

# Probability

**Subject:** Technology/Math

**Grade:** 5th

**Time:** 1 hour

**Group:** Whole Group

**Standards:** NETS – Students 1a, 1b, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 5a, 5b, 5c, 6a, 6b, 6c

**Performance Indicators:** All 3-5 Indicators

**Objective:** Students will use spinners to determine probability and whether the spinners are fair or unfair. Then they will use EXCEL to record their data and graph it to show their results.

## Resources/Materials Needed:

SMART board, projector, computer lab time or COW access for students; note paper, graph paper; SMART Notebook File: [Probability Spinners](#)

## Activities/Procedures:

### Discuss:

- Discuss the probability terms: always, most likely, likely, most unlikely, and unlikely and never; (these could be paired down to the essential for 3<sup>rd</sup> grade and possibly 4<sup>th</sup> grade.)
- Ask about the different spinners and have the students use those terms or answer this question: which color are you most likely (or least likely) to spin on spinner 1? Spinner 2? Spinner 3?

### Demonstrate:

- Demonstrate how to use the spinners and then allow students time to spin. (Students should do at least 50 spins in order to test the probability appropriately.)

### Practice:

- The students tally the spins
- After they are finished they take this data and make a graph in EXCEL.
- Students can also determine what fractional piece of the spinner each color is.

## Closing:

Students then write directions for a game that would make each of the “unfair” spinners fair (if you land on red you get 1 point, yellow or green 2 points and the first to 15 is the winner), or they could write about how they could use the information about probability and fairness in the real world (in Word.)