique for estimating quotients.
- 7. Divide by 2-digit divisors is just an extension of the steps for dividing with 1-digit divisors.
- 8. Estimate and place value can help determine the placement of digits in the quotient.
- 9. Divide with multi-digit divisors is just an extension of the steps for dividing with 1 and 2-digit divisors.
- 10. Estimate and place value can help determine the placement of digits in the quotient. 11.

Essential Questions:

- 1. what is the standard procedure for dividing with two-digit divisors?
- 2. How do you use models to divide a number?
- 3. How is multiplication used to solve division problems?
- 4. How can you use partial quotients to divide by two-digit divisors?
- 5. Why is division used to solve this problem?
- 6. How can you divide by 2-digit divisors?
- 7. How can you use the solve a simpler problem strategy to help you solve a division problem?
- 8. How can you use compatible numbers to estimate quotients?
- 9. How does understanding the structure of the number system help you solve problems?

- 10. How can you use the inverse of a numerical operation to help you compute an answer?
- 11. which mathematical skills are necessary to be fluent in computation?
- 12. How can you represent division in different ways?
- 13. How do you choose different division strategies to divide multi-digit numbers?
- 14. How can patterns help you divide larger multiples of 10?
- 15. HOw can you use models and symbols to find quotients?
- 16. What are the steps in dividing by a multiple often?
- 17. What are the steps for dividing by 2-digit numbers?
- 18. How can you divide larger numbers?
- 19. How do you solve problems involving division with greater numbers?
- 20. How do you find missing information or not use the extra information in a given word problem?

- Vocabulary activity
- Do-Now
- Division game
- Leveled Division practice

Assessments

Formative (Throughout)

- Classroom Observation.
- Homework-envision common core workbook.
- Guided Practice.
- Exit slips.
- Topic test
- Performance Task

Summative (End of Year)

Standardized tests and quizzes

Time Frame/Month: 3 weeks

Resources/Websites(Primary/Secondary)

www.engageny.org/resource/grade-5-mathematics-module 2

www.commoncoremathworksheets.com

www.learnzillion.com

www.illustrativemathematics.org

www.free-test-online.com

www.k-5mathteachingresources.com

Textbook Name (Chapters/Pages)

envision Math Common Core CH:5 Pages: 105-130

Curriculum Map

Name of Teacher _Ismat_

Subject _Gr-5 Math_

Month of December

Unit/Theme: Ch 5:Dividing by 2-digit Divisors

Enduring Understandings: students will be

- 1. using basic facts and patterns can be helpful in dividing by multiples of 10.
- 2. using area models and arrays can help students understand the algorithm for dividing by 2-digit divisors.
- 3. some real world quantities have a mathematical relationship; the value of one quantity can be found if you know the value of the other quantity. Patterns can sometimes be used to identify the relationship between quantities.
- 4. there is more than one way to estimate a quotient substituting compatible numbers is an efficient technique for estimating quotients.
- 5. Dividing by 2-digit divisors is just an extension of the steps for dividing with 1-digit divisors.
- 6. Estimation and place value can help determine the placement of digits in the quotient.
- 7. Dividing with multi-digit divisors is just an extension of the steps for dividing with 1- and 2- digit divisors.
- 8. Estimation and place value can help determine the placement of digits in the quotient.
- 9. Some problems have data missing that is needed to find the answer, and some problems have extra data not needed to solve the problem.
- 10. divide the first place value possible.
- 11. Multiply to find the greatest numbers of groups of the divisor that is less than the dividend.
- 12. subtract to find the amount left over.
- 13. Compare the amount left over to make sure it is less than the divisor.
- 14. regroup the amount left over as the next least place value.
- 15. Using compatible numbers and rounding helps to calculate the actual quotients.
- 16. understand that division with multi-digit dividends and divisors can be represented and done using an array.
- 17. understand that basic facts and place value can be used in dividing whole numbers.
- 18. understand that steps in the standard algorithm for dividing whole numbers.
- 19. Understand that values for certain quantities may be missing but needed to solve some real-world problems.

Essential Questions

- 1. What is the standard procedure for dividing with two-digit divisors?
- 2. HOw can patterns help you divide large multiples of 10?
- 3. write four division problems with a divisor of 40 and quotients of 3,30,300, and 3000.
- 4. How can you use compatible numbers to estimate quotients?
- 5. What are compatible numbers?
- 6. HOw can you use arrays to model multi-digit division?
- 7. How can you use models and symbols to find quotients?
- 8. How do you divide by a multiple of ten?
- 9. What are the steps in dividing by a multiple of ten?
- 10. What are the steps for dividing by 2-digit numbers?
- 11. How can you divide larger numbers?
- 12. How do you solve problems involving division of greater numbers?
- 13. why should you estimate?
- 14. How do I identify missing information in a word problem?

Activities

- Vocabulary Activity
- Division Game

- Leveled Division Practice
- Drawing models

Assessments

Formative (Throughout)

- Classroom observation
- Homework- envision common core workbook
- Guided practice
- Topic 5 test
- Performance task
- Engage ny module assessment

Summative (End of Year)

Standardized tests and quizzes

Time Frame/Month: 3 weeks

Resources/Websites(Primary/Secondary)

www.khanacademy.com

www.education.com

www.k5learning.com

www.mathland.com

www.commoncoresheets.com

Textbook Name (Chapters/Pages)

Envision Math common core: ch.5 Pages 105-130

Subject: Gr-5 MATH

Unit/Theme

6&7: Multiplying Decimals & Dividing Decimals

Enduring Understandings: Students will be able to

- **1.** Recognize that in a multi-digit number, a digit in one's place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.
- 2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.
- **3.** Use whole-number exponents to denote powers of 10.
- **4.** Fluently multiply multi-digit whole numbers using standard algorithm.
- **5.** Add, multiply, subtract, and divide decimals to hundredths, using concrete drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- **6.** Relate the strategy to a written method and explain the reasoning used.
- **7.** Explain the patterns in the number of zeros of the product when multiplying a number by powers of 10.
- **8.** Explain patterns in the placement of the decimal point when a decimal is multiplies or divided by a power of 10.
- 9. Multiply decimals by 10,100 and 1000.
- **10.** Estimating the product of a decimal and a whole number.
- 11. Multiply decimals using number sense.
- **12.** Draw models for multiplying decimals.
- 13. Multiplying decimals by a whole number.
- 14. Multiplying two decimals.
- **15.** Solve multiple step problems.
- **16.** Find whole-number quotients and remainders up to four digit dividends and one-digit divisors, using strategies based on place value, the operations.
- 17. Dividing decimals by 10,100, or 1000.
- **18.** Estimating decimal quotients.
- **19.** Dividing by a whole number.
- **20.** illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- **21.** Dividing a whole number by a decimal.
- **22.** Dividing a decimal by a decimal.

23. Solve multiple step problems using division strategies.

Essential Questions

- 1. What are the standard procedures for estimating and finding products involving decimals?
- 2. When in everyday life do you use decimals?
- 3. What is the rule for multiplying decimals by 10,100 and 1000?
- 4. How many places in the right do you need to relocate the decimal when multiplying by 10?
- 5. How many places in the right do you need to relocate the decimal when multiplying by 100?
- 6. How many places in the right do you need to relocate the decimal when multiplying by 1000?
- 7. Where in everyday life do you use estimation?
- 8. What are some ways to estimate products with decimals?
- 9. What should 184 be rounded to?
- 10. If you multiply two numbers greater than 1, what do you know about the product?
- 11. How can you use number sense for decimal multiplication?
- 12. How can you multiply decimals and whole numbers?
- 13. How can number sense be used to determine the location of decimal points in decimal multiplication calculations?
- 14. What are variables?
- 15. How can you multiply a decimal by a whole number?
- 16. Where in everyday life might you need to multiply using decimals?
- 17. How do you multiply a whole number by a decimal?
- 18. How can you multiply two decimals?
- 19. How can you solve multi-step problems?
- 20. What do you need to find in a word problem? Circle that in the problem.
- 21. What do you know? Underline that in the problem.
- 22. Is any extra information given? Cross that out in the problem.
- 23. What strategy or strategies can you use?
- 24. How could you solve the problem?
- 25. What are the standard procedures for estimating and finding quotients involving decimals?
- 26. How can you divide decimals by 10,100 and 1000?
- 27. In everyday life, when might you need to use division with?
- 28. HOw can numbers in division, calculations be changed to other numbers that are easy to compute with mentally?
- 29. How can you use estimation to find quotients?
- 30. HOw can you use reasoning to correctly place the decimal point in the quotient?
- 31. How can you use number sense for decimal division?
- 32. HOw can you divide a whole number by a decimal?
- 33. How can you divide a decimal by a whole number?
- 34. How can you divide a decimal using a decimal divisor?

35. HOw do you solve multiple step problems using division strategies?

Activities

- Center activity
- Algebra connections
- Tic , Tac and Toe
- Pyramid division
- hands on activities
- clip and cover
- Enrichment master
- Display the digits
- Toss and talk
- Think together
- Team work

Assessments

Formative (Throughout)

- Classroom observation
- Homework- envision common core workbook
- Guided practice
- Topic1 test
- Performance task

Summative (End of Year)

• Standardized tests and quizzes

Time Frame/Month

Resources/Websites(Primary/Secondary)

https://www.engageny.org/resource/grade-5-mathematics-module-1

https://grade5commoncoremath.wikispaces.hcpss.org/home

https://learnzillion.com/common_core/math/5

https://www.illustrativemathematics.org/content-standards/5/NBT

http://www.free-test-online.com/ccss/grade5/grade5_base_ten.html

http://www.k-5mathteachingresources.com/5th-grade-number-activities.html

Textbook Name (Chapters/Pages): Pearson Realize Edition topics 6&7

Topic 6:Pages : 131-134 Topic 7: pages 155-176 Unit/Theme Topic: 8 : Numerical expressions, patterns, and relationships.

9:Adding and subtracting Mixed numbers.

Half of topic 10: Adding and subtracting Mixed numbers.

Enduring Understandings: Students will be able to

- Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
- 2. Generate a number or shape pattern that follows a given rule.
- 3. Identify apparent features of the pattern that were not explicit in the rule itself.
- 4. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- 5. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.
- 6. Generate two numerical patterns using two given rules.
- 7. Identify apparent relationships between corresponding terms.
- 8. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.
- 9. Write, read, and evaluate expressions in which letters stand for numbers.
- 10. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expressions as a single entity.
- 11. Evaluate expressions at special values of their variables.
- 12. Include expressions that arise from formulas used in real- world problems.
- 13. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of operations).
- 14. Apply the properties of operations to generate equivalent expressions.
- 15. Some mathematical phrases can be represented using a variable in an algebraic expression.
- 16. To simplify a numerical expression, first compute within parentheses.
- 17. Patterns can sometimes be used to identify a relationship between two quantities.
- 18. Patterns that repeat in predictable ways may be used to identify relationships.
- 19. Some problems can be solved by using objects to act out the actions in the problem.
- 20. Some problems can be solved by reasoning about the conditions in the problem.
- 21. Mathematical explanations can be given using words, pictures, numbers, or symbols.
- 22. Information in a problem can often be shown using a diagram and used to solve the problem.
- 23. Some problems can be solved by writing and completing a number sentence or equation.

- 24. A number line can be used to determine the nearest half or whole a fraction is closest to.
- 25. Fractions with unlike denominators can be added or subtracted by replacing fractions with equivalent fractions with like denominators .
- 26. The product of the denominators of two fractions is a common denominator of both.
- 27. Whole numbers, integers and fractions are real numbers.
- 28. Explain how they estimated fractional amounts of objects.
- 29. Use a number line to estimate sums and differences of fractions.
- 30. Sums and differences of mixed numbers can be estimated by rounding each number to the nearest whole number .
- 31. One way to add mixed numbers is to utilize a number line and find common denominators.
- 32. Models can be used to show different ways of adding and subtracting mixed numbers.
- 33. Sometimes whole numbers or fractions need to be renamed.
- 34. One way to subtract mixed numbers is to utilize a number line to model and find common denominators.

Essential Questions

- 1. How are the values of the algebraic expression and a numeric expression found?
- 2. What are the different word phrases you could use to describe 4+3?
- 3. How to translate words into numerical expressions?
- 4. How can you evaluate a numerical expression containing more than one operation?
- 5. How can you use the order of operations to evaluate expressions with decimals?
- 6. How can you evaluate an expression with brackets?
- 7. How can you find a rule and write an addition and subtraction expression?
- 8. How can you find a rule and write an expression?
- 9. How can you find a rule and write a multiplication and division expression?
- 10. How can you find the relationship between two sequences?
- 11. How can you act out a problem and use reasoning to solve it?
- 12. How can using objects help you solve a problem?
- 13. What does it mean to add and subtract fractions with unlike denominators?
- 14. What is a standard procedure for adding and subtracting fractions with unlike denominators?
- 15. How do you write a math explanation?
- 16. Write a real world problem that involves fractions and a geometric shape?
- 17. How can you estimate the sum or difference of two fractions?
- 18. Why is it useful to estimate sums and differences?
- 19. How would you estimate adding or subtracting the fraction 1/4?
- 20. How can you add fractions with unlike denominators?
- 21. How can you subtract fractions with unlike denominators?
- 22. How to find the least common multiple?
- 23. How can you simplify an expression with two groups of parentheses?
- 24. How can adding and subtracting fractions help you solve problems?

- 25. What operation is needed to solve a problem with fractions?
- 26. Write a word problem that can be solved which includes fractions?
- 27. What does it mean to add and subtract mixed numbers?
- 28. What is a standard procedure for adding and subtracting mixed numbers?
- 29. How can you use a number line to round fractions and mixed numbers to estimate their sums and differences?
- 30. How to use models to add mixed numbers?
- 31. How can you model the addition of mixed numbers?
- 32. How can you add mixed numbers?
- 33. How can you subtract mixed numbers?
- Activities:
- Problem-Based interactive learning
- Hands-on learning
- Mixed problem solving
- White board activity

Assessments

Formative (Throughout)

- Quick check Master
- Daily common core review
- Reteaching Master
- Practice Master
- Enrichment Master
- Multiple choice test master

Summative (End of Year)

- Benchmark test topics 5-8
- Topic 8 test
- Performance Task
- Topic 9 test
- Performance Task

Time Frame/Month: 28 days

Resources/Websites(Primary/Secondary)

Www.pearsonrealize.com

Www.k5learning.com

Www.schoolsonwheels.com

Www.education.com

Textbook Name (Chapters/Pages) Pearson realize :pages- 177-200

Topic 9- pages :201-226.

Topic 10:(10-4) -pages :230-238.

Curriculum Map

Name of Teacher: Ismat

Subject: Gr-5 Math MOnth of MARCH

Unit/Theme

- 11. Multiplying and dividing fractions and mixed numbers.
- 12. Volume of solids
- 13. Units of measure

Enduring Understandings: students will be able to understand

- 1. A fraction describes the division of a whole into equal parts, and it can be interpreted in more than one way depending on the whole to be divided.
- 2. The product of a whole number and a fraction can be interpreted in different ways.
- 3. One interpretation is repeated addition.
- 4. Multiplying a whole number by a fraction involves division as well as multiplication.
- 5. The product is a fraction of the whole number.
- 6. A unit square can be used to show the area meaning of fraction multiplication.
- 7. Multiplication can be interpreted as scaling.
- 8. Rounding and compatible numbers can be used to estimate when multiplying with fractions.
- 9. Meaning of multiplying with fractions.
- 10. Meaning of fraction a/b as a divided by b.
- 11. That a fraction, mixed number or decimal can be used to represent the quotient of two whole numbers.
- 12. The meaning of dividing a whole by a fractional a mount.
- 13. The meaning of dividing a whole by a fractional amount.
- 14. The meaning of dividing a unit fraction by a whole number.
- 15. A bar diagram can be used to identify the relationship between quantities and used to select an appropriate operation for finding a solution.
- 16. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
- 17. To understand that the volume of a rectangular prism is the number of unit cubes it contains.

- 18. That the volume of a rectangular prism is the number of unit cubes it contains, and multiplying the length by the width by the height rather than counting individual cubes gives the volume.
- 19. That the volume of some solids can be found by breaking apart the solid into other solids.
- 20. Finding the volume of each smaller solid, and then adding to find the total.
- 21. That the volume of a rectangular prism is the number of cubic units it is made of.
- 22. That relationship, like 1 foot=12 inches can be used to convert customary length measurements.
- 23. Relationships like 1 gallon=4 quarts can be used to convert customary capacity measurements.
- 24. Relationships like 1 pound= 16 ounces can be used to convert customary weight measurements.
- 25. Relationships like 1 cm= 10 mm can be used to convert metric length measurements.
- 26. Relationships like 1 liter = 1,000 ml can be used to convert metric capacity measurements.
- 27. Relationships like 1 gram= 1,000 mg can be used to convert metric mass measurements.
- 28. Some measurement problems are solved by first converting given measurements to the same unit of measure.

Essential Questions:

- 1. How can you multiply fractions and whole numbers?
- 2. What are some ways to think about multiplying fractions and whole numbers?
- 3. How does multiplying by a fraction change the second factor?
- 4. How can you use number sense to evaluate the size of a product when multiplying a fraction by a whole number?
- 5. How can you use compatible numbers to estimate fractions?
- 6. How can you use number sense and benchmark fractions to estimate products of fractions?
- 7. How can you multiply fractions?
- 8. How can you find the area of a rectangle?
- 9. How can you multiply mixed numbers?
- 10. How do you find the product of mixed numbers?
- 11. How can you solve multiple step problems?
- 12. How are fractions related to division?
- 13. How can you share items?
- 14. How can you use a fraction, mixed number or decimal to represent a quotient?
- 15. How can you show a quotient using a fraction or decimal?
- 16. How can you divide a whole number by a fraction?
- 17. How can you divide by a fraction?
- 18. How can you model dividing a unit fraction by a whole number?
- 19. How can drawing a picture and writing an equation help you solve a problem?
- 20. How can three-dimensional shapes be represented and analyzed?
- 21. What does the volume of a rectangular prism mean and how can it be found?
- 22. How are parallel lines different from the perpendicular lines?
- 23. How can you use models to find the volume of a rectangular prism?
- 24. How can you measure volume?
- 25. How can you find the volume of a rectangular prism?
- 26. How can you use a formula to find the volume of a rectangular prism?
- 27. How can you use volume formulas to solve a problem?
- 28. How can you use objects to solve problems?
- 29. How can you change from one customary unit of length to another?

- 30. How do you change from one unit of length to another?
- 31. How do you change from one unit of capacity to another?
- 32. How do you change units of capacity?
- 33. How can you convert between customary units of weight?
- 34. How can you convert units of weight?
- 35. How can you convert metric units of length?
- 36. How can you convert metric units?
- 37. How do you convert metric units of capacity?
- 38. How can you convert between metric units of mass?
- 39. How do you find the hidden questions to solve multiple step problems?

- Problem-Based interactive learning
- Hands-on learning
- Mixed problem solving
- White board activity

Assessments

Formative (Throughout)

- Quick check Master
- Daily common core review
- Reteaching Master
- Practice Master
- Enrichment Master
- Multiple choice test master

Summative (End of Year)

- Benchmark test topics 5-8
- Topic 8 test
- Performance Task
- Topic 9 test
- Performance Task

Time Frame/Month: 21 days

Resources/Websites(Primary/Secondary)

www.pearsonrealize.com

www.khanacademy.org

Pearson workbook

Www.k5learning.com

Www.schoolsonwheels.com

Www.education.com

Textbook Name (Chapters/Pages)

Pearson Realize:

Topic 11/249-285

Topic 12 /288 -303

Topic 13/304-324

Unit/Theme

13. Units of measure (continued)

Ready Book math

14.Data

Enduring Understandings: students will be able to understand

- 1. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
- 2. To understand that the volume of a rectangular prism is the number of unit cubes it contains.
- 3. That the volume of a rectangular prism is the number of unit cubes it contains, and multiplying the length by the width by the height rather than counting individual cubes gives the volume.
- 4. That the volume of some solids can be found by breaking apart the solid into other solids.
- 5. Finding the volume of each smaller solid, and then adding to find the total.
- 6. That the volume of a rectangular prism is the number of cubic units it is made of.
- 7. That relationship, like 1 foot=12 inches can be used to convert customary length measurements.
- 8. Relationships like 1 gallon=4 quarts can be used to convert customary capacity measurements.
- 9. Relationships like 1 pound= 16 ounces can be used to convert customary weight measurements.
- 10. Relationships like 1 cm= 10 mm can be used to convert metric length measurements.
- 11. Relationships like 1 liter = 1,000 ml can be used to convert metric capacity measurements.
- 12. Relationships like 1 gram= 1,000 mg can be used to convert metric mass measurements.
- 13. Some measurement problems are solved by first converting given measurements to the same unit of measure.
- 14. Learn and understand how to draw line plots, interpret points, and recognize outliers.
- 15. Collect and record data in frequency tables and line plots.
- 16. Interpret results.
- 17. Make a line plot from data in a frequency table.
- 18. Use the information in a line plot to solve problems involving the data.
- 19. Some questions can be answered using a survey.
- 20. Write mathematical explanations that relate to line graphs that show data changing over time.

Essential Questions:

1. What does the volume of a rectangular prism mean and how can it be found?

- 2. How are parallel lines different from the perpendicular lines?
- 3. How can you use models to find the volume of a rectangular prism?
- 4. How can you measure volume?
- 5. How can you find the volume of a rectangular prism?
- 6. How can you use a formula to find the volume of a rectangular prism?
- 7. How can you use volume formulas to solve a problem?
- 8. How can you use objects to solve problems?
- 9. How can you change from one customary unit of length to another?
- 10. How do you change from one unit of length to another?
- 11. How do you change from one unit of capacity to another?
- 12. How do you change units of capacity?
- 13. How can you convert between customary units of weight?
- 14. How can you convert units of weight?
- 15. How can you convert metric units of length?
- 16. How can you convert metric units?
- 17. How do you convert metric units of capacity?
- 18. How can you convert between metric units of mass?
- 19. How do you find the hidden questions to solve multiple step problems?
- 20. How can line plots be used to represent data and answer questions?
- 21. How can numbers be used to describe certain data sets?
- 22. How can you organize data in a line plot?
- 23. What are some different kinds of data displays that you have seen?
- 24. How can you display the data collected in a survey?
- 25. How can you find out people's interests or things they like?
- 26. How can we organize and represent measurement data?
- 27. What information do you need to make a line plot?
- 28. How can we use line plots to organize and represent measurement data?
- 29. How can we solve problems involving measurement data?
- 30. What attributes can be shown in a line plot?
- 31. How can we use measurement data represented in a line plot to solve problems?
- 32. How do you write a good math explanation?
- 33. How did you identify important information on the graph?

- Problem-Based interactive learning
- Hands-on learning
- Mixed problem solving
- White board activity

Assessments

Formative (Throughout)

- Quick check Master
- Daily common core review
- Reteaching Master
- Practice Master
- Enrichment Master
- Multiple choice test master

Summative (End of Year)

- Ready book fractions test
- Topic 13 test
- Performance Task
- Topic 14 test
- Performance Task

Time Frame/Month: 16 days

Resources/Websites(Primary/Secondary)

www.pearsonrealize.com

www.khanacademy.org

Pearson workbook

Www.k5learning.com

Www.schoolsonwheels.com

Www.education.com

Textbook Name (Chapters/Pages)

Pearson Realize:

Topic 13/304-324

Topic 14/ 325-342.

Math ready book for state test practice.

Curriculum Map

Name of Teacher: Ismat

Subject: Gr-5 Math Month of MAY

Unit/Theme

15.classifying plane figures

16.coordinate geometry

Enduring Understandings: students will be able to understand

- 1. Classifying two dimensional figures in hierarchy based on properties.
- 2. Understand that attributes belonging to a category of two dimensional figures also belong to all subcategories of that category.
- 3. Classify two-dimensional figures in a hierarchy based on properties.
- 4. Name the polygon and state whether it is regular or irregular.
- 5. Classify the triangle by the measure of its angles and the lengths of its sides.
- 6. Classify the quadrilateral; and then find the missing angle measure.
- 7. Many special quadrilaterals have special attributes.
- 8. A trapezoid has exactly one pair of parallel sides.
- 9. A parallelogram has two pairs of equal parallel sides.
- 10. A rectangle is a parallelogram with four right angles.
- 11. A rhombus is a parallelogram with 4 sides.
- 12. A square is a parallelogram with 4 right angles and 4 equal sides.
- 13. Use a pair of perpendicular number lines called axes to define a coordinate system.
- 14. With the intersection of the lines (also known as the origin) arranged to coincide with the zero on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates.
- 15. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis with the convention that the names of the two axis and the coordinates correspond(e.g.,x-axis and x-coordinate, y-axis and y-coordinate).
- 16. A coordinate grid has a horizontal x-axis and a vertical y-axis.
- 17. The point at which the x-axis and y-axis intersect is called the origin.
- 18. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
- 19. Generate two numerical patterns using two given rules.
- 20. Identify a parent relationship between corresponding terms.
- 21. Forms ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on coordinate plane.

Essential Questions:

- 1. How can angles be measured and classified?
- 2. How can polygons, triangles, and quadrilaterals be described, classified and named?
- 3. How do you classify a polygon?
- 4. How can you classify triangles?
- 5. How can you recognize a quadrilateral?
- 6. How can you find the number of parallel sides in a quadrilateral?
- 7. Which shapes are special cases of another shape?
- 8. How many pairs of opposite sides are parallel?
- 9. Which sides have equal lengths?
- 10. How many right angles are there?
- 11. How are a square and a rhombus alike?
- 12. How is a parallelogram different from a rhombus?
- 13. How are they similar?
- 14. How are special quadrilaterals related to each other?
- 15. How are a rectangle and a rhombus alike?
- 16. Why is a square also a rhombus?
- 17. How do you name a point on a coordinate grid?
- 18. Why is the order important when naming and plotting the coordinates of a point?
- 19. How do you use coordinate graphs to solve a problem?
- 20. How do you show number relationships on a graph?
- 21. How can you generate and analyze numerical patterns?
- 22. How are points graphed?
- 23. How can we show the relationship between sequences on a graph?

Activities

- Problem-Based interactive learning
- Hands-on learning
- Mixed problem solving
- White board activity

Assessments

Formative (Throughout)

- Quick check Master
- Daily common core review
- Reteaching Master
- Practice Master
- Enrichment Master

Multiple choice test master
·
Summative (End of Year)
Ready book
Topic 15 test
Performance Task
Topic 16 test
Performance Task
Time Frame/Month: 16 days
Resources/Websites(Primary/Secondary)
www.pearsonrealize.com
www.khanacademy.org
Pearson workbook
Www.k5learning.com
<u>Www.schoolsonwheels.com</u>
Www.education.com
Textbook Name (Chapters/Pages)
Pearson Realize :
Topic 15/343-362
Topic 16/ 363-382.
Math ready book for state test practice.