

# MATHEMATICS

## Course Description



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# Series Description

The objective of the EduSystem **Mathematics K-6** series is to help students develop skills and mathematical concepts in accordance with the standards set forth by the Department of Education of Puerto Rico and the National Council of Teachers of Mathematics. The purpose of the series is to create awareness of why studying mathematical processes is important and how it is necessary for solving problems that relate to real-life situations.

Through its content, strategies, and techniques, the EduSystem **Mathematics K-6** series instills a deep understanding of the concepts, skills, and techniques necessary for the subsequent study of higher mathematics and applications. The way in which the topics, examples, and recommended applications are presented allows students to visualize, understand, and value the usefulness of mathematics in everyday life.

The EduSystem **Mathematics K-6** series covers the following areas and topics: number sense, counting, and cardinal numbers; operations and algebraic thought; numbers and operations in base ten; numbers and operations with fractions and ratios; proportional relationships; numeral systems; expressions and equations; measurement and data; statistics and probability, and geometry.

In each lesson, the objectives have been carefully aligned by taking into consideration the concepts and skills students need to establish connections between the different topics. The instructional focus is based upon conceptual understanding, skills development, and mathematical problems/solutions. It also focuses on the development of critical thinking skills which is the integral means of foundation for the students.

The EduSystem **Mathematics K-6** series encourages the direct application of what students learn and how they visualize the importance of mathematics as a universal discipline relating to society, community, organizations, and institutions. Furthermore, the incorporation of situations and real-life problems in each of the topics aims to awaken an interest in the study of mathematics for students.

## Concept Development

The EduSystem **Mathematics K-6** series is directed toward developing a mastery of:

- ▶ Mathematical reasoning skills and their applications.
- ▶ Application of problem-solving processes and strategies.
- ▶ Use of technology as tools to access, analyze, and apply information in the solution of problems in their immediate surroundings.

## General Objectives

The objectives of this Series are to:

- ▶ Help students develop an interest and appreciation for mathematics.
- ▶ Develop mathematical capability within students through experiences that stimulate their curiosity and focus it on investigation, problem solving, and communication.
- ▶ Promote that the students visualize mathematics as an integral whole and not as a group of isolated topics.
- ▶ Develop the problem-solving processes in students, as a cornerstone of encouragement, furthering the development of mathematical capacity.
- ▶ Stimulate within students the need of using language and academic vocabulary to communicate mathematical ideas.
- ▶ Develop mathematical reasoning and critical thinking skills that allow students to visualize mathematics as a relevant discipline in their lives.
- ▶ Emphasize the concepts of numbers, operations, and calculations so that they are correctly defined, conceived, and adequately applied.
- ▶ Promote the learning of concepts in geometry and measurement through hands-on experiences that incorporate experimentation and discovery of mathematical relationships using solid objects or manipulatives.

## Course Structure

The Mathematics 2 course is composed of twelve units. Each unit is composed of lessons. Each lesson contains a presentation divided into sections that develop their individual topics. Each lesson also contains a descriptive log, activities, worksheets, and handouts related to the content and, as in most cases, website links and resources. The practice and review documents generally include word problems, as well as a section devoted solely to solving problems.

We invite you to get to know the presentation sections and the documents that are generally found in the course lessons.

The units are made up of the following:

## Lessons

Each unit is composed of several lessons which are divided by topics. Furthermore, each lesson is comprised of the following:

### Presentation

Each presentation is composed of the following sections:

### Unit Opening

Each unit begins with an image which starts off the first lesson of the unit. This section presents the unit's theme as well as several questions in which the image or theme are explored.

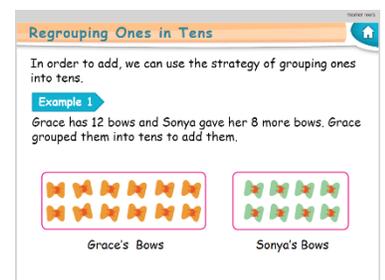


### Introduction

Presentation of a situation and questions to be explored.

## Topics to Be Developed

Sections of concept development, where mathematical ideas and concepts are explained. On some occasions, skills are developed from the situation presented in the introduction and other examples are offered.

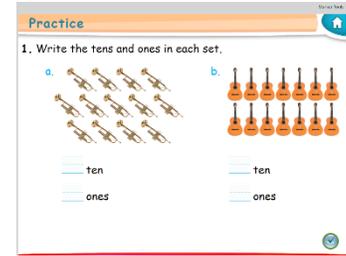




## Practice

### Practice

Lesson closure in which students apply what they learned through some exercise.



### Think About It

A reasoning question is presented and identified with a lightbulb. The goal is to develop students' reasoning and analysis capacities.



## Think About It

## Handouts and Worksheets



## Think and Practice

### Think and Practice

It presents exercises and problems after every concept development section. It has activities that help practice, enrich, and reinforce the concepts learned throughout the lesson.

### Homework

Practice for each concept building section. Students are provided with a reasonable number of exercises so that they can master the skills and concepts studied in the lesson.



## Homework

## Lesson 0

This lesson is composed of a series of unit documents and of formative and cumulative evaluation that can be used before, during, or after the study of each unit.

### What I Know!

A pretest of the concepts and skills to be discussed within the unit.



## What I Know!



## Connection

### Connection

Activity that initiates the unit. It relates Mathematics with other fields of study.

### Problem Solving

It explains strategies and procedures for the development of problem-solving skills.



## Problem Solving



## Unit Review

### Unit review

Practice exercises that allow students to confirm what they have learned in the unit.

### Reviewing the Units

Practice exercises that allow the student to confirm what they have learned in previous units.



## Reviewing the Units



## What I Learned

### What I Learned

The skills and concepts learned in the unit are measured. It allows students to do a self-evaluation. The teacher may use it as a test.

### Knowing Technology

It presents technology in its different manifestations, including the computer as well as all the gadgets present in our daily lives. It can be found in some units.



## Knowing Technology



## Think

### Think

It presents activities and includes mathematical reasoning exercises. It can be found in some units.

## Unit Breakdown

Below is an itemization of the division of each unit in lessons, including the name of each lesson with its corresponding objectives, skills, and keywords.

### Unit I. Numbers up to 99

At the end of this unit, the student will achieve the objectives found in the following lessons.

**Lesson 0: Numbers up to 99**

**Code:** C319G02U01L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

**Lesson 1: Tens**

**Code:** C319G02U01L01

**Objectives**

- ▶ Identify, count, and prepare tens.

**Keywords**

- ▶ ones, tens

**Lesson 2: Ones and Tens**

**Code:** C319G02U01L02

**Objectives**

- ▶ Complete amounts in tens and ones.

**Keywords**

- ▶ ones, tens

**Lesson 3: Place Value: Tens and ones**

**Code:** C319G02U01L03

**Objectives**

- ▶ Identify the place value of a digit.
- ▶ Decompose a number according to its place value.

**Keywords**

- ▶ after, before, between, numbers, numerals, order.

**Lesson 4: Comparing Numbers up to 99**

**Code:** C319G02U01L04

**Objectives**

- ▶ Identify and compare numerals up to 99.
- ▶ Identify the greater and lesser figure.

**Keywords**

- ▶ greatest number, greater than, least number, less than.

**Lesson 5: Ordering Numbers up to 99**

**Code:** C319G02U01L05

**Objectives**

- ▶ Organize numerals up to 99.
- ▶ Fill in numeral sequences up to 99.

**Keywords**

- ▶ comparing numbers, greatest number, greater than, least number, less than, ordering numbers, sequence

**Lesson 6: Ordinal Numbers**

**Code:** C319G02U01L06

**Objectives**

- ▶ Identify ordinal numbers from first to twelfth.
- ▶ Find a pattern.

**Keywords**

- ▶ ordering numbers in a sequence, ordinal numbers, patterns.

**Lesson 7: Odd and even numbers**

**Code:** C319G02U01L07

**Objectives**

- ▶ Identifies if a number is even or odd.
- ▶ Identifies whether the elements of a set represent an even or odd number.

**Keywords**

- ▶ even, numbers, odd.

## Unit 2: Numbers up to 1000

At the end of this unit, the student will achieve the objectives found in the following lessons.

### **Lesson 0: Numbers up to 1000**

**Code:** C319G02U02L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

### **Lesson 1: Hundreds**

**Code:** C319G02U02L01

#### **Objectives**

- ▶ Identify, write, and draw hundreds.

#### **Keywords**

- ▶ hundreds.

### **Lesson 2: Hundreds, Tens, and Ones**

**Code:** C319G02U02L02

#### **Objectives**

- ▶ Identify, write, and draw hundreds, tens, and ones.

#### **Keywords**

- ▶ hundreds, ones, tens.

### **Lesson 3: Place Value**

**Code:** C319G02U02L03

#### **Objectives**

- ▶ Write the numbers according to the place value they occupy.

#### **Keywords**

- ▶ hundreds, ones, place value, tens

### **Lesson 4: Reading and Writing Three and Four-Digit Numbers**

**Code:** C319G02U02L04

#### **Objectives**

- ▶ Read and write three and four-digit numbers.

#### **Keywords**

- ▶ digit, read, write.

**Lesson 5: Comparing and Ordering Numbers**

**Code:** C319G02U02L05

**Objectives**

- ▶ Use the symbols of greater than, less than or equal to compare numbers.
- ▶ Place numbers in order.

**Keywords**

- ▶ compare, equal to, greater than, less than, order.

## Unit 3: Combinations of Addition and Subtraction

At the end of this unit, the student will achieve the objectives found in the following lessons.

**Lesson 0: Combinations of Addition and Subtraction**

**Code:** C319G02U03L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

**Lesson 1: Properties of Addition**

**Code:** C319G02U03L01

**Objectives**

- ▶ Add numbers.
- ▶ Apply the properties of addition. (identity, commutative and associative).

**Keywords**

- ▶ addends, associative property of addition, identity property of addition, properties of addition, sum, zero.

**Lesson 2: Counting Forward**

**Code:** C319G02U03L02

**Objectives**

- ▶ Add by counting forward.

**Keywords**

- ▶ add, addends, addition, counting.

**Lesson 3: Adding with a Number Line**

**Code:** C319G02U03L03

**Objectives**

- ▶ Add with a number line.

**Keywords**

- ▶ add, addition, number line.

**Lesson 4: Combinations of Addition**

**Code:** C319G02U03L04

**Objectives**

- ▶ Apply the properties of addition.
- ▶ Add by counting forward.
- ▶ Add with a number line.
- ▶ Combine addends to find the total.

**Keywords**

- ▶ addends, property of zero, property of order, properties of addition, number line, sum.

**Lesson 5: Subtracting**

**Code:** C319G02U03L05

**Objectives**

- ▶ Subtract one-digit numbers.
- ▶ Identify the parts of a subtraction equation.

**Keywords**

- ▶ difference, minuend, subtract, subtrahend.

**Lesson 6: Subtracting with a Number Line**

**Code:** C319G02U03L06

**Objectives**

- ▶ Subtract with a number line.

**Keywords**

- ▶ number line, subtract.

**Lesson 7: Combinations of Subtraction up to 18**

**Code:** C319G02U03L07

**Objectives**

- ▶ Write and solve subtraction combinations.

**Keywords**

- ▶ subtraction combinations.

## Unit 4: Adding Two-Digit Numbers

At the end of this unit, the student will achieve the objectives found in the following lessons.

### **Lesson 0: Adding Two-Digit Numbers**

**Code:** C319G02U04L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

### **Lesson 1: Adding Tens**

**Code:** C319G02U04L01

#### **Objectives**

- ▶ Add tens.
- ▶ Observe tens when adding two-digit numbers.
- ▶ Count tens
- ▶ Write the sum of two digits by using tens.

#### **Keywords**

- ▶ add, ones, tens, two digits.

### **Lesson 2: Counting Forward**

**Code:** C319G02U04L02

#### **Objectives**

- ▶ Count to add.
- ▶ Add ones and tens.

#### **Keywords**

- ▶ add, ones, tens.

### **Lesson 3: The Tens and the Ones**

**Code:** C319G02U04L03

#### **Objectives**

- ▶ Add tens and ones.
- ▶ Observe tens and ones when adding two-digit numbers.
- ▶ Count tens and ones.
- ▶ Write the sum of two-digit numbers by using tens and ones.

#### **Keywords**

- ▶ ones, tens.

**Lesson 4: Regrouping Ones in the Tens**

**Code:** C319G02U04L04

**Objectives**

- ▶ Add tens.
- ▶ Observe tens and ones.
- ▶ Regroup ones in the tens.

**Keywords**

- ▶ ones, regrouping, tens.

**Lesson 5: Adding Tens and Ones**

**Code:** C319G02U04L05

**Objectives**

- ▶ Add tens.
- ▶ Observe tens when adding two-digit numbers.
- ▶ Count tens.
- ▶ Write the sum of two digits by using tens.
- ▶ Solve word problems.

**Keywords**

- ▶ ones, regrouping, tens.

**Lesson 6: Regrouping to Add Tens and Ones**

**Code:** C319G02U04L06

**Objectives**

- ▶ Add tens.
- ▶ Regroup to add tens and ones.
- ▶ Solve addition word problems.

**Keywords**

- ▶ ones, regrouping, tens.

**Lesson 7: Adding Two-Digit Numbers**

**Code:** C319G02U04L07

**Objectives**

- ▶ Add two-digit numbers.
- ▶ Regroup to add.
- ▶ Solve word problems.

**Keywords**

- ▶ add, two digits.

**Lesson 8: Estimating Addition**

**Code:** C319G02U04L08

**Objectives**

- ▶ Estimate sums.
- ▶ Round to the nearest ten in order to estimate.
- ▶ Add two-digit numbers.
- ▶ Solve addition word problems.

**Keywords**

- ▶ estimate, round, tens, hundreds.

## Unit 5: Subtracting Two-Digit Numbers

At the end of this unit, the student will achieve the objectives found in the following lessons.

**Lesson 0: Subtracting Two-Digit Numbers**

**Code:** C319G02U05L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

**Lesson 1: Subtracting Tens**

**Code:** C319G02U05L01

**Objectives**

- ▶ Subtract tens.

**Keywords**

- ▶ ones, subtract, tens, two digits.

**Lesson 2: Counting Back**

**Code:** C319G02U05L02

**Objectives**

- ▶ Count to subtract.
- ▶ Subtract tens and ones.

**Keywords**

- ▶ count, ones, tens.

**Lesson 3: Regrouping Tens in Ones**

**Code:** C319G02U05L03

**Objectives**

- ▶ Regroup the tens in the ones.

**Keywords**

- ▶ regroup, tens.

**Lesson 4: Subtracting Tens and Ones**

**Code:** C319G02U05L04

**Objectives**

- ▶ Subtract tens and ones.
- ▶ Regroup in order to subtract tens and ones.

**Keywords**

- ▶ ones, subtract, tens.

**Lesson 5: Regrouping to Subtract Tens and Ones**

**Code:** C319G02U05L05

**Objectives**

- ▶ Regroup the tens in the ones.
- ▶ Regroup to subtract tens and ones

**Keywords**

- ▶ ones, regroup, tens.

**Lesson 6: Subtracting Two-Digit Numbers**

**Code:** C319G02U05L06

**Objectives**

- ▶ Subtract two-digit numbers.

**Keywords**

- ▶ digit, ones, regroup, subtract, tens.

**Lesson 7: Checking a Subtraction**

**Code:** C319G02U05L07

**Objectives**

- ▶ Add in order to check the result of the subtraction.

**Keywords**

- ▶ check the subtraction.

## Unit 6: Adding and Subtracting Three and Four-Digit

At the end of this unit, the student will achieve the objectives found in the following lessons.

**Lesson 0: Adding and Subtracting Three and Four-Digit**

**Code:** C319G02U06L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

**Lesson 1: Adding Hundreds**

**Code:** C319G02U06L01

**Objectives**

- ▶ Add hundreds.

**Keywords**

- ▶ hundreds, sum.

**Lesson 2: Adding Ones, Tens and Hundreds**

**Code:** C319G02U06L02

**Objectives**

- ▶ • Add ones, tens and hundreds.

**Keywords**

- ▶ addition, hundreds, ones, tens.

**Lesson 3: Regrouping Ones and Tens**

**Code:** C319G02U06L03

**Objectives**

- ▶ Regroup ones and tens.

**Keywords**

- ▶ ones, tens, regroup.

**Lesson 4: Adding Three and Four-Digit Numbers with Regrouping**

**Code:** C319G02U06L04

**Objectives**

- ▶ Add three and four-digit numbers with regrouping.

**Keywords**

- ▶ sum by regrouping.

**Lesson 5: Subtracting Hundreds**

**Code:** C319G02U06L05

**Objectives**

- ▶ Subtract hundreds.

**Keywords**

- ▶ hundreds, subtraction.

**Lesson 6: Subtracting Ones, Tens, Hundreds, and Thousands**

**Code:** C319G02U06L06

**Objectives**

- ▶ Subtract ones, tens, hundreds, and thousands.

**Keywords**

- ▶ hundreds, ones, tens, subtract, thousands.

**Lesson 7: Subtracting by Regrouping**

**Code:** C319G02U06L07

**Objectives**

- ▶ Regroup the subtraction.

**Keywords**

- ▶ regroup.

**Lesson 8: Subtracting Three-Digit Numbers**

**Code:** C319G02U06L08

**Objectives**

- ▶ Subtract three-digit numbers.

**Keywords**

- ▶ three-digit subtraction.

## Unit 7: Geometry and Fractions

At the end of this unit, the student will achieve the objectives found in the following lessons.

### **Lesson 0: Geometry and Fractions**

**Code:** C319G02U07L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

### **Lesson 1: Three-Dimensional Shapes**

**Code:** C319G02U07L01

#### **Objectives**

- ▶ Identify three-dimensional shapes by their name.
- ▶ Name three-dimensional shapes: cone, sphere, and cylinder.
- ▶ Color three-dimensional shapes.

#### **Keywords**

- ▶ cone, cube, cylinder, rectangular prism, sphere.

### **Lesson 2: Faces, Edges and Vertexes**

**Code:** C319G02U07L02

#### **Objectives**

- ▶ Identify how many sides and how many corners each solid figure has.

#### **Keywords**

- ▶ corners, edge, face, side, vertex.

### **Lesson 3: Two-Dimensional Shapes**

**Code:** C319G02U07L03

#### **Objectives**

- ▶ Identify two-dimensional shapes.
- ▶ Name two-dimensional shapes: circle, triangle, rectangle, and square.
- ▶ Identify solid figures that are used to draw plane figures.

#### **Keywords**

- ▶ circle, rectangle, square, triangle.

**Lesson 4: The Relation Between Two and Three Dimensional Shapes**

**Code:** C319G02U07L04

**Objectives**

- ▶ Identify and recognize the geometric three-dimensional shapes.

**Keywords**

- ▶ face, circle, square, cube, sphere, pyramid, prism, rectangle, ratio, triangle.

**Lesson 5: Congruence in Two-Dimensional Shapes**

**Code:** C319G02U07L05

**Objectives**

- ▶ Identify and explain what the congruent figures are.

**Keywords**

- ▶ congruent figures.

**Lesson 6: The Axis of Symmetry**

**Code:** C319G02U07L06

**Objectives**

- ▶ Determine the symmetry of a figure.
- ▶ Identifies symmetry in their environment.

**Keywords**

- ▶ line of symmetry, symmetry.

**Lesson 7: Movements of a figure**

**Code:** C319G02U07L07

**Objectives**

- ▶ Recognizes the movements of translation and rotation.
- ▶ Describes and identifies movements in a two-dimensional figure.

**Keywords**

- ▶ rotation, translation.

**Lesson 8: Patterns with Figures**

**Code:** C319G02U07L08

**Objectives**

- ▶ Recognize and create patterns.

**Keywords**

- ▶ pattern, repetition, sequence.

**Lesson 9: Fractions**

**Code:** C319G02U07L09

**Objectives**

- ▶ Recognize and use unit fractions.

**Keywords**

- ▶ fractional units, unit fractions.

**Lesson 10: Other Fractions**

**Code:** C319G02U07L10

**Objectives**

- ▶ Write fractions.
- ▶ Identify and write fractions that represent a whole.
- ▶ Write fractions to determine the parts of a group.

**Keywords**

- ▶ integer, unit fractions, fractional units.

## Unit 8: Measurement

At the end of this unit, the student will achieve the objectives found in the following lessons.

### **Lesson 1: The Ruler**

**Code:** C319G02U08L01

#### **Objectives**

- ▶ Use arbitrary units to measure.
- ▶ Use a ruler to measure.

#### **Keywords**

- ▶ ruler, inches.

### **Lesson 2: Measuring in Inches, Feet, and Yards**

**Code:** C319G02U08L02

#### **Objectives**

- ▶ Measure objects using units of measurement like inches, feet, and yards.

#### **Keywords**

- ▶ foot, inch yard.

### **Lesson 3: Centimeters**

**Code:** C319G02U08L03

#### **Objectives**

- ▶ Use the centimeter as unit of measurement.

#### **Keywords**

- ▶ centimeter, measure, ruler.

### **Lesson 4: Meters**

**Code:** C319G02U08L04

#### **Objectives**

- ▶ Identify objects that can be measured in meters.

#### **Keywords**

- ▶ centimeters, measuring tape, meter.

**Lesson 5: Weight in Pounds**

**Code:** C319G02U08L05

**Objectives**

- ▶ Determine the weight of an object in pounds.

**Keywords**

- ▶ balance, pound, weight.

**Lesson 6: Weight in Kilograms**

**Code:** C319G02U08L06

**Objectives**

- ▶ Determine the weight of an object in kilograms.

**Keywords**

- ▶ balance, kilogram, weight.

**Lesson 7: Capacity**

**Code:** C319G02U08L07

**Objectives**

- ▶ Determine the capacity of different containers.

**Keywords**

- ▶ capacity, container, cup, measurement, tablespoon.

**Lesson 8: The Cup, the Pint, the Quart, and the Gallon**

**Code:** C319G02U08L08

**Objectives**

- ▶ Identify the cup, the pint, the quart, and the gallon as units to measure capacity.

**Keywords**

- ▶ cup, gallon, measure, pint, quart.

**Lesson 9: The Liter**

**Code:** C319G02U08L09

**Objectives**

- ▶ Use the liter as a unit to measure capacity.

**Keywords**

- ▶ capacity, liter, measure.

**Lesson 10: Perimeter and Area**

**Code:** C319G02U08L10

**Objectives**

- ▶ Determine the perimeter of a figure.
- ▶ Determine the area of a figure.

**Keywords**

- ▶ area, perimeter.

## Unit 9: Money

At the end of this unit, the student will achieve the objectives found in the following lessons.

**Lesson 0: Money**

**Code:** C319G02U09L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

**Lesson 1: Coins**

**Code:** C319G02U09L01

**Objectives**

- ▶ Identify the coins.
- ▶ Compare the coins.
- ▶ Count the coins.
- ▶ Establish relations between coins.

**Keywords**

- ▶ cents, coins, dollars, quarter.

**Lesson 2: Counting Coins**

**Code:** C319G02U09L02

**Objectives**

- ▶ Identify the coins.
- ▶ Organize the coins from greatest to least.
- ▶ Count the coins.
- ▶ Establish relations between coins.

**Keywords**

- ▶ cents, coins, counting coins, greater value, lesser value.

**Lesson 3: Counting Dollars and Cents**

**Code:** C319G02U09L03

**Objectives**

- ▶ Identify the coins and the dollar.
- ▶ Count in sequences of 5 by 5, 10 by 10, and 25 by 25.
- ▶ Solve problems.
- ▶ Establish relations between coins.

**Keywords**

- ▶ cents, counting dollars and cents.

**Lesson 4: Equal Quantities**

**Code:** C319G02U09L04

**Objectives**

- ▶ Identify the coins.
- ▶ Compare the coins.
- ▶ Count the coins.
- ▶ Group and combine coins.
- ▶ Establish relations between coins.

**Keywords**

- ▶ cents, coins, dollars, equal amounts, money.

**Lesson 5: Money for Buying Things**

**Code:** C319G02U09L05

**Objectives**

- ▶ Identify the coins.
- ▶ Compare the coins.
- ▶ Count the coins.
- ▶ Calculate totals and differences.
- ▶ Establish relationships between coins.

**Keywords**

- ▶ cents, coins, compare coins, count coins, dollars, money, money needed for buying.

**Lesson 6: Adding or Subtracting Money**

**Code:** C319G02U09L06

**Objectives**

- ▶ Observe and combine coins.
- ▶ Add money with and without regrouping.
- ▶ Subtract money with and without regrouping.
- ▶ Solve money-related problems.

**Keywords**

- ▶ adding and subtracting money, cents, dollars, money.

## Unit 10: Time

At the end of this unit, the student will achieve the objectives found in the following lessons.

**Lesson 0: Time**

**Code:** C319G02U10L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

**Lesson 1: The Hour and the Half Hour**

**Code:** C319G02U10L01

**Objectives**

- ▶ Identify the hour and half an hour.
- ▶ Write the hour and half an hour.

**Keywords**

- ▶ hour, half hour, digital clock, analog clock.

**Lesson 2: The Quarter of an Hour**

**Code:** C319G02U10L02

**Objectives**

- ▶ Identify the quarters of an hour.
- ▶ Write the quarters of an hour.

**Keywords**

- ▶ hour, quarters, quarter of an hour.

**Lesson 3: The Day**

**Code:** C319G02U10L03

**Objectives**

- ▶ Identify the difference between morning, afternoon, and evening.
- ▶ Identifies noon and midnight.
- ▶ Abbreviate the hours in a.m. or p.m.
- ▶ Recognize time relations.
- ▶ Recognizes the calendar and the relationship between days, weeks, and months.

**Keywords**

- ▶ days, months, weeks, morning, afternoon, evening, year, midnight, noon.

**Lesson 4: Time Elapsed**

**Code:** C319G02U10L04

**Objectives**

- ▶ Recognize time relations.
- ▶ Calculate elapsed time.
- ▶ Solve problems.

**Keywords**

- ▶ elapsed time.

**Lesson 5: Estimating Time**

**Code:** C319G02U10L05

**Objectives**

- ▶ Recognize time relations.
- ▶ Estimate time.

**Keywords**

- ▶ estimate.

**Lesson 6: The Calendar**

**Code:** C319G02U10L06

**Objectives**

- ▶ Recognize time relations.
- ▶ Use the calendar to collect information.

**Keywords**

- ▶ calendar.

## Unit I: Statistics

At the end of this unit, the student will achieve the objectives found in the following lessons.

**Lesson 0: Statistics**

**Code:** C319G02U11L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

**Lesson 1: Tables**

**Code:** C319G02U11L01

**Objectives**

- ▶ Use data charts to solve problems.
- ▶ Read, analyze, and build data tables.

**Keywords**

- ▶ chart, data tables.

**Lesson 2: Surveys**

**Code:** C319G02U11L02

**Objectives**

- ▶ Make surveys and analyze the data obtained from them.
- ▶ Build a table with the data obtained from a survey.

**Keywords**

- ▶ surveys.

**Lesson 3: Pictographs**

**Code:** C319G02U11L03

**Objectives**

- ▶ Analyze pictographs.

**Keywords**

- ▶ pictographs.

**Lesson 4: Bar Graphs**

**Code:** C319G02U11L04

**Objectives**

- ▶ Analyze and build bar graphs.

**Keywords**

- ▶ bar graphs.

**Lesson 5: The Cartesian Plane**

**Code:** C319G02U11L05

**Objectives**

- ▶ Identify and locate coordinates on the Cartesian Plane.

**Keywords**

- ▶ linear graphs, points at a linear graph.

**Lesson 6: Building Data Graphs**

**Code:** C319G02U11L06

**Objectives**

- ▶ Make different graphs using sets of data.

**Keywords**

- ▶ building data graphs.

**Lesson 7: Probability**

**Code:** C319G02U11L07

**Objectives**

- ▶ Determines the probability of an even occurring.
- ▶ Performs simple experiments to determine probability.

**Keywords**

- ▶ experiments, probability.

## Unit 12: Greater Numbers, Multiplication, and Division

At the end of this unit, the student will achieve the objectives found in the following lessons.

### **Lesson 0: Greater Numbers, Multiplication, and Division**

**Code:** C319G01U12L00

Unit Documents: Learning While Playing, Problem Solving, Unit Review I & II and What I Learned

### **Lesson 1: Repeated Addition and Multiplying**

**Code:** C319G02U12L01

#### **Objectives**

- ▶ Use repeated addition to recognize the multiplication.

#### **Keywords**

- ▶ multiplication.

### **Lesson 2: Skip Counting to Multiply**

**Code:** C319G02U12L02

#### **Objectives**

- ▶ Use addition to be able to multiply.

#### **Keywords**

- ▶ add, multiplication.

### **Lesson 3: Making Equal Groups**

**Code:** C319G02U12L03

#### **Objectives**

- ▶ Divide objects into equal parts.

#### **Keywords**

- ▶ multiplication.

### **Lesson 4: Properties of Multiplication**

**Code:** C319G02U12L04

#### **Objectives**

- ▶ Identify properties of multiplication.
- ▶ Applies the properties of multiplication (identity, commutative and associative).

#### **Keywords**

- ▶ associative property, commutative property, identity property.

**Lesson 5: Repeated Subtraction**

**Code:** C319G02U12L05

**Objectives**

- ▶ Use repeated subtraction to recognize the division.

**Keywords**

- ▶ division, subtraction.

**Lesson 6: Division**

**Code:** C319G02U12L06

**Objectives**

- ▶ Divide objects into equal parts.
- ▶ Relate the repeated subtraction with the division.

**Keywords**

- ▶ division, subtract.