

Vegetable Soup Graphs II (Grades 2-4)

Focus Lesson:
 Representing & Interpreting Data using creative soup recipe

Materials:
Growing Vegetable Soup by Lois Ehlert
 Projected Teacher bar graph using recipe on back of book
 Chart Paper for each group
 Crayons
 Rulers

Time: 1.5 hours

Pairs with lesson plan: Vegetable Soup Graphs I

***Common Core Standards:**

CCSS.Math.Content.2.MD.D.10

Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems¹ using information presented in a bar graph.

CCSS.Math.Content.3.MD.B.3

Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.

CCSS.ELA-Literacy.W.4.3.c

Use a variety of transitional words and phrases to manage the sequence of events.

Thinking Skill: Representing and Interpreting Data

Objective:

Students will collaborate in order to successfully complete a creative math project.
 Students will brainstorm healthy foods and healthy recipe ideas.
 Students will create group bar graph using information from their invented soup recipe.
 Students will write directions for their recipe using transitional words and complete sentences.
 Students will answer simple addition and subtraction word problems (How many more, How many less) problems through interpreting data on their own and their classmates graphs.

Connection:

Students will use healthy foods to create their own recipe and use their recipe to create their own group bar graph.

Explicit Instruction:

Project yesterday's Vegetable Soup Ingredient bar graph:
 Quick review of how to set up and create a bar graph:

- Scaling
- Labels
- X and Y axis

Guided Practice:

Tell students that after they create their bar graphs it will be time to give directions to their reader about how to make their soup.

Model how to do this by referring back to the Vegetable Soup ingredient list and *Growing Vegetable Soup*. How would we briefly write the directions for the vegetable soup we learned about yesterday?

Well let's look back into our book. Re-read end pages of the book that offer directions on how to make soup. So after we have our ingredients, what happened next?

Encourage the use of transitional words in the creation of a class wide step by step direction brief paragraph.

Example: This is how you make vegetable soup. First, cut the vegetables and put them in a pot of water. Then, boil and stir them until they are all mixed. Finally, eat your soup!

Keep class bar graph and paragraph projected or visual if on chart paper throughout lesson so students can refer to graph while working on projects.

Independent/Group Practice:

Students will begin by getting back into their groups and finishing brainstorming and creating their group soup recipe.

Each soup will have 7-8 ingredients and there will be no more than 10 of each ingredient.

Students will then create their own soup ingredient bar graphs on chart paper. All graphs should include:

- color
- labels
- title

After bar graphs are completed: On a piece of paper students should write the directions of the recipe. Ensure that each student writes at least one of the sentences. This should be a step by step series of directions using transitional words such as first, next, then, and finally.

Reflection – Group Share:

After all group graphs and paragraphs are done each group should hang up their graph around the room and hand in their recipe and ingredient list.

One by one each group should “present” their graph by stating the name of their soup and its ingredients.

After each group “presentation” ask students:

“How many more ____ did this group use than ____”

“How many less _____ did this group use than _____”

“Did this group use the same of any of their ingredients?”



Reading list:

Growing Vegetable Soup by: Lois Ehlert

Teacher Note: This lesson could also be done to teach picture graphs.