Frequency Tables and Histograms

Maya recorded the number of bags of popcorn she sold each day at the carnival, and then represented the data in a frequency table and histogram.

Bags of popcorn: 62, 65, 58, 31, 64, 58, 66, 68, 56, 67, 68, 51

Make a Frequency Table

Choose a Range: The range should cover all of the data. Divide the range into equal intervals or groups.

Range in popcorn data: $68 - 31 = 37$
You can make intervals of 10 by using a range of 30 to 69.

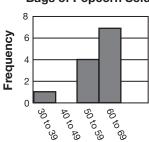**Tally Marks:** Record a tally mark for each value in the range.

Frequency: Count the tally marks and record.

Bags	Tally	Frequency
30–39	I	1
40–49		0
50–59	IIII	4
60–69	IIII II	7

Make a Histogram

Choose a Title: Bags of Popcorn Sold
Choose a Scale for the Vertical Axis: Use frequency of the data for the scale.
List Intervals on Horizontal Axis

Bags of Popcorn Sold

Use a Histogram
Look for clusters, gaps, and outliers.

Clusters: 50–69 for popcorn data
Gaps: 40–49; no bags sold in this interval
Outliers: 1 bag sold in 30–39 range

Use the information below for **1** through **3**.

Tickets Sold to Charity Ice-Skating Event							
72	81	88	51	90	89	85	74
87	100	80	99	87	96	99	84
84	86	94	88	91	85	78	90

1. Represent the data in the table in a histogram.

2. Where do most of the data in your histogram cluster?

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3. Reasoning Describe any outliers or gaps in the data.

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