

Dear Parents,

Over the next several weeks, we will be learning **how to display and interpret data** in math! The information below will help you to support your child as they learn these exciting, yet important third grade math skills.

### The GOAL:

By the end of the unit, your child should be able to **represent and interpret data using tally charts, pictographs, bar graphs, and line plots**. They should also be able to **translate information from one type of display to another**, as well as **solve problems using information from the graphs**.

#### Tally Chart

Favorite Dessert		
Dessert	Tally Marks	Number
Ice Cream	### ##	10
Brownies	###	8
Cookies		2
Cake	###	5

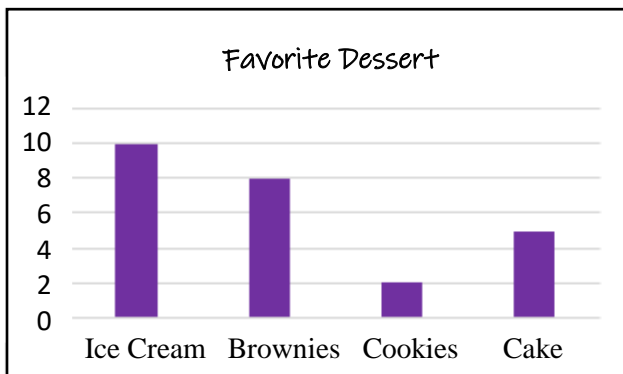
A **tally chart** is a way to show data using **tally marks**. In the chart to the left, each tally mark represents one response.

Using the tally chart...

- How many students chose ice cream as their favorite dessert?
- How many more students like brownies than cake?
- How many fewer students like cookies than ice cream?

The information found in a tally chart can transfer to another display, such as a pictograph, bar graph, or line plot. (See below)

#### Bar Graph



A **bar graph** is a way to show data using **bars**.

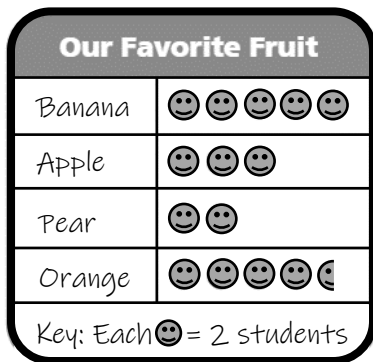
The bars can be vertical (like the example) or horizontal.

In the graph to the left, bars represent the number of students who voted for their favorite dessert.

Using the bar graph...

- How many students like cake?
- How many more students like ice cream than cookies?
- How many fewer students like cake than brownies?

Pictograph

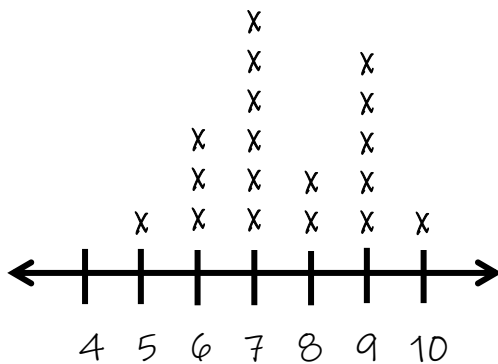


A **pictograph** is a way to show data using pictures. In the graph to the left, each smiley face represents two students, so a half-smiley represents one student.

Using the pictograph...

- How many students like bananas?
- How many more students like oranges than apples?
- How many students like pears OR bananas?
- How many total students participated in the survey?

Line Plot



A **line plot** is a way to show data using an X. In the line plot to the left, each X represents the number of students who read a specific amount of books.

Using the line plot...

- How many students read seven books?
- How many students read nine or ten books?
- How many students read more than six books?

Grade 3 Math: PA Core Math Standards in Unit 6

CC.2.4.3.A.4: Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

-- HOW TO HELP AT HOME --

- Look at different bar graphs, tally charts, pictographs, and line plots in the newspaper, magazines, on cellphone apps, etc. and have children talk about what the data is showing. Compare the quantities within the graph.
- Ask your child to create a survey for family and friends. Make a tally chart to represent the data, and then translate the data to a second display (pictograph, bar graph, line plot).
- Sort blocks, candy, toy cars, etc., by common characteristics (size, color, etc.) and have your child record the data in a bar graph or line plot. (Parents should ask questions about the data in the graph).