The Language of Variation - Variables Quiz

1. The following table shows data for the 8 longest roller coasters in the world as of 2015.

Length (feet)	Type	Speed (miles per hour)	Height (feet)	Drop (feet)	Continent
8,133	Steel	95	318	310	Asia
7,442	Steel	50	107	102	Europe
7,359	Wood	65	110	135	North America
6,709	Steel	81	259	230	Asia
6,602	Steel	95	325	320	North America
6,595	Steel	93	310	300	North America
6,562	Steel	149	171	168	Asia
6,442	Wood	67	163	154	North America

Which of the following variables is categorical?

(A) Length

(B) Type   ✓

(C) Speed

(D) Height

(E) Drop

Answer B

Correct. The variable assumes categorical values, i.e., names, and not quantitative values.

2. Which of the following questions about cars in a school parking lot will allow for the collection of a set of categorical data?

(A) How many blue cars are in the lot?

(B) What are the gas mileages, in miles per gallon, of the cars in the lot?

(C) What are the weights, in pounds, of the cars in the lot?

(D) What is the number of cars in the lot with out-of-state license plates?

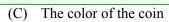(E) What are the colors of the cars in the lot?   ✓

Answer E

Correct. To answer this question, a set of data will be collected that consists of names for colors, which is

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a set of categorical data.

3. Data were collected on 100 United States coins minted in 2018. Which of the following represents a quantitative variable for the data collected?

(A) The type of metal used in the coin

(B) The value of the coin ✓

(C) The color of the coin

(D) The person depicted on the face of the coin

(E) The location where the coin was minted

Answer B

Correct. The value of a coin can be measured as a number.