



Dice Mechanic for Story Board Games

By Layman Kingsford (lead game developer) 9/7/10

The basic concept that has developed into the core mechanic for our Story Board Games was birthed from the idea to utilize the traditional RPG polyhedral dice in some way that exercised them all equally. I also wanted the mechanic to be fast and fun and, hopefully, relatively intuitive and easy to understand even for someone who had no previous exposure to more than six-sided dice. This dice mechanic has undergone several overhauls in the past couple years.

We also wanted to capture the excitement of competitive dice rolling, especially something akin to playing *Risk*. Maybe you'll remember the exhilaration as a kid (or adult) at having only one dice and facing an opponent using three or four and beating out your opponent, roll after roll, until they lost all their dice and as many armies.

What we have ended up with keeps players involved with constantly using dice to determine the success or failure of their in-game attempts. A player's dice pool is determined by the relative stats and skills of their character. These dice are then rolled and compared against a second pool of dice determined by the game, be it a situation or a character which will have various statistics giving it certain dice for its own pool.

If you have only ever seen traditional 6-sided dice, then you will need to familiarize yourself with the standard polyhedral dice:



You will also want to understand the common notation system for polyhedral dice. A small “d” is used to denote the word dice (or die) followed by a number denoting the number of sides the dice has. If more than one dice of the same size is being used, let's say 3 four-sided dice, the notation would look like this: 3d4.

In the picture above the 4-sided dice is green, the 6-sided dice is blue, the 8-sided dice is orange, the 10-sided dice is purple (note that the side representing the number 10 is often marked with a

zero), the 12-sided dice is red and the 20-sided dice is yellow. To read the result of a roll on this type of d4 you look at the number that is showing at the peak (top) of the pyramid.

In our Story Board Game system you will roll your dice pool against a competing dice pool. For this example, we are going to make two equal dice pools, each with 5 dice (the normal allowable size limit for any dice pool in this system). Each pool will consist of one each of d4, d6, d8, d10, and d12. The **RED** dice pool is rolling against the **BLUE** dice pool.

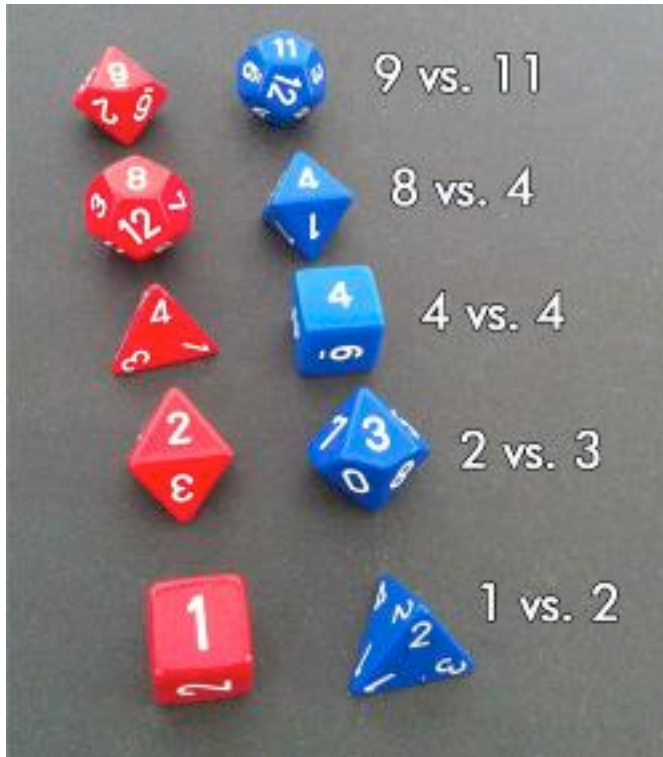
Each dice pool is rolled and set in descending order of highest roll to lowest roll. **RED's** highest roll is compared to **BLUE's** highest roll, **RED's** second highest roll is compared to **BLUE's** second highest roll, and so on. If one pool has more dice than the other, the lowest rolling dice may not have a partner and are then kept by that player.

In each individual comparison the higher rolling dice removes the lower rolling dice from that player's current pool. If there is a tie, both dice remain in their respective pools.

Note that the comparisons have nothing to do with the number of sides (size) of the individual dice, merely the numbers that they roll. If two or more dice in the same pool roll the same number, align them in order of size, the dice with more sides gets placed higher in the chain than a smaller dice showing the same result (see below).

Once all losing dice are removed from their respective pools each player then gathers their remaining dice and rolls again, aligning their results in descending order and repeating the comparison process. The **winning** player is the player that successfully eliminates all their opponent's dice before losing their own.

FIRST ROLL-OFF:



So in this first roll the **BLUE 11** beats the **RED 9**.

The **RED 8** beats the first **BLUE 4**. Note BLUE rolled a 4 with both the d8 and the d6 so the larger d8 got placed higher in the chain.

The **RED 4** and the second **BLUE 4** are tied and both dice will remain in their respective pools upon rerolling.

The **BLUE 3** beats the **RED 2**.

The **BLUE 2** beats the **RED 1**.

So at the end of this first roll-off, **BLUE** loses their d8 and **RED** loses their d10, d8 and d6.



SECOND ROLL-OFF:

The **BLUE 12** beats the **RED 9**.

The **BLUE 7** beats the **RED 3**.

The **BLUE 4** and the **BLUE 1** have no roll-off partners so **BLUE** gets to keep them.

So at the end of this second, and final, roll-off, **BLUE** loses no dice, keeping 4 when all is said and done and **RED** loses their remaining two dice and starts crying.

So that, in a nutshell, is how tasks are accomplished and conflicts resolved in a Story Board Game. A given dice pool could be reflecting the capabilities of a starship or of a lonely warrior. Obviously, bigger dice

(the dice with more sides) have a statistical advantage over the smaller dice, but Lady Luck has her say in all this as well.

Specific characters, abilities or situations may influence how the dice get arranged, allow for re-rolls or all sorts of other variations, but the above example is the basic core of our resolution system for all planned Story Board Games at this time (**nynoSaga** and **kyrtekSaga**).