



Grade 4 Mathematics COURSE SYLLABUS

GRADE LEVEL: Grade 4 **SCHOOL YEAR:** 2022-23

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COURSE DESCRIPTION:

Fourth grade math provides many activities that will further develop the acquisition of mathematical concepts and skills learned in the previous grades. The lessons built in the context of life-related situations help students retain and apply theories they have learned. Basic operations deal with larger whole numbers and decimals, like and unlike fractions, solving simple algebraic expressions and using simple formulas to solve problems in geometry. The program seeks to help students develop an understanding of math concepts through problem-based instruction, small-group interaction, and visual learning with a focus on reasoning and modeling. Each lesson includes daily review and a small-group, problem-based activity, followed by guided and independent practice activities. Lessons are organized into a customizable sequence of topics and use texts, workbooks, manipulatives, and technology, incorporating both group and individual activities.

COURSE OBJECTIVES:

1. Recognizing number operations in base 10.
2. Explain operations and algebraic thinking through expressions and patterns.
3. Solve problems through number operations through division, multiplication and measuring in metric units.
4. Solve problem based learning through addition, subtraction and multiplication of fractions.
5. Explore geometry through triangles, volume, three dimensional figures and problem solving.

PRIMARY TEXTBOOK & OTHER RESOURCES:

- **TEXT:** enVisionmath 2.0, 2016, Ranal I. Charles, Jennifer BayWilliams, Robert Q. Berry, III et al ISBN -13 978-0-328-82781-
 - **LINKS:** 1. Our school website: <http://www.dishs.tp.edu.tw/>
2. Publisher's website: <https://www.pearsonrealize.com/index.html#/>
 3. Online Math Practice: <https://www.khanacademy.org/math/cc-fourth-grade-math>
<https://www.mathsisfun.com/links/curriculum-year-4.html>

ASSESSMENT: Please see Google Classroom for more information.

The quarterly grade will be awarded for all student work based on the following criteria:

- 1) **Class participation, Homework, Quizzes and Tests** (30% of quarterly grade)
- 2) **Major Projects and Assignments** (30% of quarterly grade)
- 3) **Quarterly Exams** (30% of quarterly grade)
- 4) **Department Marks** (10% of quarterly grade)

ADDITIONAL INFORMATION:

CLASSROOM EXPECTATIONS:

- 1) Be on time to class; be seated **before** the bell rings.
- 2) Wear your uniform neatly.
- 3) Use English at all times.
- 4) Come prepared with books, assignments, and supplies, without chewing gum, snacks, food, or drinks.
- 5) A sealable water bottle is allowed.
- 6) Be respectful of others (especially when speaking), and of school property.
- 7) Do your best and participate.
- 8) Ask permission before leaving the class; take hall pass.
- 9) Wait for the bell to ring before you leave class.
- 10) Class/seat work which are not completed will have to be completed during lunch recess after the student has eaten his/her lunch, or possibly at the end of the school day.

HOMEWORK RULES

- 1) All homework should be handed in on the due date.
- 2) All homework should be done according to the directions/instructions given.
- 3) If homework is handed in late, points shall be deducted every day until assignment is turned in.

DISCIPLINE:

- 1) Verbal warning, second reminder (if needed).
- 2) Write-Up and then referral to the Discipline Office.
- 3) Further consequences if necessary.

Copying (plagiarism) is a serious offense and a form of theft. In certain cases, it is also a criminal offense. It is defined as taking words, phrasing, sentence structure, or any other element of the expression of another person's ideas, and using them as if they were your own. Plagiarism is a violation of another person's rights, whether the material stolen is great or small – it is not a matter of degree or intent. Plagiarism has serious consequences. Any act of plagiarism will result in an automatic zero on the entire assignment

Schedule of Instruction

SUBJECT: MATHEMATICS **1st QUARTER – COURSE CONTENT**

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
Week / Date	Topic / Projects / Assessments
Week 1 Aug 10th to 12th 3 Days of Class <i>10~ First Day / Orientation Day</i>	Wednesday – Orientation in the morning. Pass out books. Routines and Procedures. New students' orientation 8/12 Topic 1: Generalize Place Value Understanding
Week 2 Aug 15th to 19th <i>Opening Mass</i>	Opening Mass 8/15 Topic 1: Generalize Place Value Understanding
Week 3 Aug 22nd to 26th	Topic 2: Fluently Add and Subtract Multi-Digit Whole Numbers
Week 4 Aug 29th to Sep 2nd	Topic 3: Use Strategies and Properties to Multiply by 1-Digit Numbers
Week 5 Sep 5th to 9th 4 Days of Class <i>8~ Mass & Birthday Mother Mary</i> <i>9th – Moon Festival</i>	Topic 3: Use Strategies and Properties to Multiply by 1-Digit Numbers Topic 4: Use Strategies and Properties to Multiply by 2-Digit Numbers
Week 6 Sep 12th to 16th FYI – Pre-Exam Days	Topic 4: Use Strategies and Properties to Multiply by 2-Digit Numbers
Week 7 Sep 19th to 23rd	Comprehensive Review of Topics 1-4
Week 8 Sep 26th to 30th 2 Days of Class <i>28-30 ~Teacher's Conference</i>	Comprehensive Review of Topics 1-4 Teachers' Conference
Week 9 Oct 3rd to 7th 3 Days of Class <i>6-7 ~Q1 Exams</i>	Topics 1-4 Review and Assessment – First Quarter Exams (Thursday/Friday Half-days)

2nd QUARTER – COURSE CONTENT

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
Week / Date	Topic / Projects / Assessments
Week 1 (10) Oct 10th to 14th <u>4 Days of Class</u> <i>10 – Double 10 Holiday</i>	Topic 5: Use Strategies and Properties to divide by 1-Digit Numbers
Week 2 (11) Oct 17th to 21st	Topic 5: Use Strategies and Properties to divide by 1-Digit Numbers
Week 3 (12) Oct 24th to 28th <i>25-27 – Book Fair</i> <i>28- Masquerade Night</i> <i>TBA-Holy Rosary Mass</i>	Topic 5: Use Strategies and Properties to divide by 1-Digit Numbers Topic 6: Use Operations with Whole Numbers to Solve Problems
Week 4 (13) Oct 31st to Nov 4th <i>1-All Saint's Day Mass</i>	Topic 6: Use Operations with Whole Numbers to Solve Problems
Week 5 (14) Nov 7th to 11th	Topic 6: Use Operations with Whole Numbers to Solve Problems
Week 6 (15) Nov 14th to 18th	Topic 7: Factors and Multiples
Week 7 (16) Nov 21st to 25th <i>25 - YSC Contest</i> <i>25-Gr.12 Q2 Exam</i>	Topic 7: Factors and Multiples
Week 8 (17) Nov 28th to Dec 2nd FYI – Pre-Exam Days <i>28-Gr.12 Q2 Exam</i>	Topic 8: Extend Understanding of Fraction Equivalence and Ordering
Week 9 (18) Dec 5th to 9th <i>8 - Foundation Day Celebrations</i>	Comprehensive Review of Topics 5-8
Week 10 (19) Dec 12th to 16th <u>3 Days of Class</u> <i>15-16 ~Q2 Exams</i>	Topics 5-8 Review and Assessment -Second Quarter Exams (Thursday/Friday Half-days)
Dec 19th to Jan 2nd	Christmas Break

3rd QUARTER – COURSE CONTENT

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
Week / Date	Topic / Projects / Assessments
Week 1 (20) Jan 5 to 6th <u>2 Days of Class</u>	Topic 9: Understand Addition and Subtraction of Fractions
Week 2 (21) Jan 9th to 13th	Topic 9: Understand Addition and Subtraction of Fractions
Week 3 (22) Jan 16th to 20th	Topic 10: Extend Multiplication Concepts to Fractions
Jan 23rd to 27th	Chinese New Year
Week 4 (23) Jan 30th to Feb 3rd	Topic 10: Extend Multiplication Concepts to Fractions
Week 5 (24) Feb 6th to 10th	Topic 11: Represent and Interpret Data on Line Plots
Week 6 (25) Feb 13th to 17th	Topic 11: Represent and Interpret Data on Line Plots
Week 7 (26) Feb 20th to 24th <i>20-24 ~IOWA</i> <i>22 ~ Ash Wednesday Mass</i> <i>21-23 ~ Pre-Exam Days</i>	Topic 12: Understand and Compare Decimals
Week 8 (27) Feb 27th to March 3rd <u>3 Days of Class</u> <i>27-28 ~ 228 Memorial Day Holiday</i>	Comprehensive Review of Topics 9-12
Week 9 (28) March 6th to 10th <u>4 Days of Class</u> <i>11 – Q3 Exams</i>	Topics 9-12 Review and Assessment -Third Quarter Exams: (Friday/Monday Half-days) IOWA TESTS TBD

4th QUARTER – TENTATIVE COURSE CONTENT

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
Week / Date	Topic / Projects / Assessments
Week 1 (29) March 13th to 17th <u>4 Days of Class</u> <i>13 – Q3 Exams</i> <i>14~ Q4 Begins</i>	Topic 13: Measurement: Find Equivalence in Units of Measure
Week 2 (30) March 20th to 24th <i>20 ~ Fire Drill</i>	Topic 13: Measurement: Find Equivalence in Units of Measure
Week 3 (31) March 27th to 31st	Topic 13: Measurement: Find Equivalence in Units of Measure
Apr 3rd to 14th	Easter Break
Week 4 (33) Apr 17th to 21st	Topic 14: Algebra: Generate and Analyze Patterns
Week 5 (34) Apr 24th to 28th <i>24-28 ~ AP Mock Exams</i>	Topic 15: Geometric Measurement: Understand Concepts of Angles and Angle Measurement
Week 6 (35) May 1st to 5th <i>2-4~ Pre-Exam</i> <i>1-5~ Final Exams (K, 5, 8, 12 only)</i> <i>1-5 ~ AP Exams</i>	Topic 15: Geometric Measurement: Understand Concepts of Angles and Angle Measurement Topic 16: Lines, Angles and Shapes
Week 7 (36) May 8th to 12th <i>8-12~ Final Exams(K, 5, 8, 12 only)</i> <i>1-5 ~ AP Exams</i>	Topic 16: Lines, Angles and Shapes Comprehensive Review of Topics 13-16
Week 8 (37) May 15th to 19th <u>3 Days of Class</u> <i>18-19~ Q4 Exams</i>	Comprehensive Review of Topics 13-16 Topics 9-12 Review and Assessment -Fourth Quarter Exams: (Thursday/Friday Half-days)
Week 9 (38) May 22nd to 26th <u>4 Days of Class</u> <i>22~ Record Day</i> <i>23-26 ~ Student Clearance</i>	Ancillary Activities – Student Clearance Days Graduations /Recognitions
Week 10 (39) May 29th to June 2nd <u>4 Days of Class</u> <i>1 ~ Students Last Day</i> <i>2~ Teachers/Staff Meeting</i>	Ancillary Activities Graduations /Recognitions Thursday half-day (Last day of school)