6 - Simulation with Dice

Your group starts with 100 dice, and will carry out ten rounds with them.

In each round you will roll all the dice. All that shows a 1 will be discarded.

First predict the results, **then** roll the die. You have 10 minutes.
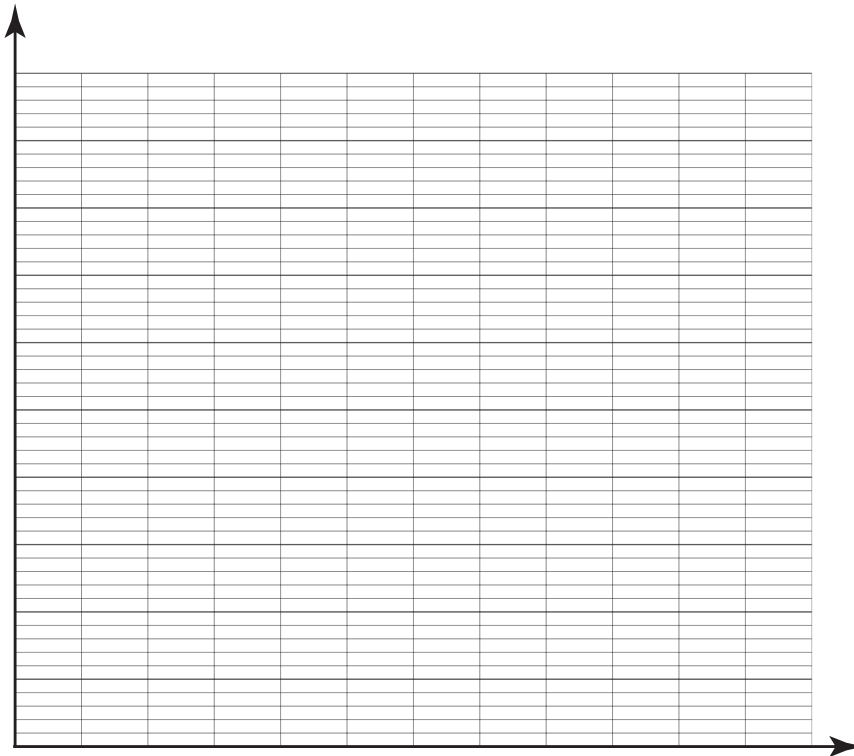
Table 1 Record of die simulation

	Predictions	Actual	Difference
0	100	100	**100-100 = 0**
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

1. (a) How did you make your prediction?

   (b) What chemical / physical system(s) show a constant probability of change like these die? (You may want to come back and add to the list as you discover them.)

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   (c) Graph your data.

   (d) Why is your prediction not **exactly** spot-on? What would happen if you repeat this with 5,000 die?

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