



Curriculum Document for Mathematics

Course Title: elementary school

Grade: 4

Learner Objective #1: Students will use appropriate vocabulary and reasoning skills when solving problems.

- Write addition sentences
- Comprehend the relationship between addition and subtraction
- Identify the cumulative property
- Write subtraction problems
- Comprehend the relationship between subtraction and addition
- Compare numerals
- Name numerals in different ways
- Write numerals through hundred thousands
- Round numbers to the nearest 10, 100 and 1000
- Write related multiplication and division sentences
- Identify the properties of multiplication
- Find patterns in multiplication
- To comprehend the relationship between both multiplication and division and addition and subtraction
- Write related division and multiplication sentences
- Compare fractional numbers
- Identify mixed numbers
- Identify like and unlike numbers
- Rename unlike fractions

Learner Objective #2: Students will effectively use numbers for counting, measuring, estimating, and problem solving.

- Compute column addition
- Use zeros in addition

- Find patterns in addition
- Add 2, 3, 4, and 5 digit numbers with and without renaming
- Solve addition problems
- Use zeros in subtraction
- Find patterns in addition
- Subtract 2, 3, 4, and 5-digit numbers with and without renaming
- Solve subtraction word problems
- Solve multiplication word problems
- Multiply through thousands by ones and tens
- Estimate multiplication problems
- Find factors
- Find multiples, common multiples, and least common multiples
- Solve word problems in multiplication
- Find the missing factor
- Estimate quotients
- Divide ones, tens, hundreds, and thousands by ones and tens
- Divide amounts of money
- Write fractions for part of a whole
- Find equivalent fractions
- Renaming mixed numerals as fractions
- Add and subtract fractions
- Solve word problems involving addition and subtraction of fractions
- Add and subtract mixed numbers
- Express fractions in lowest terms
- Multiply a one-digit number by 10, 100, and 1,000
- Multiply a one-digit number by a two- or three- digit number
- Estimate products of two-digit numbers by rounding factors
- Multiply by two-digit numbers using partial products
- Use basic facts to divide with remainders
- Divide a two-digit number by a one-digit number without a remainder
- Divide by two-digit numbers using partial products

Learner Objective #3: Students will use geometric concepts and relationships to interpret, represent, and solve problems.

- Identify one, two, and three-dimensional figures
- Locate points on a coordinate plane
- Identify points, planes, lines, line segments, and angles
- Identify polygons

- Identify quadrilaterals
- Find perimeter of a figure
- Find the area of regular and irregular shapes
- Identify congruent figures
- Identify tessellations
- Identify similar figures

Learner Objective #4: Students will use appropriate tools to measure accurately. Students will use measurements in problem-solving situations.

- To measure a length in linear or customary units to the nearest unit
- To use the appropriate units to measure weight
- To use appropriate units to measure capacity
- To compare customary and metric units of measure
- To write a number sentence to solve measurement problems

Learner Objective #5: Students will use data and statistics in problem-solving situations.

- To organize data in tables and use the data to solve problems
- To choose the appropriate graph to represent data
- To read and interpret data on a line plot, line graph, and stem and leaf plot
- To determine the probability of an event

Learner Objective #6: Students will use patterns and generalizations to define and solve problems.

- Multiply a whole number by amounts of money to solve problems
- Use basic facts and patterns of tens to multiply two-digit numbers
- Solve problems by multiplying two-digit numbers
- Solve problems by dividing two- and three-digit numbers
- To solve problems by subtracting fractions and mixed numbers with like denominators
- Use diagrams to solve problems