Junior Knights: Dice Games

For this exercise, you will try to create your own game using simulations of standard dice rolls. You may use other dice (D20 for example), if you like. Here are several ideas of games you could create:

War Like Battle
Each team (2 teams playing) starts with 5 coins.
Each turn is a bet on who will roll a higher number on a six-sided die.
If both teams roll the same number, no change occurs.
Otherwise, if one team rolls a higher number, they receive a coin from the other team.
Game ends when one team loses all of their coins.

Yahtzee Simplified
In the game of Yahtzee, a player rolls five dice, trying to get different combinations:

One pair
Two pairs
Full house
Four of a Kind
Five of a Kind
Straight (1-2-3-4-5 or 2-3-4-5-6)

Each combination is worth some number of points.

In the real game, players can reroll some of their dice.

For a simplified version, you can simply have a player roll 5 dice once and then assign them points depending on what they roll.

You can vary the complexity of this game by determining which of the items above you want to count for points.

You can add multiple turns and multiple players to add complexity as well.

Dice Blackjack
Have two teams rolls 3 standard six sided dice. Then, alternating, ask each team if they want to roll again. Goal of the game is to get a sum as close to 21 without going over, like regular blackjack.

You can add complexity to this by adding a dealer and having teams place bets against the dealer, as occurs in regular blackjack. With this addition, you would keep track of how much money each team has.

Risk Battles

In the game of Risk, one team will attack other team's territory. Each territory will have some number of armies. For example, a territory with 10 armies may attack one defended by 6 armies. When attacking, the attacking team rolls 3 dice (unless they have fewer than 4 armies), and the defending team rolls 2 dice (unless they have 1 army). Both team roll their dice for an attack. Sort both teams' dice in order from highest to lowest. Match up the top two corresponding pair of dice. If the attacker's die shows a higher value than the defender's die, the attacker wins the battle. Otherwise the defender does. Here are some examples:

Attacker: 3, 4, 5
Defender: 4, 4 (The attacker wins the 5 to 4 battle, loses the 4 to 4 battle)

Attacker: 1, 1, 6
Defender: 2, 2 (The attacker wins the 6 to 2 battle, loses the 1 to 2 battle)

Attacker: 3, 4, 5
Defender: 1, 2 (Attacker wins both battles)

Attacker: 3, 4, 5
Defender: 3, 4 (Attacker wins 5 to 4 battle and 4 to 3 battle. You're not allowed to
                match up the two 4s…)

Attacker: 2, 4, 5
Defender: 4, 6 (Attacker loses both 5 to 6 battle and 4 to 4 battle. You're not allowed to
                match the attacker's 5 with the defender's 4.)

After the attack, subtract 1 army from the opposite side for each win.

Repeat attacks until either the attacker is left with 1 army or the defender has 0 armies.