

control. He conducted the test 3 times for each amount of oil. He then counted the number of kernels that had popped. He used the following amounts of oil: 5 ml, 10 ml, 20 ml, and 30 ml. He used the same amount of popcorn in each trial. He heated the oil for 2 minutes and cooked the popcorn for 4 minutes.

Important Aspects of Design Outline:
Independent Variable: amount of oil
Levels (treatments) of I.V.: 4
Number of trials for each level (treatment): 3
Dependent Variable: # of popcorn

Scenario 1 Data Table - Title _____:

The effect of increasing the amount of oil on the number of

amount of oil (ml)	# of popcorn kernels popped			Average # of popcorn kernels popped
	T1	T2	T3	
5				
10				
20				
30				

Scenario 2:
 Susan wondered if the height of a hole punched in the side of a milk carton would affect how far from the container the liquid would squirt when the carton was full of liquid. She thought that the higher the hole in the container, the further the liquid would squirt. She used 4 identical cartons and punched the same size hole in each. The hole was placed at a different height in each of the containers. The height of the holes varied in increments of 5 cm, ranging from 5 cm to 20 cm from the base of the carton with the hole placed 5 cm up was used as the control. She put her finger over the holes and filled the cartons with water. When each carton was filled to the proper level, she placed it in the sink and removed her finger. She used a metric ruler, Susan measured how far away from the carton's base the liquid had squirted when it hit the bottom of the sink. Susie repeated this procedure 3 times.

Important Aspects of Design Outline:
Independent Variable: Height of hole
Levels (treatments) of I.V.: 4
Number of trials for each level (treatment): 3
Dependent Variable: distance liquid would squirt

Scenario 2 Data Table - Title _____:

The effect of hole punch height in a carton on distance ^{liquid} squirted

hole punch height (cm)	distance liquid squirted (cm)			Average distance liquid squirted (cm)
	T1	T2	T3	
5				
10				
15				
20				