

## Probability and Statistics

### Unit 1: Representing and Interpreting Data

Day	Activity
1–2	Data Plots
3–4	Showing Data Center and Spread
5–6	Interpreting the Shape of Data Distributions
7–8	Normal Distributions
9–10	Unit Activity—Unit 1
11	Posttest—Unit 1

### Unit 2: Relating Data Sets

Day	Activity
12–13	Relating Categorical Data
14–15	Interpreting Data as a Line
16–17	Relating Quantitative Data
18–19	Making and Interpreting Correlations
20–21	Correlation Versus Causation
22–24	Unit Activity—Unit 2
25	Posttest—Unit 2

### Unit 3: Independent and Conditional Probability

Day	Activity
26–27	Sample Space
28–29	Applying the Addition Rule for Probability
30–31	Applying the Multiplication Rule for Probability
32–33	Independent Events
34–35	Using Counting Techniques to Determine Probabilities
36–37	Conditional Probability
38–40	Unit Activity—Unit 3
41	Posttest—Unit 3

**Unit 4: Applying Probability**

<b>Day</b>	<b>Activity</b>
42–43	Interpreting Two-Way Frequency Tables
44–45	Using Probability to Make Fair Decisions
46–47	Using Probability to Analyze Decisions and Strategies
48–49	Applying Conditional Probability and Independence
50–51	Interpreting Conditional Probability
52–54	Unit Activity—Unit 4
55	Posttest—Unit 4

**Unit 5: Making Inferences and Conclusions**

<b>Day</b>	<b>Activity</b>
56–57	Making Inferences Based on Statistics
58–59	Evaluating the Validity of a Statistical Model
60–61	Using Statistics in Surveys, Experiments, and Studies
62–63	Analyzing a Survey
64–65	Statistically Comparing Two Treatments
66–67	Evaluating Reports Based on Data
68–71	Unit Activity—Unit 5
72	Posttest—Unit 5

**Unit 6: Using Probability to Make Decisions**

<b>Day</b>	<b>Activity</b>
73–74	Random Variables
75–76	Expected Value of a Random Variable
77–78	Making Predictions Based on Probabilities
79–80	Making Predictions Based on Empirical Data
81–82	Ins and Outs of Expected Value
83–84	Fair Decisions with Random Variables
85–86	Complex Decisions Using Probability
87–89	Unit Activity—Unit 6
90	Posttest—Unit 6