**Probability: Prediction Activity**

Each round, four dice will be rolled: 1 red, 2 white and 1 black. The sets of letters {A,B,C} and {W,X,Y,Z} will be jumbled, a random date will be chosen, and a mystery letter or number chosen. You will choose three events to bet on, and these bets will be placed in each round of the simulation. **You cannot change your choices during the simulation.** Each type of bet costs $1 each, but they return different amounts. Try to choose events that give a good return compared to their probability of occurring.

Choose **three** of the following bets, and make your selection…

|  |  |  |  |
| --- | --- | --- | --- |
| Return | Predict… | Example | Your selection… |
|  | Red die | 4 |  |
| $5 | Total of white dice | 10 |  |
|  | Order of A,B,C | C,A,B |  |
|  | Calendar month | July |  |
| $10 | Both white dice | 3,5 (=5,3) |  |
|  | Total of all 4 dice | 20 |  |
|  | Order of W,X,Y,Z | Z,W,Y,X |  |
| $20 | Mystery letter/number | Q |  |
|  | Calendar day of month | 26 |  |
|  | Both sequences | BCA,XWYZ |  |
| $100 | Red,white,black dice | 2,(1,6),5 |  |
|  | Full calendar date | August 14 |  |

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