

EIGHTH GRADE CURRICULUM OBJECTIVES

State Standard 10C

Students who meet the standard can determine, describe and apply the probabilities of events.

(Probability, including counting techniques)

The Learner Will...

MAINTAIN (G)	TARGET (H)	INTRODUCE (I)
<ul style="list-style-type: none"> • Discuss odds versus probability. • Make and test conjectures about the results of experiments and simulations using proportionality and basic understanding of probability. • Compute probabilities for simple compound events using methods such as organized lists and tree diagrams. 	<ul style="list-style-type: none"> • Describe and explain complementary and mutually exclusive events using appropriate terminology. • Design and conduct experiments or simulations for probability, including the possible use of technology to simulate events. • Discuss the difference in empirical and theoretical probability. • Compute probabilities for simple compound events using a variety of methods, including area models. • Identify situations where dependent and independent events occur. • Determine probabilities using simple counting techniques. • Discuss situations where permutations and combinations should be used in counting outcomes. 	<ol style="list-style-type: none"> 1. Determine geometric probability based on area. 2. Calculate probability using Venn diagrams. 3. Determine simple probabilities using frequency tables. 4. Construct empirical probability distributions using simulations. 5. Describe the concepts of conditional probability. 6. Develop an understanding of permutations and combinations as counting techniques.