

Pre-AP 6th Grade Math Curriculum Bundle # 4

| Title | Suggested Dates |
|-------------|------------------------------------|
| Probability | October 26 – November 13 (14 days) |

| Big Idea/Enduring Understanding | Guiding Questions |
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| Theoretical probability is found by analyzing a situation and predicting outcomes and experimental probability is found as the result of an experiment. | <ol style="list-style-type: none"> 1. Are experimental and theoretical probabilities always equivalent? 2. How are theoretical and experimental probabilities alike and different? |
| Theoretical probabilities can be analyzed by constructing sample spaces and experimental probabilities can be analyzed by collecting experimental data. | <ol style="list-style-type: none"> 1. How can you determine all possible outcomes of an event? 2. How do you determine the probability of an event and its complement? |

The resources included here provide teaching examples and/or meaningful learning experiences to address the District Curriculum. In order to address the TEKS to the proper depth and complexity, teachers are encouraged to use resources to the degree that they are congruent with the TEKS and research-based best practices. Teaching using only the suggested resources does not guarantee student mastery of all standards. Teachers must use professional judgment to select among these and/or other resources to teach the district curriculum.

| Knowledge & Skills with Student Expectations | District Specificity/Examples | Suggested Resources (See note above) | |
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| <p>6.10 Probability and statistics. The student uses statistical representations to analyze data.</p> <p>6.10C sketch circle graphs to display data</p> | <ul style="list-style-type: none"> • use estimation to evaluate the reasonableness of the displayed data • use fraction, percent, and angle benchmarks to evaluate the reasonableness of the displayed data • focus on ratios and proportions to determine parts of wholes | | <p>PH: Lesson 7-8</p> <p>Region IV: Activity A p. 225, Activity B pp. 226-227 (protractor optional)</p> <p>AIRR 6th grade Activity #244-247</p> <p>Closing the Distance 6th Lesson 10 pg. 167-184</p> |
| <p>6.9 Probability and statistics. The student uses experimental and theoretical probability to make predictions.</p> <p>6.9A construct sample spaces using lists and tree diagrams</p> | <ul style="list-style-type: none"> • construct spaces for experimental and theoretical probabilities • use sample spaces (lists, tables and other diagrams) to analyze possible outcomes for a given situation | <p>CMP2 How Likely Is It? Pearson Investigations 1, 2</p> | <p>PH: Lesson 10-1</p> <p>Region IV: Activity A&B, pp. 214-217</p> <p>Understanding Math Understand Probability: Topic 1</p> <p>AIRR 6th grade Activity #220-224</p> <p>Accelerated Curriculum 6th Unit 10 Lesson 1</p> |

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| <p>6.9 Probability and statistics. The student uses experimental and theoretical probability to make predictions.</p> <p>6.9B find the probabilities of a simple event and its complement and describe the relationship between the two</p> | <ul style="list-style-type: none"> • determine the results of simple events (one thing happening) and its complement • collect data using frequency tables • interpret the results of a given experiment and express its probability as a ratio in all forms (simplified) • determine the experimental probability of given events | | <p>PH: Lesson 10-2, 10-3</p> <p>AIRR 6th grade Activity #225-228</p> <p>Accelerated Curriculum 6th Unit 10 Lesson 2</p> <p>Closing the Distance 6th Lesson 15 pg. 259-276</p> |
| <p>7.10 Probability and statistics. The student recognizes that a physical or mathematical model can be used to describe the experimental and theoretical probability of real-life events.</p> <p>7.10A construct sample spaces for simple or composite experiments</p> | <ul style="list-style-type: none"> • experiment with and without replacement • list outcomes in various forms (tree, list, table), use 2 or more components (major focus at this grade level) | <p>CMP2 What Do You Expect? - Blue Pearson Investigations 1, 2</p> | <p>PH Textbook- 7th grade Chapter 12-3</p> <p>AIRR 7th grade Activity #306-309</p> <p>LTF: Family Fun: Binomial Probability p. 338 (updated version available on-line)</p> <p>Understanding Math Understanding Probability: Topic 7, Topic 8</p> |
| <p>7.10 Probability and statistics. The student recognizes that a physical or mathematical model can be used to describe the experimental and theoretical probability of real-life events.</p> <p>7.10B find the probability of independent events</p> | <ul style="list-style-type: none"> • Experiment with coins, drawing objects out of a box without looking, spinner, choosing a random card, marbles, cubes, etc. • display results as a fraction, decimal or percent • conduct experiments with simple and composite events | | <p>PH Textbook- 7th grade Chapter 12-1 thru 12-4</p> <p>BrainPop.com Probability of Independent Events & Probability of Compound Events</p> <p>LTF Diagnostic Unit 8</p> <p>AIRR 7th grade Activity #310-313</p> |
| <p>7.11 Probability and statistics. The student understands that the way a set of data is displayed influences its interpretation.</p> <p>7.11A select and use an appropriate representation for presenting and displaying relationships among</p> | <ul style="list-style-type: none"> • use data in tables to create visual displays • create more than one display of the data • select best display for a given set of data • recognize appropriate/inappropriate representations for data | | <p>PH Textbook- 7th grade 11.1b (Venn Lab) Chapter 11.1</p> <p>LTF Movie Probability p. 304</p> |

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| <p>collected data, including line plot, line graph, bar graph, stem and leaf plot, circle graph, and Venn diagrams, and justify the selection</p> | | | <p>Unit 9 Diagnostic (may need to eliminate a few questions)</p> <p>AIRR 7th grade Activity #326-327</p> <p>Closing the Distance 7th Lesson 15 pg. 253-274</p> |
| <p>7.11 Probability and statistics. The student understands that the way a set of data is displayed influences its interpretation.</p> <p>7.11B make inferences and convincing arguments based on an analysis of given or collected data</p> | <ul style="list-style-type: none"> • use the data to make predictions in percents, fractions, ratios • recognize and analyze data in tables, bar graphs, Venn diagrams, line graphs, circle graphs, line plot <p>Process skill to be addressed with relevant content</p> | | <p>PH Textbook- 7th grade Chapter 11-1 thru 11-6</p> <p>AIRR 7th grade Activity #329-332</p> <p>Closing the Distance 7th Lesson 15 pg. 253-274</p> |