## Unit 6 Lesson 8: Rising and Falling

### 1 Notice and Wonder: A Bouncing Curve (Warm up)

#### Student Task Statement

What do you notice? What do you wonder?



### 2 What is Happening?

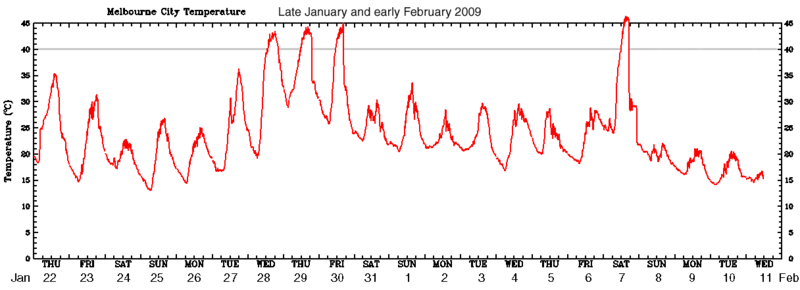
#### Student Task Statement

Here are some relationships that produce graphs that have a repetitive nature. For each situation, describe the dependent and independent variable. How does the dependent variable change? What might cause this change?

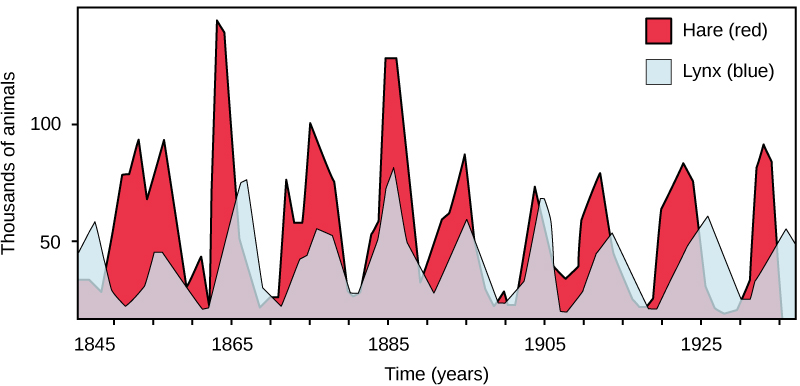
1. This is the graph of the distance of a race car from the starting line as it goes around a track.

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1. This is the graph of the temperature in a city in Australia over 21 days.

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1. This is the graph of two populations over time.

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### 3 Card Sort: Graphs of Functions

#### Student Task Statement

Your teacher will give you a set of cards that show graphs.

1. Sort the cards into categories of your choosing. Be prepared to describe your categories.  
     
   Pause for a whole-class discussion.
2. Sort the cards into new categories in a different way. Be prepared to describe your new categories.



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