

Standards Chart: Shake, Rattle, & Roll

Grades 6–8

Common Core State Standards corestandards.org/Math	LESSON 1	LESSON 2	LESSON 3	LESSON 4
Statistics and Probability	X	X		X
8.SP.A.1. Construct and interpret scatterplots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	X			
8.SP.A.2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatterplots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	X			
6.SP.B.4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.		X		
6.SP.B.5. Summarize numerical data sets in relation to their context.		X		
7.SP.C.7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.				X
7.SP.C.8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.				X
Number System			X	
7.NS.A.3. Solve real-world and mathematical problems involving the four operations with rational numbers.			X	
Mathematical Practice	X	X	X	X
MP1. Make sense of problems and persevere in solving them.		X	X	X
MP2. Reason abstractly and quantitatively.	X		X	
MP3. Construct viable arguments and critique the reasoning of others.	X	X		
MP4. Model with mathematics.		X	X	X
MP5. Use appropriate tools strategically.				X
MP7. Look for and make use of structure.		X		
MP8. Look for and express regularity in repeated reasoning.				X

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NCTM Standards nctm.org/standards	LESSON 1	LESSON 2	LESSON 3	LESSON 4
Data Analysis and Probability	X	X		X
Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.	X			
Select and use appropriate statistical methods to analyze data.	X	X		
Develop and evaluate inferences and predictions that are based on data.	X	X		
Understand and apply basic concepts of probability.				X
Algebra	X	X		
Understand patterns, relations, and functions.	X	X		
Analyze change in various contexts.	X			
Number and Operations		X	X	X
Understand numbers, ways of representing numbers, relationships among numbers, and number systems.			X	X
Compute fluently and make reasonable estimates.		X	X	X
Problem Solving	X	X	X	X
Reasoning and Proof	X	X	X	X
Communication	X	X	X	X
Connections	X	X	X	X
Representation	X	X	X	X