1st Grade Math: Tally Charts and Bar Graphs

In this lesson, we will learn about **tally charts** and **bar graphs** and how to use them to collect and display information!

Key Vocabulary

- Tally Marks: A way to keep track of numbers by making marks. Every group of 5 is represented like this: | | | | |.
- . Tally Chart: A table that shows tally marks to record and count data.
- . Bar Graph: A graph that uses bars (rectangles) to show and compare information.
- · Data: Information or facts collected about something.

Tally Charts

What is a Tally Chart?

A tally chart is a simple way to collect and organize data. You use tally marks to show how many times something happens.

How to Use Tally Marks:

- For each item or response, you make a line | .
- After 4 lines, the 5th line is drawn across the first 4 to form a group of 5: ||||.
- · This makes it easy to count in groups of 5!

Example: Tally Chart for Favorite Fruits

We asked 10 students what their favorite fruits are, and here's the tally chart:

Fruit	Tally Marks	Total
Apples	•	
🏂 Bananas	•	
₹ Grapes	•	
Strawberries		

Analyzing the Tally Chart:

1. How many students like apples?

a. Answer: 6 students like apples.

2. Which fruit is the most popular?

a. Answer: Apples are the most popular (6 students).

3. How many students chose bananas and grapes together?

a. Answer: 7 students (5 like bananas, 2 like grapes).

Bar Graphs

What is a Bar Graph?

A **bar graph** is a way to display data using **bars** (rectangles) to represent amounts. Each bar shows how many times something happens, and it helps compare data visually.

Example: Favorite Fruits Bar Graph

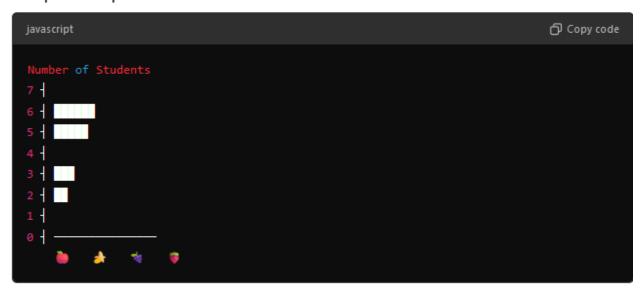
We can use the same data from our tally chart to create a **bar graph**:

Fruit	Number of Students
Apples	6
🏂 Bananas	5
₹ Grapes	2
Strawberries	3

In the bar graph:

- The fruits are listed on one side (usually the bottom or left).
- The numbers are shown on the other side (bottom or left).
- The height (or length) of each bar shows how many students chose each fruit.

Example Bar Graph:



How to Read and Use Bar Graphs:

- Which bar is the tallest?: The taller the bar, the more students chose that item.
- Compare two bars: See which bar is taller or shorter to compare how many students chose each option.

Activities

1. Classroom Tally Chart:

a. Ask students a question (like favorite animals), and have them create a tally chart using tally marks.

2. Drawing a Bar Graph:

a. Use the data from the tally chart to create a bar graph. Have students label the axes and draw the bars to match the numbers.

3. Analyze Bar Graphs:

a. Give students a bar graph and ask them questions about the data, such as "Which bar is the tallest?" or "How many more people chose option A than option B?"

Conclusion

Tally charts and bar graphs are excellent ways to **collect**, **organize**, and **show data**. With tally marks, you can keep track of numbers, and with bar graphs, you can easily compare different sets of information visually!