

Grade 5 Mathematics Unit Preview Quarter 2: Probability

Objectives: (Your student will be able to)

- List all possible outcomes of an event.** The computer club is serving sandwiches. The member can choose a ham sandwich or a turkey sandwich. All sandwiches come with either lettuce, tomatoes, or pickles. On his or her sandwich each member can select mayo, mustard, or hot sauce as a topping. Use a tree diagram to show how many sandwich combinations can be created?
- Find the probability of an event and express as a fraction (1/2) or a ratio (1 out of 2).** For example, the probability of flipping a coin and having it land on heads is $\frac{1}{2}$. Landing on heads represents one out of the two possible outcomes.
- Conduct an experiment and make a prediction based on the outcomes of the experiment.** For example, based on the probability of flipping a coin and it landing on heads $\frac{1}{2}$, how many times can you expect it to land on heads if you flipped a coin 20 times? Next, conduct the experiment.



Vocabulary: (Words your student will need to understand)

<ul style="list-style-type: none"> Probability: The ratio/fraction that tells how likely it is that an event will take place. 	<ul style="list-style-type: none"> Experimental Probability: The probability of an event based on actually doing the event or task.
<ul style="list-style-type: none"> Independent Event: In probability, when the outcome of one event does not affect the outcome of a second event, the events are independent 	<ul style="list-style-type: none"> Theoretical Probability: The mathematically calculated chances of a specific event occurring (see probability). Probability of tossing heads is $(H) = 1/2$, if there were 100 tosses of a coin, in theory should equal 50 heads.
<ul style="list-style-type: none"> Outcomes: Individual results of a probability experiment. 	<ul style="list-style-type: none"> Equally Likely: When the outcomes of an experiment have the same chance of happening

Activities to do with your student (in addition to homework, optional):

- Conduct different experiments with different probabilities. Predict an outcome based on the theoretical probability and then find the experimental probability of the event.
- List possible outcomes of independent events. For example, creating different types of sandwiches or combinations of outfits.
- Practice basic facts.

