What is *Engaging Mathematics, Volume I: Grade 1*?

1 An instructional resource featuring over 90 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 all of the grade 1 mathematics TEKS and provides—

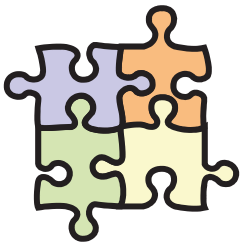
- Rigorous problem-solving tasks;
- Manipulative-based tasks;
- Vocabulary development tasks; and
- Sorting and classifying tasks.

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. Page titles for student handouts and activity masters 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.

Composing and Decomposing Numbers, Activity 5
1(2)(B)

Activity Objective
I can compose and decompose numbers.

Materials
- **Composing Numbers**

Teacher Directions
1 Prompt students to circle the sets of values that can be composed to represent the same value as the set of beans shown on **Composing Numbers**.
2 **Communicating about Mathematics:** Prompt students to choose one of the sets of values not circled in Set B and describe how they know the value does not represent the same value as the set of beans using the sentence stems.

Debriefing Questions
- How can you decompose numbers?
- Why can a number be decomposed in more than one way?

Listen For . . .
- *Appropriate decomposition of the numbers into groups of tens and ones.*
- *Understanding that numbers can be decomposed into groups of tens and ones in more than one way.*

Answers

Set A:

70 + 2	70 + 10 + 2
60 + 10 + 1 + 1	60 + 10 + 2

Set B:

20 + 20 + 5	40 + 5
4 + 5	30 + 10 + 2 + 3

I did not circle *4 + 5.*

I know these values equal *9*, so it is not the same value as the set of beans because *the set of beans has a value of 45.*

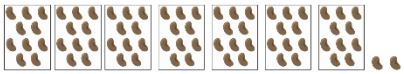
An answer key is included for each activity, when appropriate.

Name: _____

Composing Numbers

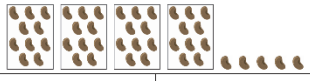
Circle the sets of values that can be composed to represent the same value as the set of beans.

Set A:



70 + 2	70 + 10 + 2
60 + 10 + 1 + 1	60 + 10 + 2

Set B:



20 + 20 + 5	40 + 5
4 + 5	30 + 10 + 2 + 3

I did not circle _____.

I know these values equal _____, so it is not the same value as the set of beans because . . .

