

APPENDIX 1
The Hot Hand and Other Ways to Relate Math in Sports

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Common Core State Standards

7.SP.2

Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates of predictions.

7.SP.3

Informally address the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a measure of variability.

7.SP.4

Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.

The way I would like to start my unit is with an understanding of statistics and probability. North Carolina follows the Common Core State Standards and the seventh grade standards that fit well include 7.SP.2 in which students will collect sample data and then make generalizations about a population based on the collected data. Students will also address 7.SP.3 in which students will compare two data sets of information and build on their understanding of mean, median, inter-quartile range and Mean Absolute Deviation from 6th grade. The main concept is to find the variability of the data. Standard 7.SP.4 requires students to use measures of central tendency to draw informal comparisons about the two populations.