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NCTM Standard(s):

[Select and use](file:///C:\Users\Kayla%20Jensen\Google%20Drive\Math%20Methods%20Notebook\NCTM%20Standards\document\chapter5\data.htm#bp2) appropriate statistical methods to analyze data

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| • | describe the shape and important features of a set of data and compare related data sets, with an emphasis on how the data are distributed; |

Launch:

“I am making cards for all of my family members over the holidays. I really wanted to find paper with stars all over for the outside of the card, but I couldn’t find any that I liked. So then I went to the store to look for stickers. They were all sold out!! So I was talking to the other teachers and they asked me why I didn’t just draw them.

I need to make at least 60 cards to send out. I think that is a great idea but I only have an hour to finish 60 cards! How many minutes are in an hour? (60 minutes) So how long do I have to make 1 card? (1 minute)

Explore:

* How long is a minute? Can we sit super quietly for a whole minute?
* Everyone will need a piece of paper and a pencil out on their desks. On the top I want you to predict how many stars you could make in that amount of time.
* When I say go, draw as many stars as you can. When time is up, count all of your stars and write to total number on the bottom and on your sticky note.
* Compare your actual number with your neighbors. Think about the differences, who drew the most? Who had the least? Did anyone have the same amount?
* We are going to plot our data on a line graph. What should we label the horizontal line? (number of stars drawn in one minute) What should we label the vertical line? (number of people who drew X number of stars)
* While we are plotting the data, we are going to be looking for the Range and Mode.
  + The **range** of a set of data is the difference between the highest and lowest values in the set.
  + The **mode** is the value that occurs most often. If no number is repeated, then there is no mode for the list.

Share:

* To make the chart, “Who thinks they have the highest numbers of stars? Who has the lowest number of stars?” Students will then place their data on the line graph made on the board.
* In groups, by analyzing data on the board, determine what the range and mode are. Share findings with the class by a show if hands.
* How are the post-its spread out? Are there many clustered together? Are there any gaps?

Summarize:

* By looking at the mode of our data, how many stars do you think I should be able to draw on each card?
* Tomorrow we are going to look at the data from 2 other classes and compare them to our class data. One is from a 2nd grade class and one is from a 6th grade class.