

### Purpose

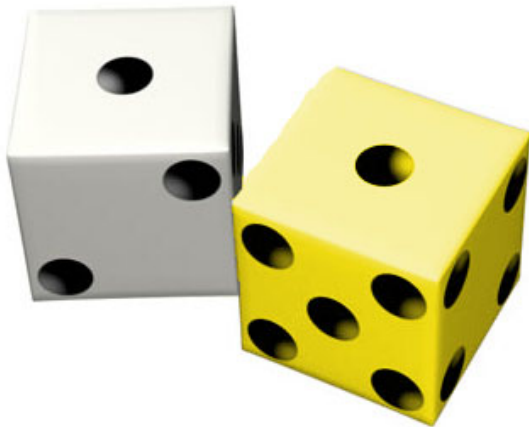
1. Understand the concepts of theoretical and experimental probability.
2. Conduct multiple trials rolling two six-sided dice and summing the values for each trial.
3. Use iSENSE to visualize the data and draw conclusions.

### Materials

Two six-sided dice

### Method

1. Roll two six-sided dice – one white and one yellow – a total of 10 times.
2. For each trial, record the value of each side in the table provided in the Observations section.

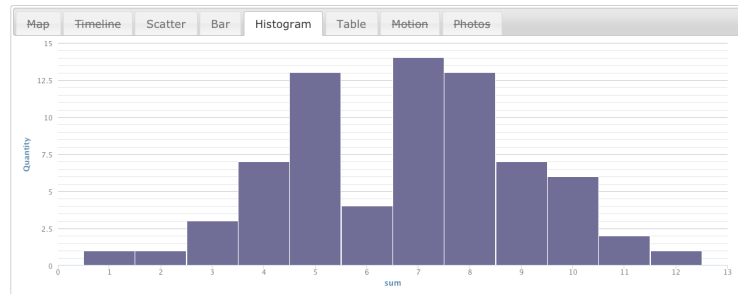


### Observations

Trial	White	Yellow
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

### iSENSE Analysis

1. Download and open the spreadsheet file attached to the Distribution of Dice Rolls project.
2. Transfer the values from your Observations table into the spreadsheet.
3. Save your spreadsheet and upload the file to the Distribution of Dice Rolls project.
4. Use the Histogram visualization to examine the distribution of values from each individual die (white and yellow), as well as the sum of the two dice.
5. Add data from other contributors and see how this affects the distribution of the rolls.
6. Save any visualization that you find particularly interesting.



### Discussion Questions

1. How do you interpret the dice roll data?
2. Are all results equally likely? Why or why not?
3. How does the shape of the distribution curve change as more data are added to the visualization?
4. Can you think of other probability experiments to conduct with the iSENSE system?