**Topic**: Number sets

**Question**: Which of the following is another name for the counting numbers?

## **Answer choices:**

A Natural numbers

B Whole numbers

C Real numbers

D Integers



### Solution: A

Counting numbers are also called natural numbers. They are the set of positive integers, or positive whole numbers,

$$\{1, 2, 3, 4, \dots\}$$

All of the natural numbers are whole numbers, but unlike the set of whole numbers, the set of natural numbers doesn't include 0. Additionally, all natural numbers are real numbers, but real numbers includes things like fractions and decimals, which aren't included in natural numbers. Natural numbers are also integers, but integers includes negative numbers and 0, where natural numbers don't.



**Topic**: Number sets

Question: Which set could represent whole numbers?

# **Answer choices:**

$$C = \{-1, 0, 1, 2, \ldots\}$$

D 
$$\{-4, -3, -2, -1, ...\}$$

Solution: A

Whole numbers are made up of all positive integers, plus 0.



**Topic**: Number sets

Question: Which set makes sense?

# **Answer choices:**

A Boys = 
$$\{Tom, Joe, Eric\}$$

B Girls = 
$$\{1, 2, 3\}$$

C Odd numbers = 
$$\{2, 4, 6\}$$

## Solution: A

Tom, Joe and Eric are all boys, so the set of "Boys" could be made up of those values. On the other hand, 1, 2 and 3 are not girls; 2, 4 and 6 are not odd numbers, they're even numbers; and peas and carrots are not fruits, they're vegetables.

