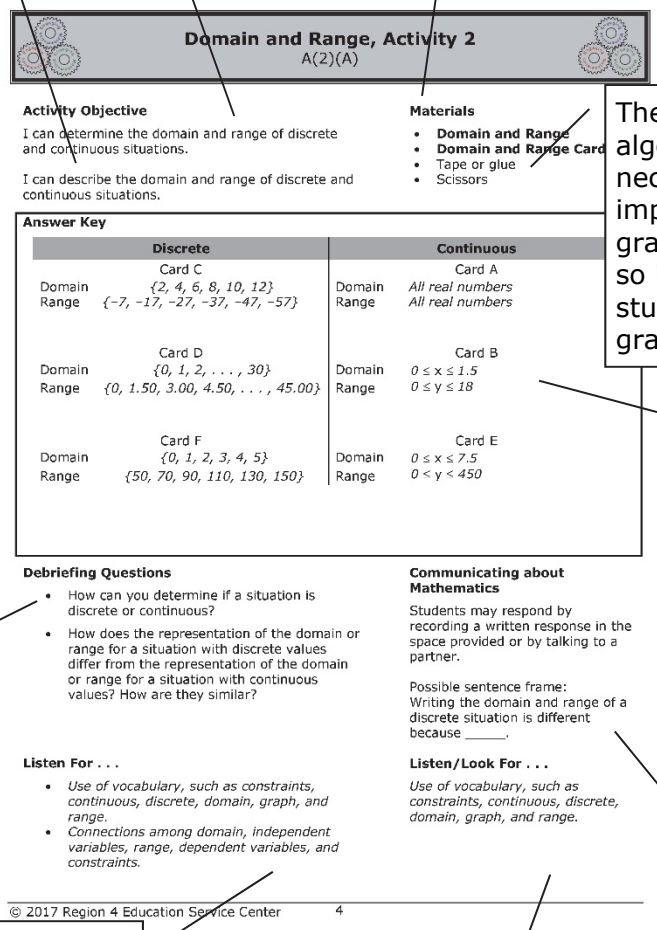
What is found in an Engaging Mathematics TEKS-based activity?

TEKS have been phrased in student-friendly language so that students may gauge their learning.

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

ELPS have been included in the form of a student-friendly language objective.



Domain and Range, Activity 2
A(2)(A)

Activity Objective

I can determine the domain and range of discrete and continuous situations.

I can describe the domain and range of discrete and continuous situations.

Materials

- **Domain and Range**
- **Domain and Range Card**
- Tape or glue
- Scissors

Answer Key

Discrete		Continuous	
Card C		Card A	
Domain	{2, 4, 6, 8, 10, 12}	Domain	All real numbers
Range	{−7, −17, −27, −37, −47, −57}	Range	All real numbers
Card D		Card B	
Domain	{0, 1, 2, . . . , 30}	Domain	$0 \le x \le 1.5$
Range	{0, 1.50, 3.00, 4.50, . . . , 45.00}	Range	$0 \le y \le 18$
Card F		Card E	
Domain	{0, 1, 2, 3, 4, 5}	Domain	$0 \le x \le 7.5$
Range	{50, 70, 90, 110, 130, 150}	Range	$0 < y < 450$

Debriefing Questions

- How can you determine if a situation is discrete or continuous?
- How does the representation of the domain or range for a situation with discrete values differ from the representation of the domain or range for a situation with continuous values? How are they similar?

Communicating about Mathematics

Students may respond by recording a written response in the space provided or by talking to a partner.

Possible sentence frame:
Writing the domain and range of a discrete situation is different because _____.

Listen For . . .

- *Use of vocabulary, such as constraints, continuous, discrete, domain, graph, and range.*
- *Connections among domain, independent variables, range, dependent variables, and constraints.*

Listen/Look For . . .

Use of vocabulary, such as constraints, continuous, discrete, domain, graph, and range.

The emphasis on algebra readiness skills necessitates the implementation of graphing calculators, so it is assumed all student have access to graphing calculators.

An answer key is included for each activity.

Debriefing questions are included to assist the teacher with facilitating a post-activity student discussion.

Each activity includes an opportunity for students to articulate and summarize their own learning.
A sentence frame is provided for students who may need language support.

Key learning outcomes from the debriefing discussion are summarized here.

Key learning outcomes from the Communicating about Mathematics section are included here.