



Dear Seventh Grade Families,

In Unit 10, students will work on the following seventh grade Common Core standards in Number System (NS) domain.

7.SP.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 $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.
7.SP.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.
7.SP.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. b. Develop a probability model by observing frequencies in data generated from a chance process.
7.SP.8	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event. c. Design and use a simulation to generate frequencies for compound events.

### Unit 10 Concepts:

- Probability
- Compound Events
- Sample Spaces
- Experiments

Ask questions like these to help your seventh grader as a productive mathematical thinker:

- When is a list better than a table?
- How can you use the probability in each event to find the probability of a compound event?
- What is the difference between experimental and theoretical probability?
- How can you test your solution to see if it answers the problem?

### Unit 10 Vocabulary:

- Probability
- Outcome
- Simple & Compound Events
- Independent & Dependent Events
- Theoretical Probability
- Experimental Probability
- Frequency
- Sample space
- Fundamental Counting Principle

Need a review? Check out our lesson videos online!

[swunmath.com/student-videos](http://swunmath.com/student-videos)

If you don't know the class's special name, ask your child's teacher.

We encourage you to talk with your child daily about what was learned in math class.

Thank you for your support!