Hey Kids! Time for a super fun Math lesson, courtesy of Math Madness!

## PROBABILITY

A probability is a measurement of how likely something is to occur. probabilities have values from $O$ to 1.

- A probability of $O$ means something is guaranteed not to happen;
- A probability of 1 means that it certainly will.

In order to calculate a probability, divide the number of desired outcomes by the number of possible outcomes. Ex:

The probability of a coin coming up heads when flipped is $1 / 2$. There is 1 desired outcome (heads), and 2 possible outcomes (heads and tails).

The probability of rolling a 5 or a 6 on a six-sided die is $2 / 6$ (or $1 / 3$, once simplified). There are two desired outcomes (5 and 6) and six possible outcomes ( $1,2,3,4,5,6$ )

Figure out the probability of pulling the specified item out of a bag of rocks. The bag contains 5 red, 4 blue, 5 green, 3 yellow and 1 black rock.

Probability of getting a red rock:
Probability of getting a blue rock:
Probability of getting a green rock:
Probability of getting a yellow rock:
Probability of getting a black rock:
Probability of getting a red or blue rock:
Probability of getting a rock that is not green:
Probability of getting a rock that is not black:


