

# Data Representations

Classroom:

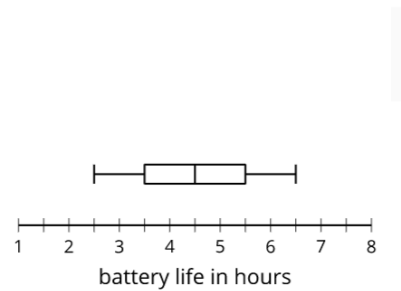
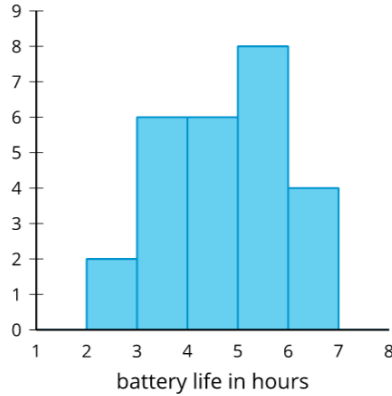
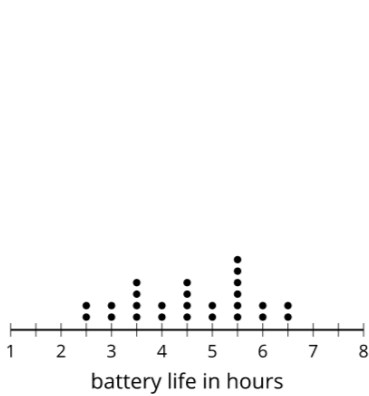
Due:

Student Name:

Date Submitted:

## Notice and Wonder: Battery Life

1) The dot plot, histogram, and box plot summarize the hours of battery life for 26 cell phones constantly streaming video. What do you notice? What do you wonder?



## Tomato Plants: Histogram

A histogram can be used to represent the distribution of numerical data.

The data represent the number of days it takes for different tomato plants to produce tomatoes. Use the information to determine the values for each cell in the frequency table.

47, 52, 53, 55, 57, 60, 61, 62, 63, 65, 65, 65, 65, 68, 70, 72, 72, 75, 75, 75, 76, 77, 78, 80, 81, 82, 85, 88, 89, 90

days to produce fruit	frequency
40-50	A
50-60	B
60-70	C
70-80	D
80-90	E
90-100	F

2) Cell A

3) Cell B

4) Cell C

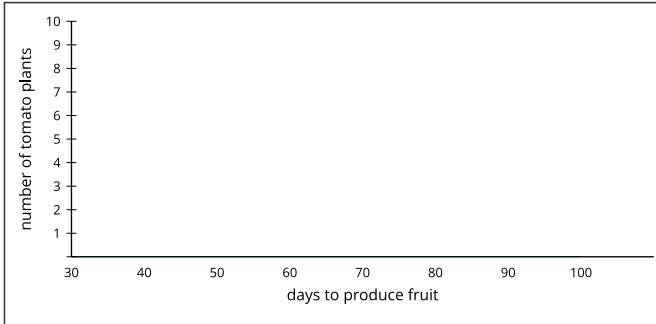
# Data Representations

5) Cell D

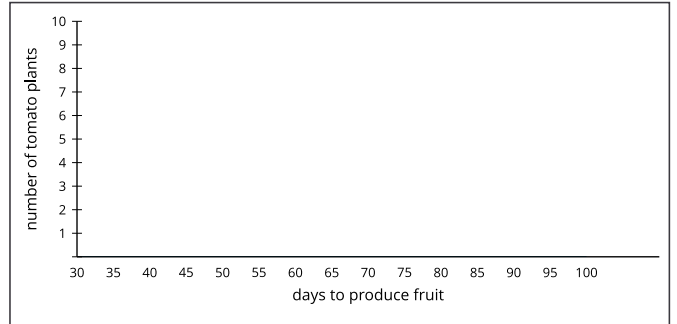
6) Cell E

7) Cell F

8) Use the set of axes and the information in your table to create a histogram.



9) The histogram you created has intervals of width 10 (like 40–50 and 50–60). Use the set of axes and data to create another histogram with an interval of width 5.



10) How does this histogram differ from the other one?

## Tomato Plants: Box Plot

A box plot can also be used to represent the distribution of numerical data.

11) Using the same data as the previous activity for tomato plants, find the median.

47, 52, 53, 55, 57, 60, 61, 62, 63, 65, 65, 65, 65, 68, 70, 72, 72, 75, 75, 75, 76, 77, 78, 80, 81, 82, 85, 88, 89, 90

Show Work

12) What does the median represent for these data?

# Data Representations

13) Find the median of the least 15 values to split the data into the first and second quarters. This value is called the first quartile.

Show Work

14) What does this value mean in this situation?

15) Find the value (the third quartile) that splits the data into the third and fourth quarters.

Show Work

16) Find the minimum value.

17) Find the maximum value.

18) Use the **five-number summary** to create a box plot that represents the number of days it takes for these tomato plants to produce tomatoes.

