M9

## Name: Statistical Experiments

$\qquad$

1. Roll two 6-sided dice and record the two numbers. Repeat until you gather 10 pairs of numbers.

| Roll | Die \#1 | Die \#2 |
| :---: | :---: | :---: |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |

Data analysis:
a) What number did you roll most often? $\qquad$
b) What number did your roll least often? $\qquad$
c) Is there a number you never rolled? $\qquad$ If yes, which one? $\qquad$
2. Using the 10 pairs of numbers rolled in exercise 1, Fill in the table below:

| Roll | Sum | Product |
| :---: | :--- | :--- |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |

Data analysis:
a) What sum did you roll most often? $\qquad$
b) What product did you roll most often? $\qquad$
c) What sum did your roll least often? $\qquad$
d) What product did your roll least often? $\qquad$
e) What is the average sum your rolled? $\qquad$
Hint: To find the average sum, add all sums and divide by 10 .
f) What is the average product your rolled? $\qquad$
3. Roll a 30 -sided die 30 times and record your results.

| Roll | Result | Roll | Result | Roll | Result |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 |  | 11 |  | 21 |  |
| 2 |  | 12 |  | 22 |  |
| 3 |  | 13 |  | 23 |  |
| 4 |  | 14 |  | 24 |  |
| 5 |  | 15 |  | 25 |  |
| 6 |  | 16 |  | 26 |  |
| 7 |  | 17 |  | 27 |  |
| 8 |  | 18 |  | 28 |  |
| 9 |  | 19 |  | 29 |  |
| 10 |  | 20 |  | 30 |  |

a) Have you rolled any number more than once? $\qquad$ If yes, which one? $\qquad$
b) Is there a number that you have not rolled at all? ? $\qquad$ If yes, which one? $\qquad$

4. Select a card from a full deck of cards. Record information about the card. Return the card into the deck, shuffle, and select another cards. Repeat for total of 10 trials (selections).
Use symbols for suits:
$\qquad$ diamonds, $\qquad$ clubs, $\qquad$ spades, $\qquad$ hearts.

| Selection | Suit | Rank | Face card? $\mathrm{Y} / \mathrm{N}$ |
| :--- | :--- | :--- | :--- |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 |  |  |  |
| 10 |  |  |  |
|  |  |  |  |

