Curriculum Coverage in 7th Grade Mathematics for the 2018-2019 School Year as Outlined by TN Standards.

TN Standards Major Work of the Grade:

* Operations with fractions
* Proportional Relationships
* Equivalent Expressions from properties
* Contextual problems involving equations and inequalities

Supporting:

* Geometrical figures
* Angle measure, area, surface area, volume
* Random sampling
* Compare two populations
* Probability
* Data Sets

[**The Standards for Mathematical Practice**](http://www.corestandards.org/Math/Practice)

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| **MP1. Make sense of problems and persevere in solving them.** | **MP2. Reason abstractly and quantitatively.** | **MP3. Construct viable arguments and critique the reasoning of others.** | **MP4. Model with mathematics.** |
| **MP5. Use appropriate tools strategically.** | **MP6. Attend to precision.** | **MP7. Look for and make use of structure.** | **MP8. Look for and express regularity in repeated reasoning.** |

**4th Nine Weeks**

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| **Probability** **(Allow 2-3 weeks for instruction, review, and assessment)** |
| **TN Standards** | **Learning Outcomes**  | **Instructional Focus** | **Content** |
| 7.SP.C.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around ½ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. | I can…..Determine the likelihood of an event by exploring the probability of an event. |  | **GO Math Lesson:** Lesson 12.1 Probability (p. 367)Lesson 12.2 Experimental Probability of Simple Events (p. 375)Lesson 12.3 Experimental Probability of Compound Events (p. 381) **Engage NY Task:** [Module 5 Topic A and Topic B](https://www.engageny.org/resource/grade-7-mathematics-module-5)[Calculating and Interpreting Probabilities](https://www.engageny.org/resource/grade-7-mathematics-module-5)[Estimating Probabilities](https://www.engageny.org/resource/grade-7-mathematics-module-5) |
| 7.SP.C.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. | Determine the experimental probability of an event.EX. *When rolling a number cube 600 times, predict that a 3 or a6 would be rolled roughly 200 times, but probably not exactly 200 times.* |  | Lesson 12.4 Making Predictions with Experimental Probability (p. 387) |
| 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.a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selectedb. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies? | Determine the theoretical probability of a simple event. EX. *If a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.*I can….Determine the theoretical probability from a simulation.EX*. Find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?* |  | Lesson 13.1 Theoretical Probability of Simple Events (p. 399)Lesson 13.2 Theoretical Probability of Compound Events (p. 405)Lesson 13.3 Making Predictions with Theoretical Probability (p. 411)Lesson 13.4 Using Technology to Conduct a Simulation (p. 417) |
| 7.SP.D.8 Summarize numerical data sets in relation to their context.a. Give quantitative measures of center (median and/or mean) and variability (range and/or interquartile range), as well as describe any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.b. Know and relate the choice of measures of center (median and/or mean) and variability (range and/or interquartile range) to the shape of the data distribution and the context in which the data were gathered.  | I can….Describe the measures of central tendency (median and/or mean) or measures of variability (range and/or interquartile range) Describe any overall pattern and striking deviations from the overall pattern with reference to the context in which the data were gathered.Know and relate the choice of measures of central tendency and variability to the shape of the data distribution.Know the context in which the data were gathered and apply the correct measure of central tendency or data distribution.\*\*\*Make sure you cover the word variance and how it applies to how data is distributed |  | **\*\*\*There are NO GO Math Lessons to Correspond to this Standard**  |
| **Allow 2-3 weeks of review for TNReady Part II****For the remainder of the school year, begin 8th grade skills:****Rational and Irrational Numbers,Pythagorean Theorem, Linear functions** |

**Resource Toolbox:**

<http://www.kutasoftware.com/free.html>

<http://illuminations.nctm.org/>

<http://cuacs8.mck.ncsu.edu/mathsampleitems/main.html>

<http://www.ilovemath.org/index.php?option=com_docman>

<http://www.math-aids.com>

<http://www.commoncoresheets.com>

<http://www.mathworksheetsland.com>