

## What is *Engaging Mathematics, Volume I: Kindergarten*?

1

An instructional resource featuring 85 Texas Essential Knowledge and Skills (TEKS)-based, classroom-ready mathematics activities that each take approximately 10 to 15 minutes to complete.

2

A TEKS-based resource that addresses the majority of the kindergarten mathematics TEKS and provides—

- Rigorous problem-solving tasks;
- Manipulative-based tasks;
- Vocabulary development tasks; and
- Sorting and classifying tasks.

3

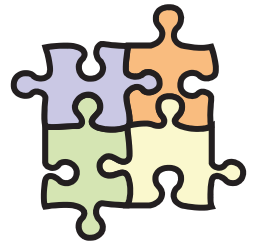
A resource that supports high-quality, research-based practices by providing activities that can be used for various purposes, including—

- Engaging warm-ups and opening tasks that draw students into relevant and challenging mathematics;
- Instructional support for all students to help learners articulate, refine, and retain important mathematical concepts, processes, and skills;
- Short-cycle, formative assessments that provide immediate and ongoing feedback to guide instruction for the teacher and learning for the student; and
- Supplemental tasks to support intervention strategies.

4

A resource that incorporates the mathematical process standards by promoting—

- Reasoning, generalizing, and problem-solving in mathematical and real-world contexts;
- Modeling, using tools, and connecting representations;
- Analysis; and
- Communication.



# What is found in an Engaging Mathematics TEKS-based activity?


Each activity addresses a specific student expectation that is reflected in the content objective.

Common classroom materials are used for ease of preparation. Materials are listed 1-per-student unless otherwise noted. Page titles for student handouts are represented with bold font.

Directions are included to guide student completion of activities with multiple steps.

Each activity includes an opportunity for students to articulate and summarize aspects of their learning using drawings, words, numbers, or symbols.

Debriefing questions are provided for teacher use when supporting student thinking and discourse.



**Counting Objects, Activity 5**  
 K(2)(C), K(2)(A)

**Activity Objective**  
I can count a set of objects.

**Materials**

- **Pattern Block Creation**
- Pattern blocks

**Teacher Directions**

- 1 Prompt students to use pattern blocks to create a figure or design that will fit inside the rectangle on **Pattern Block Creation**.
- 2 **Communicating about Mathematics:** Prompt students to count and record the number of each shape of pattern block and the total number of pattern blocks used.
- 3 Prompt students to trace or draw their creation.

Designs may have a count beyond 20 for students who are ready to extend their counting.


**Debriefing Questions**

- When you count objects, what does the last number tell you?
- If you moved the pattern blocks into a different arrangement, would you still have the same number of pattern blocks? How do you know?

**Listen For . . .**

- *Understanding that the last number said tells the number of objects in the set.*
- *Understanding the number in a set remains the same regardless of the arrangement.*

**Answers**  
*Answers will vary.*




hexagons	squares	rhombuses	triangles	trapezoids
1	2	2	1	2

I used a total of 8 pattern blocks.







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An answer key is included for each activity, when appropriate.

Name: \_\_\_\_\_



**Pattern Block Creation**

		 or 		
hexagons	squares	rhombuses	triangles	trapezoids

I used a total of \_\_\_\_\_ pattern blocks.

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