

## Statistics

### Instructional Focus: Analyze and use data to solve problems

| CCSS   | 4 – Mastery  | 3 – Proficient  | 2 - Basic  | 1 – Below Basic   | 0 – No Evidence  |
|--|--|---|--|---|--|
| <p><b>Calculating and interpreting standard deviations</b></p> <p><b>Determining the probability of normal distributions</b></p> | <p>Can extend thinking beyond the standard, including tasks that may involve one of the following:</p> <ul style="list-style-type: none"> <li>• Designing</li> <li>• Connecting</li> <li>• Synthesizing</li> <li>• Applying</li> <li>• Justifying</li> <li>• Critiquing</li> <li>• Analyzing</li> <li>• Creating</li> <li>• Proving</li> </ul> | <p>For random variables and binomial random variables, calculate <u>and interpret</u> the standard deviation</p> <p>Determine <u>binomial probability</u> by using normal approximation</p> | <p>For random variables <u>and</u> binomial random variables, calculate the standard deviation</p> <p>Determine the <u>probability of nonstandard normal distributions</u> by <u>calculating a z-score</u></p> | <p>For random variables <u>or</u> binomial random variables, calculate the standard deviation</p> <p>Determine the <u>probability of standard normal distributions, given a z-score</u></p> | <p>Little evidence of reasoning or application to solve the problem</p> <p>Does not meet the criteria in a level 1</p> |