Grade 7
Distance Learning Module 7: Week of: May 18th – May 22nd

Grade 7 PreAlgebra - *Modified from Unit E - Probability and Statistics*

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Students use organized lists and trees to write sample spaces about events and determine probabilities associated with the events including simple probabilities and conditional probabilities involving 'and' and 'or'.

CCSS.MATH.CONTENT.7.SP.A.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

CCSS.MATH.CONTENT.7.SP.A.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 or predictions.

CCSS.MATH.CONTENT.7.SP.C.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. 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.

CCSS.MATH.CONTENT.7.SP.C.8B Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., rolling double sixes), identify the outcomes in the sample space which compose the event.

Vocabulary: probability, theoretical probability, experimental probability, certain, likely, unlikely, impossible, tree diagram, frequency table, compound event

Skills:

1) Finding experimental probabilities by collecting data
2) Using theoretical probability to predict
3) Using samples to predict
4) Displaying compound events with diagrams or organized lists and then finding probabilities

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Intro to Probability -Watch the video and take notes -Complete the practice problems and check answers. -Do google form	-Intro to Probability Video (Math Antics) -Practice Problems with Answer Key	Answer Question on Google Forms and submit
Tuesday: Experimental vs. Theoretical Probability -Watch Video and take notes -Read Notes and do practice -Complete Practice Problems on Khan Academy	-Experimental vs. Theoretical Probability Video -Notes, Examples and Practice: Khan Academy Notes	Google Form on Theoretical vs Experimental
Wednesday: Sample Space (tree diagram, list) -Watch Video and take notes -Review posted notes -Complete Practice Problems on Khan Academy	-Sample Space for Compound Events: Khan Academy Video -Notes for Tree Diagrams -Great Notes with Examples -Practice Problems on Khan Academy	Teachers will check Khan Academy results.
Thursday: Fundamental Counting Principle -Read Notes -Watch Video -Take Practice Quiz -Complete Practice Problems on Khan	-Notes for Fundamental Counting Principle -Video for Fundamental Counting Principle -Practice Quiz for Fundamental Counting Principle	Teachers will check Khan Academy results

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Academy	How many Combinations are There? -Practice Problems for Fundamental Counting Principle: Khan Academy	
Friday: Two Way Tables 1) Watch the video (and the optional one if you need it) 2) do the Titanic worksheet - answers are at the bottom 3) Do the Khan problems	Video: Two Way Tables (just watch to 6:20) Video: Two Way Tables and Venn Diagrams (optional) Titanic and Two Way Tables	Khan Practice "Read Two Way Frequency Tables" Khan Practice "Read Relative Frequency Tables"

Week criteria for success:

1) I can explain the difference between experimental and theoretical probability.
2) I can calculate probability.
3) I can draw and interpret a tree diagram that represents sample space.
4) I can use the Fundamental Counting Principle to calculate the sample space.

Supportive resources and tutorials for the week (plans for re-teaching):