Weekly Seafood Consumption Data

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Grade Level: 2

Duration: 2 - 1 Hour Sessions

Overview:

For thousands of years the people of Sitka have relied on the abundance of the ocean to meet subsistence needs. Even today, the ocean provides food for many people living in Sitka. In this lesson students will gather data about how many times a week their family eats seafood. Once the data has been collected, students will sort it, graph it, and interrupt the data.

Standards Addressed:

Domain: Measurement & Data

Represent and interpret data.

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 problems[1] using information presented in a bar graph.

Mathematical Practices:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Model with mathematics
- Use appropriate tools strategically
- Attend to precisions
- Look for and make use of structure

Essential Question:

How can you represent data about weekly seafood consumptions?

Objectives:

Children will collect and represent a set of data in a bar graph and use the bar graph to solve problems.

Materials:

- ✓ data tracker (to be created by class)
- ✓ computer with internet access
- ✓ calculator
- ✓ graph interpretation worksheet

Vocabulary

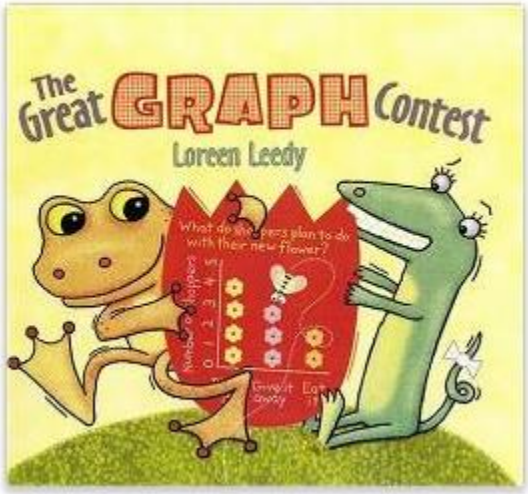
- bar graph
- data

Set the Purpose:

Children today we are going to start a lesson about collecting, and graphing data. We are going to collect data about seafood. For thousands of years the people of Sitka have relied on the abundance of the ocean to meet subsistence needs. Even today, the ocean provides food for many people in living in Sitka. How many times a week do you think families in Sitka eat seafood? How much seafood does your family eat per week?

We are going to create a log sheet together and you are going to keep track of how many times you eat seafood this week. Once we have collected the data we will sort it, graph it, interrupt the data and reflect on what we have learned from our data.

Opener:



Read The Great Graph Contest written by Loreen Leedy to the class. The story is about a snail who has a contest with his friends to see who can make the best graph. The book explores all facets of data analysis including data collection and different types of graphs.

Model & Guided Practice:

In the story we just read we about the process of collecting data and representing it with a graph. Our job today is to come up with a plan to answer our question - . How many times a week do you think families in Sitka eat seafood? Take a minute to talk in you groups about what steps you think we need to take. Allow students time to talk and share with the class their ideas. *So it sounds like we all agree we need to come up a survey or log of some sort. Do you think we would be able to have every family in Sitka fill out this log?* Allow students to discuss and share. *What could we do instead?* Allow students to discuss and share. *Yes, we could take a sample. We could track just the families in our class. What do we need on our seafood tracker log?* Allow students to give input and build the log tracker as they give suggestions (see sample of tracker). *Now we have our tracking logs, it's now your job to take these logs home and collect data for the week.*

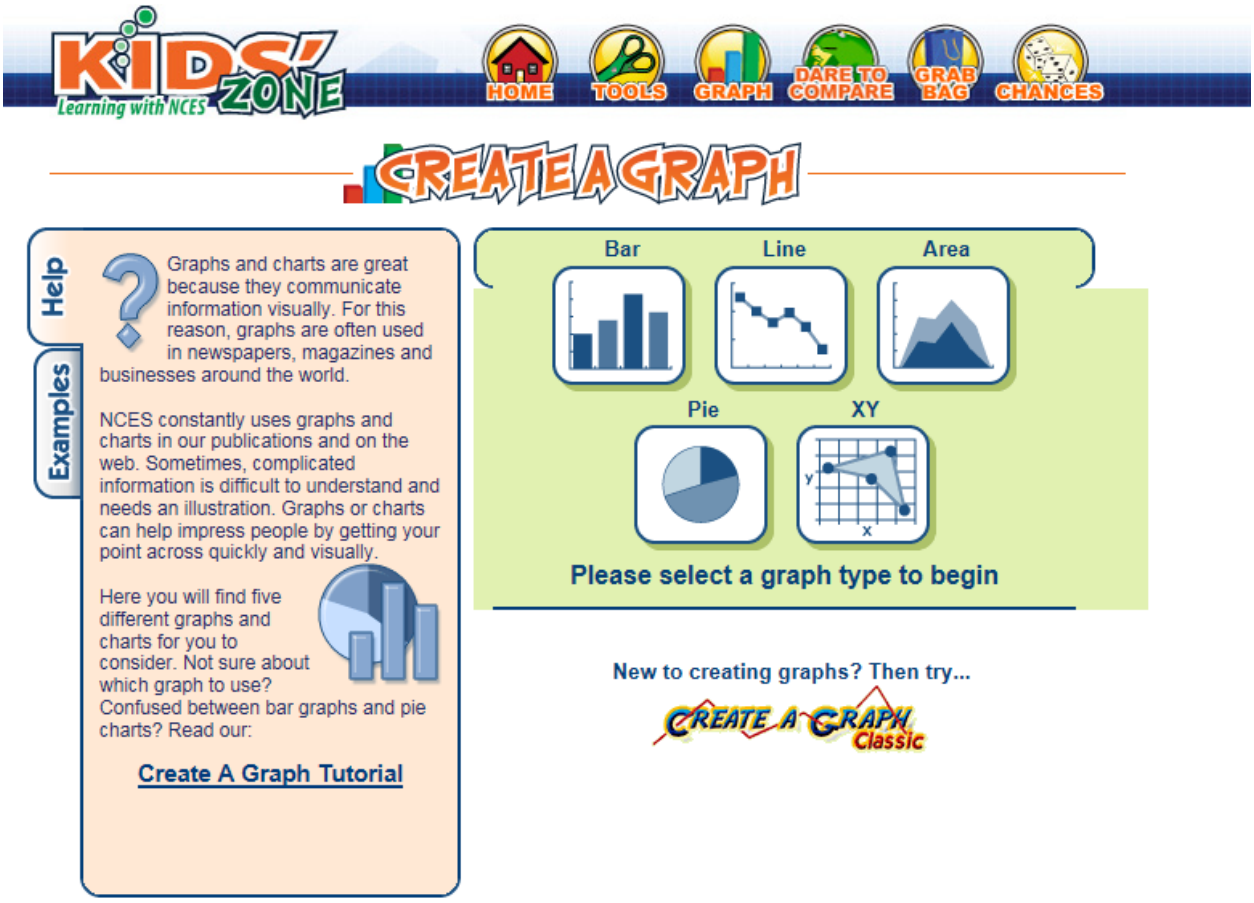
PART II

Model & Guided Practice:

We have now finished collecting our data and now we need to put our data all together. How can we put our data together and

make it easy to work with? Allow students to discuss and share. *So it sounds like maybe we can make a chart on the board and use tally marks or sticky notes.* Take time to summarize and organize the data with the class. You could give each student a sticky note for each time their family ate seafood during the week and have them place sticky on the board under the type of seafood. After the data has been organized take a few minutes to reflect on the process and information. *We are now ready to create our graph. We are going to use the website: Kid's Zone: National Center for Education Statistics to create our bar graphs. We are going to build a graph together and then you are going to build one on your own.* Use the interactive white board to walk through all the steps of creating a bar graph with the websites interactive tools. Be sure to review all the parts and

options for the bar graph ad you create it.



Independent Practice:

Now it is time for you to create your own bar graph with the data we have collected. Don't forget to save and print your graph when you are a finished. When you are done you are going to use your graph to complete the worksheet.

Assessment:

Students will be assessed on their ability to successfully collect and represent a set of data in a bar graph and use the bar graph to solve problems. Teacher will be walking around answering questions, and viewing student's work. Teacher will be listening to see if there are any concerns, misinterpretations or questions while the students build their bar graph and use the graph to complete the worksheet.

Closure:

Once students have completed their graphs gather the class for a discussion. Ask the students what information their graphs told them. Remind the students of the original problem and ask them how many times families (in room 6) eat seafood per week.

Continuation:

If time allows have students come up with their own question for the class, survey the class, and graph the data.

Samples & References:

SAMPLE

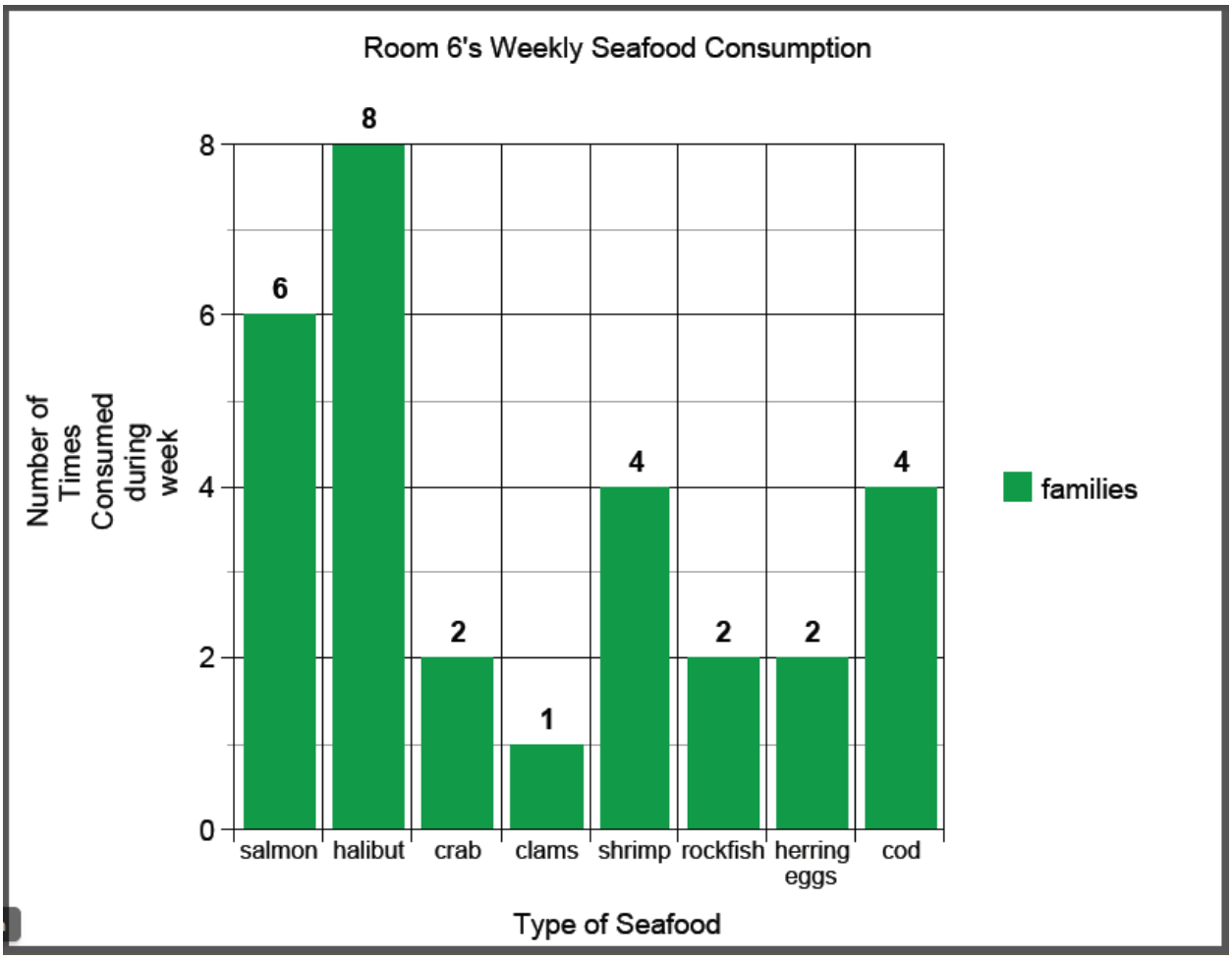
Name_____ Date _____

Seafood Log

Keep track of each time your family eats seafood.

	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
salmon							
halibut							
rock fish							
cod							
crab							
shrimp							
clams							

SAMPLE


Room 6's Weekly Seafood Consumption
Number of Times Consumed during week
0
2
4
6
8
6
8
2
1
4
2
2
4
salmon
halibut
crab
clams
shrimp
rockfish
herring eggs
cod
Type of Seafood
families

Name_____ Data_____

Use your graph to help answer questions about our data.

① How many family logs did we have turned in?_____

② How many times during the week did families eat seafood?
_____

③ Use a calulator to find the average number of times familes ate seafood. With the calculator type :

Answer from ② ÷ Answer from ① =

What number did you get?_____ That number represents the average number of times familes from our class ate seafood during the week .

Do you think our average is the same as a 2nd grade class in Arizona?

What was the most popular type of seafood?

Wny do you think that type eaten the most?