

## Dinner for Every Night of the Week

**Focus Lesson:** Understanding Grids

**Materials:**

Graph paper  
 Pencils  
 Markers  
 Whiteboard  
 Dry erase markers

**Grade:** 5

**Time:** 40 minutes

**\*Common Core Standards:**

**CCSS.MATH.CONTENT.5.MD.B.2**

Represent and interpret data.

**Thinking Skill:**

Bar graphs  
 Grid work

**Objective:**

Students will review graphing such as bar graphs.  
 Students will track and record data of what they eat for dinner each night.  
 Students will create bar graphs using the data and analyze their dinner meal habits.  
 Students will create a calendar grid and understand how often they eat their favorite foods.

**Connection:**

Meal planning is hard. There are a number of things that influence a cook's meal decision: how quickly does it have to be ready? who is eating it? what the weather is like? have I made it recently? do I have the ingredients I need? do I have enough time? how many portions do I need to make?

Who has eaten the same thing for dinner at least twice in one week? (Hands will go up) Today and for the next few weeks we're going to work on seeing just how often we eat our favorite foods.

**Explicit Instruction:**

In order to see how often we eat the same meal for dinner, we are going to need to collect some data. What data will we need to collect? (record answers on chart paper)

We will need to keep track of what we eat for dinner each night, and keep a tally of how many times we have the same meal for the next 2 weeks. That is a total of 14 days.

Keeping a record of something involves tracking data by writing it down. To be as accurate as possible we will record what we eat instead of just trying to remember. This will ensure that we have the correct information for our class graph.

**Guided Practice:**

Who in the room likes pizza?

I am going to list some pizza toppings on the whiteboard (pepperoni, sausage, veggies, etc). Raise your hand only once for your FAVORITE topping. I am going to count the number of people who choose each topping as their favorite, and make a graph out of it.

Label the x and y axis on the whiteboard and draw a simple grid. Tally the students' responses on the side. I tallied your responses and here is what I have (show students the list). If (3) people like pepperoni, how high should I draw my bar graph? Guide students to stop the bar at three.

Continue until all the data is graphed. Explain to students that we have made a bar graph together, and that they are going to do the same in the future.

On chart paper write two favorite breakfast foods for each child in class (like waffle, cereal, bacon, eggs). Assign partners to make a favorite class breakfast graph for practice before the next step. Have them do a thumbnail sketch of the graph before they put it on large paper. If they finish early, invite them to decorate the graph with drawings of foods.

For the next 2 weeks, each of you will keep a record of what you have for dinner each night, just like I kept a record of how many of you raised your hands for your favorite pizza topping. Later we will make our own bar graphs and calendar chart to see how often we eat the same meal in 2 weeks.

#### **Independent Practice:**

Students will record their dinners at home by making a simple list of foods they eat. List examples: hamburgers, hot dogs, pork chops, corn, green beans, rice, french fries, pizza, spaghetti. Students should limit their meals to 15 items.

After 2 weeks students will bring their lists in to class and tally their meals (3 hot dogs, 2 pizza, 4 corn, etc) and create a bar graph representing the number of times they had each meal. Decisions will have to be made about *how* to tally meats and vegetables based on *what* the students actually eat for 2 weeks. Focus should not just be on meat. The meal should go on the x-axis and the y-axis will be the number of times they ate that meal.

Once they have completed their bar graphs, students will be given large-squared graph paper to create a grid of the month, like a calendar. In each square the students will fill in meals that they eat for dinner, and plan the month out any way they want (they can have their favorites more often, make sure two things aren't done twice in a row, etc). This will give the students an overarching idea of what they eat for dinner and how often they eat/want to eat it per month.

#### **Reflection – Group Share:**

When the bar graphs are completed, have some students share their graphs. It will be interesting to see the different foods the class eats, especially if there are varying cultures in the classroom.

Allow students to decorate their meal “calendars” and share and/or hang up in the classroom.

#### **Reading list:**

**Teacher Note:** A follow-up lesson might include a class bar graph of most frequently eaten foods (top ten for example)