CONNEAUT AREA SCHOOL DISTRICT MATHEMATICS—Module 5		
UNIT OF STUDY: Statistics and Probability	**COURSE/GRADE:** Grade 7	**# WEEKS:** 20 days

Focus (emphasis) Standards/EC	**Technology/manipulatives**
CC.2.4.7.B.2 Draw informal comparative inferences about two populations… **M07.D-S.2.1.1** Compare two numerical data distributions using measures of center and variability. Example 1: The mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team. This difference is equal to approximately twice the variability (mean absolute deviation) on either team. On a line plot, note the difference between the two distributions of heights. Example 2: Decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth grade science book. **CC.2.4.7.B.3** Investigate chance processes and develop, use, and evaluate probability models. **M07.D-S.3.1.1** Predict or determine whether some outcomes are certain, more likely, less likely, equally likely, or impossible (i.e., a probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event). **M07.D-S.3.2.1** Determine the probability of a chance event given relative frequency. Predict the approximate relative frequency given the probability. Example: When rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times but probably not exactly 200 times. **M07.D-S.3.2.2** Find the probability of a simple event, including the probability of a simple event not occurring. Example: What is the probability of not rolling a 1 on a number cube?	Calculators, Smartboard, Study Island, rulers, white boards, highlighters, colored pencils, cards, dice, spinners,

M07.D-S.3.2.3 Find probabilities of independent compound events using organized lists, tables, tree diagrams, and simulation.	
Important (reinforced) Standards/EC **CC.2.4.7.B.1** Draw inferences about populations based on random sampling concepts… **M07.D-S.1.1.1** Determine whether a sample is a random sample given a real-world situation. **M07.D-S.1.1.2** Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Example 1: Estimate the mean word length in a book by randomly sampling words from the book. Example 2: Predict the winner of a school election based on randomly sampled survey data.	**Reading, writing, speaking strategies** Journaling, read aloud, persuasive/informational/expository writing, graphic organizers, Frayer model, lecture, cooperative learning, board work, demonstration, Think-Pair-Share, note-taking, crossword puzzles
Vocabulary Complementary events, compound event, dependent event, experimental probability, fair, Counting Principle, independent events, outcome, permutation, probability, random, relative frequency, sample space, simple event, simulation, theoretical probability, tree diagram, unfair, biased sample, double box plot, double dot plot, population, sample, random sample, statistics, survey, unbiased sample, chance, likely event, equally likely, population	**Questioning and discussion techniques** Bellringers, Exit tickets, discovery, small/large groups, peer tutoring, games, homework review, dry erase boards
Real life application Cards, sports, biology, production, agriculture, sales, business	**Performance assessment** Test, Quiz, Performance Task, Homework, Projects, Notebooks, Study Island
Computation Operations involving real numbers	**Accommodations/adaptations** Differentiation strategies, small group instruction, cooperative learning, guided practice, peer tutoring, limited problems/choices, manipulatives and models, clarity checks, diagrams and graphs

SAS Module Resources www.pdesas.org: *Grade 7 Mathematics Assessment Anchors and Eligible Content *Mathematics Glossary *PA Core Mathematics, Grades PreK-12 *PA Standards Instructional Frameworks: Math (Go to Teacher Tools then Curriculum Mapping) *Math Cluster Matrix – Tri-folds 6-7-8	