(Miss Slick, 1st Grade Math,???)

Graphing Leaves Lesson Plan

1. **Topic:**
2. Students will be knowledgeable about activities, holidays, and scientific processes that occur during the season of fall.
3. **Vocabulary**
	1. *Graph-* are drawings that show mathematical information with lines, shapes, and colors. Used to compare and draw conclusions about things.
4. **Objectives/Standards**
	1. Using the leaves collected on the leaf hunt, TSWBAT to show which color leaf was most popular in the class through the creation of a data chart to the teacher’s satisfaction. (CC.2.4.1.A.4 Represent and interpret data using tables/charts).
	2. Given a song about fall, TSWBAT sing and act out the body movements demonstrated by the teacher to the teacher’s satisfaction. (Standard - 9.1.3.B Recognize, know, use and demonstrate a variety of appropriate arts elements and principles to produce, review and revise original works in the arts. Music: • sing • play an instrument • read and notate music • compose and arrange •improvise.)
5. **Teaching Procedures**

Anticipatory Set: *(2 minutes)*

1. The teacher will stand in front of the class with a couple different colored leaves in her hands. She will hold them in front of her as if she is trying to decide which one is prettier than the others. She will say things like “Hmm, this one doesn’t have any holes, so it is better than this red one…” etc. The teacher will sigh in frustration and explain that she cannot decide which leaf is the most popular kind of leaf by just looking at different leaves. She will ask the class if they think there is another way they could solve this issue.

 Development 1: *(10 minutes)*

1. After students agree to help the teacher, the teacher will explain that **graphs** are used to show a collection of data, such as the leaves they collected during the leaf hunt. Graphs help people find thing things out, such as which color leaf was the most popular in the class.
2. The teacher will then ask students to pull out their leaves from the leaf hunt. The teacher will have students pick a paper leaf cut out based on the color leaf they picked up on the leaf hunt. I.e. if they picked up a red leaf, they get a red paper cut out leaf.
3. Then the teacher will pull out a large paper with the outlines of a graph on it and stick it to the whiteboard. The teacher will explain that the lines on the graph help people to understand what is being measured on the graph. On the x-axis will be the title “Different colored leaves” with each color listed under each bar on the graph. On the y-axis, the title “Number of leaves” will be listed with numbers going up the line starting at one.
4. The teacher will ask the class what they should title their graph if they are trying to find the most popular colored leaf in the class. After hearing student responses, the teacher will write the title on the top of the graph. The teacher will explain that without a title, people reading the graph will not know what the graph is measuring.
5. Next, the teacher will have students come up one by one and tape their paper cut out leaves to the chart. Once every student has taped their leaf to the graph the teacher will allow students to look at it for a minute or two.

 Guided Practice 1: *(10 minutes)*

1. The teacher will then ask the class if anyone can tell which color leaf was collected the most. After hearing student responses, the teacher will ask how they could tell this.
2. Next, the teacher will ask which color leaf was collected the least or not at all. The teacher will ask students to explain their responses. Then the teacher will ask which color had more people collect them red or orange, yellow or brown, green or red, etc.
3. The teacher will emphasize to the class that graphs can tell people a lot of different things just by looking at them. Today they discovered which color leaf was the most popular in their class.
4. The teacher will then have students go to the carpet for a quick brain break. The class will watch a counting leaves video and count along with the video on their fingers. When the leaves fall off the tree, they can pretend to touch their toes and make leaf falling motions with their hands. (<https://www.youtube.com/watch?v=GtCiE4aK9QA>).

 Independent Practice 1: *(8 minutes)*

1. After the video, the teacher will explain to students that they are going to make another graph on their own. This graph will show different colored apples. The teacher will have students color all the apples with the letter G green, the letter R red and the letter Y yellow. The teacher will then explain that students have to count the number of apples with the letter on it and color the graph that many squares. The teacher will model this with one letter. (**See Attached**)
2. Students will complete this in their seats and answer the questions on the worksheet. While students complete this worksheet, the teacher will be circulating and assisting any students who need help.

Closure: *(3 minutes)*

* 1. The teacher will conclude the lesson by asking students what we can find out by looking at a graph. What are some important things for our graphs to have? Can our graphs be about anything or do they have to be about leaves and apples?
1. **Materials**
* Leaves
* Paper cut out leaves (red, orange, yellow, green, brown)
* Paper graph
* Apple graph paper
* Red, green, and yellow crayons
* Whiteboard
* Pencils
* Smart Board
* Markers
1. **Evaluation**
2. Formative Assessment- The teacher will assess student understanding through questioning and the worksheet during the independent practice.
3. Summative Assessment- N/A
4. **Reflection**
	1. Student Evaluation:
		1. How did the students do grasping the concept of using graphs to draw conclusions about data?
		2. Did they have to ask for help from their peers, the teacher, or did they attempt to complete their apple graphs on their own?
		3. What was their body language during the independent practice? (i.e. were they slouched in their seat frowning, just sitting there doing nothing because they were stuck, or were they actively working on the worksheet and smiling?)
	2. Teacher Evaluation:
		1. Did I include enough students in the leaf graph?
		2. Did I do an effective job of getting to all the students who needed help during the independent practice to help assist them?
		3. How could I have improved this lesson to better teach my students?