

Examples of Survey Choices that could be used to create a...

1. **Bar Graph** (page 30)
 - a. Example choices on survey: Always, Sometimes, Never
 - b. Survey could collect any countable data. (In the above example, you would count the number of survey respondents who chose 'Always', etc.)

2. **Dot Plot** (pages 58-60)
 - a. Survey could collect any countable data, but preferably within a small range from a small number of people such that a number line can easily display all possible answers as dots above the number line.
 - i. Keep in mind that the number line must be able to be displayed on a Google Slide.
 - ii. You may want to display *only* the results from the senior boys on a dot plot. Or, do a 'stacked dot plot' and display the results from the senior girls above the results from the senior boys such that the results can be easily compared visually. (See page 60)

3. **Stem-and-Leaf Plot** (pages 55-57)
 - a. Example choices on survey:
 - i. 52, 53, 53, 55, 57, 62, 63, 67, 71, 74, 79, 81, 83, 85, 88, 90, 91, 95, 96, 97, 99
 - b. Survey answers need to be double digit (or triple digit) numbers that can be split into a 'stem' and a 'leaf'.

4. **Histogram** (pages 37-51)
 - a. Example choices on survey:
 - i. To make it easy on yourself, include a survey question that has intervals from which to choose. (Otherwise, you will need to divide the data into intervals yourself.)
 - ii. Choices like this will include fractional values:
 1. 0 to less than 5
 2. 5 to less than 10
 3. 10 to less than 15
 4. 15 to less than 20
 5. 20 to less than 25
 - iii. Choices like this will not include fractional values:
 1. 136-155
 2. 156-175
 3. 176-195
 4. 196-215
 5. 216-235
 - b. A histogram is good for dividing a large quantity of data into separate numerical intervals.
 - c. Survey answers need to be able to broken into numerical intervals.
 - i. Intervals must cover all possible survey answers. [So, take into consideration whether or not fractions would be acceptable answers and write your survey question accordingly.]
 - ii. Intervals must be equal. [Note: Watch out for '0'!]

5. **Ogive Curve** (pages 51-54)

- a. Example choices on survey:
 - 0 to 3
 - 4 to 7
 - 8 to 11
 - 12 to 15
 - 16 to 18
- b. You may instead take a question that asks for individual numerical data, and divide it into equal intervals yourself afterwards. This is good if you want to use the same data for different reasons. In the above example, your choices on the survey would instead be 0, 1, 2, 3, ... 16, 17, 18 (which would be best presented in a drop-down list).
- c. Survey answers need to be able to be broken into numerical intervals.
 - i. Intervals must cover all possible survey answers. [In above choices, 3.2 and 3.5 must not be possible.]
 - ii. Intervals must be equal. [Note: '0 to 3' has four possible numbers: 0,1,2,3. '4 to 7' also has four possible numbers: 4,5,6,7. Etc.]

6. **Standard Deviation** (pages 88-93)

- a. You will be required to show the calculation of Standard Deviation by hand. You may then use technology to calculate Standard Deviation for a larger data set. But, to be able to do the 'by hand' required portion, your survey choices should be limited to 5 to 10 individual numbers.
- b. Example survey choices: (Ex: Numbers below may represent number of people living in one residence.)
 - i. 2
 - ii. 3
 - iii. 4
 - iv. 5
 - v. 6
 - vi. 7
 - vii. Other: (please enter number of _?_)
- c. Or, allow students to enter a number (by using a text box). Then, randomly choose 10 responses from, say sophomore girls, to calculate the standard deviation by hand.

7. **Two-Way Classification Table** (page 146)

- a. Typically, you can use the Age, Grade, or Gender questions along with a question with choices of: Yes, No, Sometimes (or 3 other categorical choices).