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| **LG #** | **A213** | **Standards:** | **S-IC.1.1, S-IC.2.3, S-IC.2.6** |
| **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:*** Design an unbiased method to collect data.
* Analyze and critique the data collection process, including flaws and biases, from published performed experiments, observational studies, and surveys.

**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 use surveys, experiments, and observational studies to collect data.****The student will be able to:*** Understand statistics as a process for making inferences about population parameters based on a random sample from that population. (S-IC.1.1)
* Recognize the differences among sample surveys, experiments, and observational studies. (S-IC.2.3)
* Explain how randomization relates to sample surveys, experiments, and observational studies. (S-IC.2.3)
* Evaluate reports based on data. (S-IC.2.6)

**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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| * Population
 | * Census
 | * Observational Study
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| * Parameter
 | * Survey
 | * Controlled Experiment
 |
| * Sample
 | * Sampling Methods
 | * Bias
 |
| * Statistic
* Control Group
* Randomization
* Correlation(Association)
 | * Cluster Grouping
* Treatment Group
* Random sample
* Causation
 | * Lurking Variable
* Blind Study
* Double Blind Study
 |

**The student will be able to:*** Recognize the purpose of sample surveys. (S-IC.2.3)
* Recognize the purpose of experiments. (S-IC.2.3)
* Recognize the purpose of observational studies. (S-IC.2.3)
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| **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 |