



**Program Transfer Goals**

- Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.
- Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.
- Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.
- Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

**PACING**

First Grading Period	Second Grading Period		Third Grading Period			Fourth Grading Period	
Unit 1: Understanding the Number System	Unit 2: Comparing Numbers	Unit 3: Composing and Decomposing Numbers	Unit 4: Money	Unit 5: Personal Financial Literacy	Unit 6: Geometry	Unit 7: Measurement	Unit 8: Addition and Subtraction
BOY Screener			MOY Screener			EOY Screener	

**Assurances for a Guaranteed and Viable Curriculum**

Adherence to this scope and sequence affords every member of the learning community clarity on the knowledge and skills on which each learner should demonstrate proficiency. In order to deliver a guaranteed and viable curriculum, our team commits to and ensures the following understandings:

**Shared Accountability: Responding to the Needs of All Learners**

- High levels of learning for all students.
- The district and course formative assessments aligned to the standards for this course support educators and learners in monitoring academic achievement and leveraging interventions.

**Shared Understanding: Curriculum Design**

- The district curriculum design weaves together the elements of content, skills and assessments in order to adhere to curriculum design at the macro and micro level, ensuring vertical alignment.
- The district curriculum incorporates standards, scope and sequence, enduring understandings, essential questions, performance assessments, and recommended resources.

**Interdependence: Curriculum Units**

Members of the learning community utilize the curriculum units, plan collaboratively, and reflect on results for continuous improvement.

## UNIT 1: UNDERSTANDING THE NUMBER SYSTEM

### TIMELINE: 8 WEEKS - 1ST GRADING PERIOD

During the first week of school, learners begin to understand what math entails, such as numbers, money, time, and shapes. They will begin to see math in their world. As the unit progresses, learners will subitize small groups of objects (instantly recognize the number of objects in a group, without counting). They will begin with patterns of small numbers, such as dots on dice. They will also learn the counting sequence, beginning with counting objects, and write and name numerals. Throughout this unit, learners will collect, sort and organize data (into two categories) to answer questions.

#### ■ Transfer Goal:

- Communicate cardinality (number of objects in a set) using objects, pictures, words, and oral language
- Select tools to collect, sort, and organize data

#### *Students will know...*

when counting, the last number said is the number of objects in a set; there are patterns in our number system; various ways to collect data

#### *Students will be skilled at...*

counting forward to 20 (by ones) with and without objects; counting backward (by ones) with and without objects; reading numbers to 20; writing numbers to 20; representing numbers to 20 with pictures or objects; counting a set of 20 objects; instantly recognizing an amount of up to 10 objects without counting each individually; counting forward to 120 (by ones); counting forward to 120 by tens beginning with any decade (such as 50, 60, 70, ...); collecting, sorting, and organizing data into categories

## UNIT 2: COMPARING NUMBERS

### TIMELINE: 2 WEEKS - 2ND GRADING PERIOD

Learners begin comparing numbers with concrete objects as they generate sets that are more/less than a given set. In order to show how they know the group has more/less, the learners line up (or partner) the items and compare. Then, they make a transition to comparing sets of objects as pictures before they begin to compare numbers. The language *more*, *greater than*, *fewer*, *less than*, *same*, and *equal to* are all used to compare, rather than symbols. Counting on and back supports learners as they work toward generating numbers that are one more or one less than a given number. Throughout this unit, learners will collect, sort, and organize data (into three categories) to answer questions.

#### ■ Transfer Goal:

- Communicate comparisons of objects/pictures in a set, numbers as more, less, or equal using written or oral language
- Select tools to collect, sort, and organize data

#### *Students will know...*

numbers and amounts can be compared

#### *Students will be skilled at...*

generating a set with concrete materials to represent a number that is more, less, or equal; generating a set with pictorial models to represent a number that is more, less, or equal; generating a number that is one more than or one less than another number up to at least 20; comparing sets of objects up to at least 20 in each set using comparative language; using comparative language

to describe two numbers up to 20 presented as written numerals; collecting, sorting, and organizing data into categories

### **UNIT 3: COMPOSING AND DECOMPOSING NUMBERS**

**TIMELINE: 6 WEEKS - 2ND GRADING PERIOD**

This unit focuses on making ten, that is composing and decomposing numbers up to ten. Learners will use objects and pictures to create ten using two (or more) sets of objects or pictures. Learners will also break apart ten objects or pictures into two (or more parts). Throughout this unit, learners will collect, sort, and organize data (into three categories) to answer questions.

■ **Transfer Goal:**

- Evaluate the decomposition of a number for reasonableness (does the sum of the parts equal the number?)
- Use written or oral language to describe how a set of objects or pictures may be composed or decomposed
- Select tools to collect, sort, and organize data

*Students will know...*

numbers are made of parts and parts can be combined to make a number

*Students will be skilled at...*

Composing numbers up to ten with objects and pictures; decomposing numbers up to ten with objects and pictures; collecting, sorting, and organizing data into categories

### **UNIT 4: MONEY**

**TIMELINE: 2 WEEKS - 3RD GRADING PERIOD**

Learners will compare U.S. coins in this unit, recognizing that each is different. They notice that each coin has a different front and back. In this unit, as well, learners will continue to collect, sort, and organize data (into three categories) in order to create real object and picture graphs. Learners will draw conclusions from the data.

■ **Transfer Goal:**

- Use the 4-step problem solving plan to analyze coins
- Use written or oral language to describe coins
- Select tools to collect, sort, and organize data
- Use graphs to communicate the organization of data

*Students will know...*

coins have different characteristics; coins have different names

*Students will be skilled at...*

Identify U.S. coins by name, including pennies, nickels, dimes, and quarters; collecting, sorting, and organizing data into categories; creating real object graphs; drawing conclusions about data collected

## UNIT 5: PERSONAL FINANCIAL LITERACY

**TIMELINE: 2 WEEKS - 3RD GRADING PERIOD**

In this unit centered around personal financial literacy, learners identify ways to earn income. They distinguish between ways money is earned (through income and as gifts). They make connections between income and ways to fulfill wants and needs. They also begin considering simple skills required for jobs. In this unit, as well, learners will continue to collect, sort, and organize data (into three categories) in order to create real object and picture graphs. Learners will draw conclusions from the data.

### ■ Transfer Goal:

- Use written and oral language to explain concepts related to personal financial literacy, including income, wants, and needs
- Select tools to collect, sort, and organize data
- Use graphs to communicate the organization of data

*Students will know...*

the difference between income and money received as a gift; skills required for a job; ways to earn income; income is a source to meet one's wants and needs

*Students will be skilled at...*

listing skills required for a job; distinguishing between wants and needs; collecting, sorting, and organizing data into categories; creating real object graphs; drawing conclusions about data collected

## UNIT 6: GEOMETRY

**TIMELINE: 6 WEEKS - 3RD GRADING PERIOD**

Learners sort shapes based on characteristics of the shapes. Learners identify shapes based on their characteristics, as well as describe characteristics of a specific shapes. Learners explore how shapes fit together to make other shapes and how larger shapes can be made up of smaller shapes. In this unit, as well, learners will continue to collect, sort, and organize data (into three categories) in order to create real object graphs. Learners will draw conclusions from the data.

### ■ Transfer Goal:

- Use written and oral language to identify and describe shapes
- Display, explain, and justify the classifications of shapes
- Select tools to collect, sort, and organize data
- Use graphs to communicate the organization of data

*Students will know...*

a square is a special rectangle

*Students will be skilled at...*

Identifying circles, triangles, rectangles, and squares; identifying cylinders, cones, spheres, and cubes; identifying the attributes of shapes; classifying shapes; creating shapes; collecting, sorting, and organizing data into categories; creating real object graphs; drawing conclusions about data collected

## **UNIT 7: MEASUREMENT**

**TIMELINE: 3 WEEKS - 4TH GRADING PERIOD**

Learners will notice that certain attributes of an object can be measured. Learners make direct comparisons of these measurable attributes and describe the comparison. For example, direct comparisons can be done by laying objects next to each other, or setting them on opposite sides of a balance, or filling two containers with scoops of rice. In this unit, as well, learners will continue to collect, sort, and organize data (into three categories) in order to create real object and picture graphs. Learners will draw conclusions from the data.

### ■ **Transfer Goal:**

- Use written and oral language to communicate comparisons of measurable attributes of objects
- Select tools to collect, sort, and organize data
- Use graphs to communicate the organization of data

*Students will know...*

the length, capacity, and weight of an object can be measured

*Students will be skilled at...*

Comparing a measurable attribute of two objects; collecting, sorting, and organizing data into categories; creating real object graphs and picture graphs; drawing conclusions about data collected

## **UNIT 8: ADDITION AND SUBTRACTION**

**TIMELINE: 8 WEEKS - 4TH GRADING PERIOD**

Learners will use objects and pictures to solve contextual problems that involve joining and separating. Learners use words, pictures, and numbers to explain how they solved the problem and justify their answer. In this unit, as well, learners will continue to collect, sort, and organize data (into three categories) in order to create real object and picture graphs. Learners will draw conclusions from the data.

### ■ **Transfer Goal:**

- Use a problem-solving model to solve contextual joining and separating problems
- Use written and oral language to explain strategies used to solve contextual joining and separating problems
- Select tools to collect, sort, and organize data
- Use graphs to communicate the organization of data

*Students will know...*

The action of joining represents addition; The action of separating represents subtraction

*Students will be skilled at...*

Solving word problems using objects and pictures to find sums and differences within 10; Explain the strategies used to solve problems using spoken words, concrete and pictorial models, and number sentences; collecting, sorting, and organizing data into categories; creating real object graphs and picture graphs; drawing conclusions about data collected