**Lesson 3**

Subject: Math

Grade: Third Grade

Topic: Probability

CA Standards:

1.2 Record the possible outcomes for a simple event (e.g., tossing a coin) and systematically keep track of the outcomes when the event is repeated many times.

1.3 Summarize and display the results of probability experiments in a clear and organized way (e.g., use a bar graph or a line plot).

1.4 Use the results of probability experiments to predict future events (e.g., use a line plot to predict the temperature forecast for the next day).

Time Needed: 60 mins

Objective: The students will be to transfer their information from their tally charts onto a spinner and spin the spinner to find out the probability of the spinner landing on a certain color fruit loop. The students will record what each spin lands on and graph their results.

Vocabulary: Accurate, Spinner

Materials:

-Crayons

-13 pencils

-13 paper clips

-Tally Chart Worksheet

-Spinner Worksheet

-Results Worksheet

I. ANTICIPATORY SET

* Activate prior knowledge: I will hold a Socratic Seminar on the rug and explain to them how it will work and the expectations. These expectations will be written on a flip chart with what it looks like and what it sounds like. Then I will pose the question: Do you think drawing from a goodie bag ten times or spinning a spinner 50 times will give us more accurate results on the event possibilities that are likely to happen? Please explain why you think that way. I will explain that ***accurate*** means the most correct results on what color we would land on the most and least. Show them my spinner made based on my fruit loops so they have a visual of a spinner. Show them what drawing out of my goodie bag looks like.
* Motivation/ Purpose: This will get the students to brainstorm and make a hypothesis of how we get more accurate results prior to actually doing this experiment.

II. INSTRUCTION:

1. I will explain how to do the experiment
2. First they will draw out of their goodie bag 10 times. After every draw they will record what goodie they drew on their tally chart. A blank tally chart is given to them on their worksheet. Then they must place the goodie back in their goodie bag. They will repeat this 10 times.
3. After this experiment, they will complete the rest of the questions on their worksheet.
4. Next, they will make a spinner based off of their goodies. They will color each sliver in the spinner according to the color fruit loops they have.
5. After, they will do 50 spins on their spinner. In order to create the spinner, the students will need a pencil and a paper clip. One partner will put the paper clip in the middle of the spinner and the hold the point of the pencil down in the center of the spinner. This will keep the paper clip in place. The other partner will spin the paper clip 50 times and record the spins on a tally chart given to them on their next worksheet.
6. Once they have finished spinning the paper clip 50 times, they will answer questions regarding their spins.
7. Afterward, they will complete a worksheet comparing the results from drawing from their goodie bag 10 times and spinning the spinner 50 times.

III. GUIDED PRACTICE

* Complete experiment and worksheets that go along with the experiment

IV. CLOSURE

For the closure, we will revisit the question from the Socratic seminar as a class and see if the students' answers have changed after they tried the experiment.

V. INDEPENDENT PRACTICE

Journal Prompt: How does probability apply to your life? How is probability useful to you?