## Unit 5 Lesson 10: Piecewise Linear Functions

### 1 Notice and Wonder: Lines on Dots (Warm up)

#### Student Task Statement

What do you notice? What do you wonder?



### 2 Modeling Recycling

#### Images for Launch





#### Student Task Statement



1. Approximate the percentage recycled each year with a piecewise linear function by drawing between three and five line segments to approximate the graph.
2. Find the slope for each piece. What do these slopes tell you?

### 3 Dog Bath

#### Student Task Statement

Elena filled up the tub and gave her dog a bath. Then she let the water out of the tub.



1. The graph shows the amount of water in the tub, in gallons, as a function of time, in minutes. Add labels to the graph to show this.
2. When did she turn off the water faucet?
3. How much water was in the tub when she bathed her dog?
4. How long did it take for the tub to drain completely?
5. At what rate did the faucet fill the tub?
6. At what rate did the water drain from the tub?

### 4 Distance and Speed (Optional)

#### Student Task Statement



The graph shows the speed of a car as a function of time. Describe what a person watching the car would see.



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