

SIXTH 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 (E)	TARGET (F)	INTRODUCE (G)
<ul style="list-style-type: none">• List all possible outcomes of compound, independent events (e.g., toss a coin and spin a spinner).• Assign a value of zero to probabilities that are impossible and a value of one to probabilities that are certain.• Express simple probabilities as a fraction between zero and one.• Predict the probability of outcomes of simple experiments and test the predictions.	<ul style="list-style-type: none">• Record probabilities as fractions, decimals, or percents.• Demonstrate that the sum of all probabilities equals one.• Determine empirical probabilities from a set of data provided.• Set up a simulation to model the probability of a single event.• Discuss the effect of sample size on the empirical probability compared to the theoretical probability.• List outcomes by a variety of methods (e.g., tree diagram).• Determine theoretical probabilities of simple events.	<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.