

Dominican International School Kaohsiung



Course Syllabus

Subject: Mathematics

Grade: 3

SY: 2023-2024

Teacher: Ms. Wolmarans

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COURSE DESCRIPTION:

The third-grade Math curriculum builds on the foundations developed in the previous grade. Students in the third grade explore, create and discover further mathematics through activity – centered instruction. They construct their own Math understanding and sharpen their mathematical skills when they communicate with each other. More reinforcement exercises are provided in number concepts and basic operations through multi-step word problems. Addition and subtraction of similar fractions are introduced together with decimals using money notations. Ideas about geometric figures are also extended in the grade.

1. Students generalize their understanding of place value, understanding the relative size/value of numbers in each place. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, particularly the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. Students will also apply their understanding of models for division, place value, properties of operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.
2. Students develop an understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., $15/9 = 5/3$), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.
3. Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.

Some of the specific areas students will master:

- Understanding multiplication (in terms of a certain number groups each of which has the same number of objects)
- Understanding division (as sharing of a certain number of objects into groups of equal amounts)
- Solving word problems
- Finding the “missing” numbers in equations
- Knowing and using the commutative, associative and distributive properties
- Writing and telling time to the minute
- Solving problems that require adding and subtracting intervals of time
- Finding the perimeter or area of a polygon
- Dividing shapes into parts and using fractions to describe parts
- Recall the multiplication and division table through 10
- Read, interpret and display data on graphs and charts
- Addition and subtraction within 1,000 skills

COURSE OBJECTIVES:

The students will receive instruction in and demonstrate the ability to perform basic mathematical functions and problem solving in the following areas: graphs, place value, adding and subtracting whole numbers and money, multiplication, division, geometry, fractions, measurement.

Assessment:

- 30% Class Participation & Seatwork, Homework
- 30% Minor Projects, Portfolio, Unit Tests & Major Projects
- 30% Quarter Exam/Assessment
- 10% Deportment

Course Requirements:

- The course will be conducted through lectures, discussions, practice material, projects, and student presentations. Students are strongly encouraged to raise questions and make comments in class. Participation is the key to success.
- Students are required to complete each assignment by the date that it is assigned. Staying on track with assignments will facilitate understanding of the class material.
- Assignment books are available to each student. If there is difficulty in completing the assignments, the teacher must be notified before class the next day.

- Students are encouraged to communicate concerns to teachers and ask for help as needed throughout the school year.
- Students are expected to organize their own class materials and to keep their work neat and tidy. Parents are encouraged to help students by labeling personal items with identification stickers with the student's name in English.
- Students will observe all school policies as outlined in the DISK Handbook. This includes arriving at school on time, abiding by the dress code and speaking only English on the school grounds.
- Students will observe all school policies on Academic Honesty, as outlined in the DISK Handbook. All cases of academic misconduct (such as cheating on tests or plagiarism) will automatically result in a "Fail" grade for the assignment, in addition to any sanctions that may be imposed by the School Discipline office.

Textbooks:

Go Math textbook, *Go Math* workbook

Classroom Rules and Expectations:

- Have materials ready for class
- Be attentive
- Participate in class discussions and activities
- Work as a valuable team member
- Complete tasks as directed using your creativity
- Be proud of your answers or work
- Share your math ideas
- Have fun!

Class Materials Required:

- Pencils, eraser, highlighter
- Notebook
- Manipulatives
- Ruler

Quarter One - Pacing Guide

DATE	CHAPTER/LESSON TARGET/PAGES
Week 1	Introduction to the class, rules, procedures, Math assessment
Week 2	Chapter 1 (L1- L5) Addition Within 1000
Week 3	Chapter 1 (L6 - L10) Addition Within 1000
Week 4	Chapter 1 (L11 - L12) Addition Within 1000 (Chapter 1 Test) Chapter 2 (L1 - L 3) Represent and Interpret Data
Week 5	Chapter 2 (L4 - L 7) Represent and Interpret Data (Chapter 2 Test) Chapter 3 (L 1) Understanding Multiplication
Week 6	Chapter 3 (L 2 - L5) Understanding Multiplication
Week 7	Chapter 3 (L6 - L7) Understanding Multiplication
Week 8	Chapter 3 (L7) (Chapter 3 Test) Chapter 1-3 Exam Review
Week 9	Exams

Quarter Two - Pacing Guide

DATE	TOPIC/LESSON TARGET
Week 1	Chapter 4 (L1-5) Multiplication Facts and Strategies
Week 2	Chapter 4 (L6 -10) Multiplication Facts and Strategies
Week 3	Chapter 5 (L1 - L3) Use Multiplication Facts (Chapter 4 Test)
Week 4	Chapter 5 (L4 -L5) Use Multiplication Facts

Week 5	Chapter 5 Use Multiplication Facts & Chapter 6 (L1- L3) (Chapter 5 Test)
Week 6	Chapter 6 (L4-L6) Understanding Division
Week 7	Chapter 6 (L7-9) Understanding Division (Chapter 6 Test)
Week 8 1	Review Week
Week 9	Exams
Week 10	Xmas Preview Q3

Quarter Three - Pacing Guide

DATE	TOPIC/LESSON TARGET
Week 1	Chapter 7 (L1 - L4) Division Facts
Week 2 1	Chapter 7 (L5 - L9) Division Facts (Chapter 7 Test)
Week 3	Chapter 8 (L1 - L5) Understanding Fractions
Week 4	Chapter 8 (L6 - L9) Understanding fractions (Chapter 8 Test)
Week 5	Chapter 9 (L1-L4) Compare Fractions
Week 6	Chapter 9 (L5-L8) Compare Fractions (Chapter 9 Test)
Week 7	Chapter 10 (L1-L5) Time Length Mass
Week 8	Chapter 10 (L6-L9) Time Length Mass (Chapter 10 Test)

Week 9	Review Week
Week 10	Exams

Quarter Four - Pacing Guide

DATE	TOPIC/LESSON TARGET
Week 1	ITBS Practice & Testing
Week 2	Chapter 11 (L1-L4) Perimeter and Area
Week 3	Chapter 11 (L5-L8) Perimeter and Area
Week 4	Chapter 11 (L9 - L10) Perimeter and Area (Chapter 11 Test)
Week 5	Chapter 12 (L1 - L4) Geometry
Week 6	Chapter 12 (L5 - L9) Geometry (Chapter 12 Test)
Week 7	Chapter 11 & 12 Exam Review
Week 8	EXAMS
Week 9	Graduation