**Grade 6 Math  
Unit 11: Probability**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Lesson 1: Basics of Probability**

**Probability** is the likelihood that something will occur.

1) Use one of the following terms to describe each of the events listed below: impossible, unlikely, equally likely, likely, and certain.

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| **Event** | **Probability** |
| You will have Math on any given day at school. |  |
| It will snow in June. |  |
| If you roll a normal dice, you will roll a 1, 2, 3, 4, 5 or 6. |  |
| If you flip a coin, it will land on heads. |  |
| There will be school tomorrow. |  |
| If you draw a card from a deck of cards, you will draw the ace of spades. |  |
| If you multiply 5 x 2 you will get 13. |  |

2) Write your own event and share it with a friend. Have them decide the probability of the event occurring.

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**Lesson 2: Describing probability with numbers**

Probability can also be described using numbers, typically in the form of a fraction. In order to determine the mathematical probability of an event occurring, you use the following formula:



For example, if a black ball, a blue ball, a green ball, a yellow ball and a pink ball were in a bag in the gym and you picked one at random, you would have a chance of selecting a black ball. This is because there is one black ball in the bag and there are five balls in total.

1) Determine the probability of the following events occurring using fractions.

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| **Event** | **Probability** |
| If you flip a coin, you will get tails. |  |
| If you roll a dice, you will get an even number. |  |
| If you roll a dice, you will get a five. |  |
| If you pick a card from a deck, you will get the queen of hearts. (There are 52 cards in a deck). |  |
| If you have a bag of cards with each letter of the alphabet on them, you’ll choose a vowel (not including Y). |  |