**Unit:** Data Management and Probability

**Grade:** Primary (K-3)

**Curriculum Expectation**
 Describe the probability that an event will occur through investigation with simple games and probability experiments and using mathematical language

**Activity
1**) Students will start by placing their 10 counters on the number sheet below however they like but making sure each counter is in a box with a number.
2) Next students will roll 2 dice and add up the sum of the two dice.
3) If they have a counter on that number they will remove the counter.
4) The student is trying to remove all 10 of their counters in the least number of moves. Through this they will start to notice which numbers come up more often and which are unlikely or impossible to achieve.
5) Have the student repeat the activity a few more times to see if they are able to win with fewer and fewer moves.
Note: This can be done as a game with more than one player by seeing which player clears their board first.
After playing 2-3 times have students do the activity backwards. They will start with no counters on their sheet and roll the two dice. Students will add up the dice and then place their counter on the corresponding number. At the end have students count the number of counters on each square and compare which number was rolled the most often and which was rolled the least.
After have the student write the different addition statements using the numbers 1-6 within the corresponding box that would add up to that number
ex. Within the 7 box students would write 1+6=7, 2+5=7, 3+4=7

**Check for Understanding**
 I can identify which number is impossible to get when adding the sum of two dice
I can identify which numbers are more likely to get when adding the sum of two dice and why
I can identify which numbers have only one possibility to be achieved

**Materials**
 Sheet attached below, 2 dice or random dice online generator, 10 small objects to use as counters (blocks, pieces of paper, etc.)

**WEEK 1 – Probability Game**

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| 10 | 11 | 12 |