# Pre-K Chapter 10

Math
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### **Enduring Understandings**

During this chapter, students will learn to:

- Compose numbers 2 to 5.
- Add by joining sets of manipulatives or pictures of objects up to 5.
- Decompose numbers 2 to 5.
- Subtract by separating sets of manipulatives or pictures of objects up to 5.
- Add by joining sets of manipulatives or pictures of objects up to 10.
- Subtract by separating sets of manipulatives or pictures of objects up to 10.
- Find a Patter to solve the answer to an addition problem.

### **Unit Overview**

In Chapter 10, students will use concrete objects to solve addition and subtraction stories. They will gain understanding of joining, putting together, taking away, and finding what is left. Students will be given opportunities to create their own addition and subtraction stories using numbers on to 10 and sometime zero. Students will also gain experience and understanding with composing and decomposing numbers to five.

Students are now becoming more familiar with numbers zero through 10 and their quantities. They can begin to add numbers and their quantities through joining or combining. inversely, they can begin to subtract numbers and amounts by separating. Managing these operations with amounts through 10 will be presented using concrete objects, pictures, and modeling of addition and subtraction problems.

### What's Happening Developmentally?

This area is usually considered to be the practice part of mathematics. Here is where children engage in the operations of mathematics as they work on addition and subtraction.

The typical **3-year-old** is able to do one-to-one correspondence and count the number of like objects such as cars or dolls. When presented with two objects and one is taken away, they are able to discern that there remains one.

**4-year-olds** are beginning the transition to solving addition and subtraction word problems through the use of concrete objects. Later at this age, some of the children will be able to solve "part-whole" problems and recognize numbers with greater consistency.

By the **age of 5**, children are making rapid progress in this area. Many develop strategies that allow them to add or subtract mentally and are able to solve word problems that require conceptual understanding (e.g., "part-part-whole"). In understanding of the place value concept.

### **Essential Questions**

How do we add and subtract?

### **Instructional Strategies & Learning Activities**

Lesson	10-1	10-2	10-3	10-4	10-5
	Compose Numbers (pp. 61A- 61D)	<b>Adding to 10</b> (pp. 62A-62D)	Problem- Solving Strategy: Find a Pattern (pp. 63A-63B)	<b>Decompose</b> <b>Numbers</b> (pp. 64A-64B)	Subtracting from 10 (pp. 65A-65D)
Lesson/Object ive	<b>Objective</b> : Students will show ways to compose or make numbers 2 to 5.	<b>Objective:</b> Stud ents will model addition problems to tell how many in all.	<b>Objective:</b> Stud ents will use the strategy Find a Pattern to solve addition problems.	<b>Objective:</b> Stud ents will show ways to decompose or take apart numbers 2 to 5.	<b>Objective:</b> Stud ents will model subtraction problems to tell how many are left.
Foundation for CCSS	K.OA.1	K.OA.1, K.OA.2	K.OA.1	K.OA.3	K.OA.1, K.OA.2
Math Vocabulary	part, whole	add, altogether, join		equal, part, same, whole	separate, subtract

Lesson Resources	Materials: Flip book, dominoes, sticky notes Manipulativ es-two-color counters, Work Mat 2: Five-Frame, bear counters	Materials: Flip Book, dot cards Manipulatives- connecting cube, Work Mat 4: Story Mat	Materials: Flip Book Manipulatives- bear counters and boats, connecting cubes	Materials: Flip Book, sticky notes Manipulatives- color tiles, bear counters, connecting cubes, Work Mat 2: Five- Frame	Materials: Flip Book, pennies, piggy bank Manipulatives- Work Mat 4: Story Mat, bear counters, Blackline Master page 125
	Other Resources- Five Little Monkeys Jumping on the Bed by Eileen Christelow	Other Resources- Oliver's Party by Jenny Fry	Other Resources-Caps for Sale by Esphyr Slobodkina Seaweed Soup by Staurt J. Murphy	Other Resources-Five Little Monkeys Jumping on the Bed by Eileen Christelow A Day in the Park by Becky Harr	Other Resources- Oliver's Party by Jenny Fry A Day in the Park by Becky Harr
Technology connectED	Song: "Jumping to Add and Subtract"	Song: "Jumping to Add and Subtract"	Song: "Jumping to Add and Subtract"	Song: "Jumping to Add and Subtract"	Song: "Jumping to Add and Subtract"
Researching All Learners	Stepping Back English Language Learners Going Farther	Stepping Back English Language Learners Going Farther	Stepping Back English Language Learners Going Farther	Stepping Back English Language Learners Going Farther	Stepping Back English Language Learners Going Farther

## Integration of Career Readiness, Life Literacies and Key Skills

TECH.9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
	Different types of jobs require different knowledge and skills.

### **Computer Science and Design Integration**

CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
CS.K-2.8.2.2.ED.3	Select and use appropriate tools and materials to build a product using the design process.

**Interdisciplinary Connections** All disciplines are incorporated into the preschool program when appropriate.

LA.RI.K.1	With prompting and support, ask and answer questions about key details in a text.
LA.RI.K.2	With prompting and support, identify the main topic and retell key details of a text.
LA.RI.K.4	With prompting and support, ask and answer questions about unknown words in a text.
LA.RI.K.7	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
LA.RF.K.1	Demonstrate understanding of the organization and basic features of print.
LA.RF.K.2	Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
LA.RF.K.3	Know and apply grade-level phonics and word analysis skills in decoding and encoding words.

### Differentiation

Each chapter in MyMath teacher manual contains differentiated instruction for Approaching Level, On Level, and Above Level students.

### **Modifications & Accommodations**

IEP and 504 accommodations will be utilized in addition to the differentiated instruction in the Unit.

### **Benchmark Assessments**

Checklists

Teacher observation

### **Formative Assessments**

Checklists

Teacher observation

Discussion

### Summative Assessments

Assessments for chapters located in MyMath Unit.

### **Instructional Materials**

See Above

### Standards

MA.PK.4.1	Children begin to demonstrate an understanding of number and counting.
MA.PK.4.1.4	Understand the relationship between numbers and quantities (i.e., the last word stated when counting tells "how many"):
MA.PK.4.1.4.a	Accurately count quantities of objects up to 10, using one-to one-correspondence, and accurately count as many as 5 objects in a scattered configuration.
MA.PK.4.1.4.b	Arrange and count different kinds of objects to demonstrate understanding of the consistency of quantities (i.e., "5" is constant, whether it is a group of 5 people, 5 blocks or 5 pencils).
MA.PK.4.1.4.c	Instantly recognize, without counting, small quantities of up to 3 or 4 objects (i.e., subitize).
MA.PK.4.1.5	Use one to one correspondence to solve problems by matching sets (e.g., getting just enough straws to distribute for each juice container on the table) and comparing amounts (e.g., collecting the number of cubes needed to fill the spaces in a muffin tin with one cube each).
MA.PK.4.2	Children demonstrate an initial understanding of numerical operations.
MA.PK.4.2.1	Represent addition and subtraction by manipulating up to 5 objects:
MA.PK.4.2.1.a	putting together and adding to (e.g., "3 blue pegs, 2 yellow pegs, 5 pegs altogether."); and
MA.PK.4.2.1.b	taking apart and taking from ("I have four carrot sticks. I'm eating one. Now I have 3.").
MA.PK.4.2.2	Begin to represent simple word problem data in pictures and drawings.
MA.PK.4.3.1	Sort, order, pattern, and classify objects by non-measurable (e.g., color, texture, type of material) and measurable attributes (e.g., length, capacity, height).

Compare (e.g., which container holds more) and order (e.g., shortest to longest) up to 5 objects according to measurable attributes.