

# 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 as a separate document to guide student completion of activities with multiple steps.

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

## Composing and Decomposing Numbers, Activity 3 2(2)(A)

**Activity Objective**  
I can compose and decompose numbers.

- Materials**
- **Directions: Decomposing a Number**
  - **Decomposing a Number**
  - Base-ten blocks

- Facilitation Questions**
- How can you use the least number of hundreds, tens, and ones to represent 475?  
*I can use four flats, seven rods, and five units.*
  - How can you use the base-ten blocks to show decomposing four hundreds? Seven tens? Five ones?  
*I can decompose the four hundreds into two or more groups.*
  - How can you use composing to show that you decomposed the value correctly?  
*I can compose the answer I got, and if it equals 475 then I did it correctly.*

**Answer**  
Possible answers:

**My Ways to Decompose 475**

$200 + 200 + 50 + 20 + 5$	$400 + 20 + 20 + 30 + 2 + 3$

**My Partner's Ways to Decompose 475**

$200 + 100 + 100 + 20 + 50 + 5$	$300 + 100 + 60 + 10 + 3 + 2$

Date: \_\_\_\_\_

### Composing Numbers

sets of values that can be composed to represent the same base-ten blocks.

$1,000 + 100 + 30 + 6$	$1,000 + 10 + 10 + 10 + 3 + 3$
$1,000 + 100 + 10 + 20 + 5 + 1$	$1,000 + 100 + 20 + 10 + 4 + 2$

$100 + 100 + 30 + 30 + 5$	$200 + 50 + 10 + 3 + 2$
$100 + 100 + 6 + 5$	$200 + 60 + 4 + 1$

An answer key is included for each activity.

Each activity includes an opportunity for students to articulate and summarize aspects of their learning.

**Communicating about Mathematics**  
Choose one of the sets of values not circled. Explain how you know this value cannot be composed to represent the value of the base-ten blocks.

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