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| **LG #** | **L107** | **Standards:** | **S-ID.1.1, S-ID.1.2, S-ID.1.3, S-ID.1.4** |
| **4.0** | **In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard.****The student will be able to:*** Determine the type of distribution for data for which a normal distribution is not appropriate.

**No major errors or omissions regarding the score 4.0 content.** |
| **3.5** | In addition to 3.0, in-depth inferences and applications with partial success. |
| **3.0** | **Students will be able to summarize, represent and interpret data on a single count or measurement variable. Use mean and standard deviation to fit a normal distribution.****The student will be able to:*** Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. (S-ID.1.2)
* Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). (S-ID.1.3)
* Use mean and standard deviation to fit a normal distribution. (S-ID.1.4)
* Use mean and standard deviation to estimate population percentages.(S-ID.1.4)
* Use calculators, spreadsheets, and tables to estimate areas under the normal curve.

(S-ID.1.4)**No major errors or omissions regarding the score 3.0 content (simple or complex).** |
| **2.5** | No major errors or omissions regarding 2.0 content and partial knowledge of 3.0 content. |
| **2.0** | **The student recognizes and describes specific terminology such as:**

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| --- | --- | --- |
| * Outlier
 | * Skewed to the left
 | * Mean
 |
| * Standard Deviation
 | * Skewed to the right
 | * Normal Distribution
 |
| * Symmetric
 |  |  |

**The student will be able to:*** Represent data with plots on the real number line (dot plots histograms, and box plots). (S-ID.1.1)
* Recognize that there are data sets for which such a procedure is not appropriate.

(S-ID.1.4) |
| **1.5** | Partial knowledge of the score 2.0 content, but major errors or omissions regarding score 3.0 content. |
| **1.0** | With partial understanding of some of the simpler details and processes and some of the more complex ideas and processes. |
| **0.5** | With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes. |
| **0.0** | Even with help, no understanding or skill is demonstrated |