Mathematics
Unit 3: Data Analysis, Statistics, and Probability

Essential Understandings	▪ Graphs convey data in a concise way. ▪ Information from a graph can be used to answer questions. ▪ The probability of an event's occurrence can be predicted with varying degrees of confidence.
Essential Questions	▪ How can information be collected, recorded, and organized? ▪ What is probability? ▪ How can one use data to make predictions? ▪ What is mode? ▪ How does one find the mode?
Essential Knowledge	▪ Data is collected and organized to solve problems and answer questions. ▪ Graphs are used to represent and interpret data. ▪ Probability is a measure of how likely an event is to occur. ▪ The mode is the number that appears most frequently in a set of data.
Vocabulary	▪ Terms: o scale (in regard to graphs), likely, less likely, equally likely, impossible, certain, analyze, probability, trial, outcome, mode, least frequent, organized list
Essential Skills	▪ Read, construct, and interpret scaled bar graphs. (I, R, A) ▪ Read and interpret scaled line plots, tally charts and tables. (I, R, A) ▪ Determine if outcomes are more likely, less likely, equally likely, or impossible. (I, R, A) ▪ Define, find, and use most (i.e., mode) and least frequent, and largest and smallest when analyzing data. (I, R, A)

Related Maine Learning Results	B. Data
	  Data Analysis
	    B2. Students read, construct, and interpret bar graphs.

NECAP	NECAP
	  Data, Probability, and Statistics/Geometry and Measurement
	  M (DSP) 3-1
	    Interprets a given representation (line plots, tally charts, tables, or bar graphs) to answer questions related to the data, to analyze the data, to formulate conclusions, or to make predictions.
	  M (DSP) 3-2
	    Analyzes patterns, trends, or distributions in data in a variety of contexts by determining or using most frequent (mode), least frequent, largest, or smallest.
	  M (DSP) 3-5
	    For a probability event in which the sample space may or may not contain equally likely outcomes, determines the likelihood of the occurrence of an event (using "more likely", "less likely", or "equally likely").