

Dog Prob	0.5				
Cat Prob	0.5				
Test 1	# Of Kids	% of Probability			
Cat	3	30%			
Dog	7	70%			
Frequency	Percentage	Decimal		Factorial	
Cat	$(.5)^3$	0.125		$10!/(7!*(10-7)!)$	[1]
Dog	$(.5)^7$	0.0078125		120	
Chance a kid would choose a dog in a different group of 10 kids					
0.1171875	11.71%				

[1] This equals $(10 \cdot 9 \cdot 8 \cdot 7 \cdot 6 \cdot 5 \cdot 4) / (7 \cdot 8 \cdot 6 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1)$
 $604,800 / 5040 = 120$