



Vocabulary  
ratio  
fraction  
percent  
experiment  
outcome  
event  
probability  
sample  
tree diagram  
compound event  
fair  
unfair

## Maine State Learning Results for Grade 7

Predict the probability of outcomes of simple experiments and verify predictions using the understanding that the probability of an occurrence is the ratio of the number of actual occurrences to the number of possible occurrences.

Interpret probabilities between and including zero and one.

Explain why zero and one are the upper and lower limits for probability values.



### Grading

Exceeds- 94-100 points

Meets-80-93 points

Partially Meets- 65-79

Does Not Meet- Below 65

# PROBABILITY



WHAT DO YOU EXPECT?

A Layered Curriculum Unit.

## The C Layer

65 points max.

Listen to the lecture each day and take notes on your outline. 10pts (2 per day)

Make flash cards for the vocabulary words. You will be evaluated based on a random testing of 5 words. 10 points

Create two spinners with several sections of different colors. Label each section with the probability of landing in that section. 20 pts

Describe, in a paragraph, how you could use past weather records to find the probability of snow occurring during a given month. 20 pts.

Do a probability worksheet. 20 pts.

Toss a coin 100 times. Find the probability the coin will land on heads. 20pts

Take the quiz. 20pts

Work the computer game Fish Tank for 10 minutes. <http://www.bbc.co.uk/education/mathsfile/shockwave/games/fish.html> 10 pts.

Watch the Probability Bite Size Activity and take the test. Raise you hand to show me your score. <http://www.bbc.co.uk/schools/gcsebitesize/maths/dataprobability1act.shtml> \_ 15 points.

Pull 4 practice problems from the cards on the board. Complete the problems. 20pts

Make a tree diagram to show how many different possibilities there are for a class schedule with your five teachers. 20pts

Work with a partner. Name three different automobile colors. Then name five different brands of automobiles. Make a tree diagram to show all the autos that could be purchased in one of the chosen colors and brands. 25 pts.

## The B Layer

30 points max.



Make a dart board and give the probability of hitting each area. Show as a ratio and a percent. 15pts.

Open a pack of M&Ms give the probability of randomly choosing an M&M of each color. Create a pie chart of your data. 15 pts.

Create an example of an unfair spinner. Why is it unfair? Explain your answer based on the probability of landing in each section. 15pts

Give an example of a situation where the probability is 1 and another example of a 0 probability. Why is it so? 15pts.

Do "THE ODDS ARE..." worksheet. You will need to find out what the difference between probability and odds before you begin. 15pts



## The A Layer

5 points max.

Examine a lottery. Is it worth spending 2 dollars to play every week? Why? 5pts.

Should towns allow casino gambling? Why or Why not? 5 pts

