



San Diego Unified School District

Instructional Module to Enhance the Teaching of

HARCOURT

Math

California Edition

Grade K

Module 2-Modified

*Patterns and
Movement*

- WORK IN PROGRESS -

MODULE 2 – PATTERNS

Modules represent individual units of study that lead to essential learnings

THREADS THROUGHOUT THE YEAR:

The threads represent ongoing learning opportunities in which students should be actively engaged throughout all units of inquiry during the school year. These should not be isolated to any one particular unit of inquiry.

- Students will be provided opportunities to:
 - Develop understanding of numbers and the number system and use their understanding to solve problems and recognize reasonable results.
 - Use mathematical reasoning to solve problems.
 - Communicate their mathematical thinking by using words, numbers, symbols, graphs and charts, and translate between different representations
 - Express generalizations of patterns and relationships.
 - Make connections among mathematical ideas and between other disciplines.
 - Develop and use strategies, skills, and concepts to solve problems.
 - Use appropriate tools as vehicles to learn mathematical concepts.

These are essential learnings that represent bigger ideas/concepts:

- Students recognize that the same pattern can be found in many forms-physical, geometric and numerical situations (e.g. blue triangle, red triangle, blue triangle, red triangle, red triangle = ABAB = clap hands, slap knees, clap hands, slap knees).
- Students can extend, describe and identify patterns by referring to shapes, sizes or colors.
- Students recognize that patterns have a sequence of elements that are repeated in ordered, predictable ways.
- Students recognize that order exists in situations and events around us.
- Students will interpret patterns using various manipulatives and actions.

These are essential questions that learners ask themselves in order to achieve the essential learnings:

- How can I describe a pattern?
- How do I know what comes next in a pattern? How do I identify the repeating elements in a pattern?
- How can I copy a pattern using different manipulatives and various materials/actions?
- How can I extend a known pattern?
- How can I translate/interpret a pattern using various manipulatives and actions?

Resources: Van de Walle (Fifth Edition), Chapter 22, pp. 41 –420; K. Richardson, *Number Arrangements; Changing Numbers; Counting Objects*

Harcourt Math: Grade K
Module 2
 Patterns and Movement
 10 Days

Module 2 Patterns and Movement 10 days	Chapter 2 <ul style="list-style-type: none"> • Lesson 2.1 Copy Patterns • Lesson 2.2 Extend Patterns • Lesson 2.3 Make a Pattern • Lesson 2.4 Find a Pattern • Literature Connection • Assessment
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Day 1 Unit 1 Lesson 2.1	Day 2 Unit 1 Lesson 2.1	Day 3 Unit 1 Lesson 2.2	Day 4 Unit 1 Lesson 2.2	Day 5 Unit 1 Lesson 2.3
Day 6 Unit 1 Lesson 2.4	Day 7 Unit 1 Lesson 2.4	Day 8 Unit 1 Literature Connection	Day 9 Unit 1 Assessment	Day 10 Unit 1 Assessment

Module 2

ORDER OF UNITS – Grade K
2006-2007 School Year
TRADITIONAL CALENDAR

September 19 instructional days	Getting Ready for Kindergarten	8 days
	Module 1: Sorting and Classifying	11 days
October 22 instructional days	Module 1: Sorting and Classifying	1 days
	Module 2: Patterns	10 days
	Module 3: Matching and Counting	11 days
November 16 instructional days	Module 3: Matching and Counting	4 days
	Module 4: Numbers 0 to 5	12 days
December 11 instructional days	Module 4: Numbers 0 to 5	3 days
	Module 5: Numbers 6 to 10	8 days
January 21 instructional days	Module 5: Numbers 6 to 10	7 days
	Module 6: Geometry and Equal Parts	14 days
February 18 instructional days	Module 7: Numbers 10 to 30	16 days
	Discretionary Day	2 days
March 22 instructional days	Module 8: Money	13 days
	Module 9: Measurement	9 days
April 16 instructional days	Module 9: Measurement	4 days
	Module 10: Time	12 days
May 22 instructional days	Module 11: Exploring Addition	15 days
	Module 12: Exploring Subtraction	7 days
June 13 instructional days	Module 12: Exploring Subtraction	10 days
	Discretionary Days	3 days

