

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
MATH Unit 4: Probability and Statistics	8 th grade	4 th 6 weeks	27 Days
Objectives		Examples/Specifications	
<p>Chapter 8: (8.11) Probability and statistics. The student applies concepts of theoretical and experimental probability to make predictions. The student is expected to: (A) find the probabilities of dependent and independent events; (B) use theoretical probabilities and experimental results to make predictions and decisions; and (C) select and use different models to simulate an event. (8.13) Probability and statistics. The student evaluates predictions and conclusions based on statistical data. The student is expected to: (A) evaluate methods of sampling to determine validity of an inference made from a set of data; (B) recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis. (8.14) Underlying processes and mathematical tools. The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. The student is expected to: (A) identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics; (C) select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem (8.16) Underlying processes and mathematical tools. The student uses logical reasoning to make conjectures and verify conclusions. (A) the student is expected to:make conjectures from patterns or sets of examples and nonexamples Chapter 9: (8.12) Probability and statistics. The student uses statistical procedures to describe data.</p>		<p>Find the probability of independent and dependent events</p> <p>Explore the difference between theoretical and experimental probabilities</p> <p>Find the number of permutations of objects</p> <p>Predict actions of a larger group by looking at a sample</p> <p>Find the number of combinations of objects</p>	

<p>The student is expected to:</p> <p>(A) select the appropriate measure of central tendency or range to describe a set of data and justify the choice for a particular situation</p> <p>(C) select and use an appropriate representation for presenting and displaying relationships among collected data, including line plots, line graphs, stem and leaf plots, circle graphs, bar graphs, box and whisker plots, histograms, and Venn diagrams, with and without the use of technology</p> <p>(8.15) Underlying processes and mathematical tools. The student communicates about Grade 8 mathematics through informal and mathematical language, representations, and models.</p> <p>The student is expected to:</p> <p>(B) evaluate the effectiveness of different representations to communicate ideas.</p>	<p>Select the appropriate display for data</p>
<p>Language of Instruction:</p>	<p>Textbook Correlations:</p>
<p>Biased sample Combination Composite experiments Convenience sample Dependent events Event Experimental probability Fundamental counting principle</p>	<p>Chapter 8 Chapter 9 Data collection – central tendencies Number cubes, spinners, coins Graphing project</p>
	<p>Weblinks/Other Resources:</p>

<p>Independent events Outcome Random Permutation Population Probability Sample Sample space Simulation Theoretical probability Tree diagram Unbiased sample Voluntary response sample Histograms Circle graphs Measures of central tendency Measures of variation Box and whisker plots</p>	<p>Quia.com - random number generators</p>
<p>Evaluation/External Assessment/Local Assessment:</p>	<p>Best Instruction Timeline:</p>
<p>Quizzes, Chapter tests, benchmarks, t-made assessments</p>	<p>Chapter 8: 11 days Chapter 9: 10 days Review/Sem. Exams: 6 days</p>