

## Chapter 1 : Bar Graphs - Lesson Plan - Ms. Anderson's First Grade Class

*Graphs, Charts, and Tables* â€¢ 1 Fnded b ent dlt datn *Graphs, Charts, and Tables Lesson Plan Video Set up the video by reminding students that data is information and information is.*

The different types of graphs and how to use them Objectives: Put them in the order that the song is and then explain each kind of graph. Song is optional After each explanation, introduce the song verse that goes with it. Hand out a copy of the song to each student. Once you have finished each verse, go back and sing the whole song together. Hand each student in the group a packet with a different colored piece of paper. If they say tally chart, they are correct. If no one answers correctly try and give them hints. Using the board or overhead projector, make a tally chart according to the students answers. Have them do the same on their white piece of paper. Sing the with the students one more time. We will display each different type of graph on the board. The grouping will be every bar graph together, all circle graphs together and so on. Discuss the differences in the graphs and why each one is important in its own way. Ask students what the important parts of a graph are? After you discuss this in class, ask the students to survey their friends or family of something that they would like to graph. Have them bring in a tally chart and a graph showing what they found. Lyrics by Jodi Baumgard. Use x and y axis for the line graphs Do a couple more and use them as drafts Ending result may look like a giraffe Do the Grapharena! Pie graphs are the ones that take the most time The percents have to be right on the dime Sometimes they look like the inside of a lime Do the Grapharena! Picture graphs are so creative Like bar graphs but more inventive Everyone can be very constructive Do the Grapharena!

## Chapter 2 : Lesson on graphing functions

*In this bar graphs and line graphs learning exercise, students examine given data, organize it, and create bar graphs and line graphs from the given information. They interpret graphs and write statements explaining the graph.*

Read aloud the words they can see together. Type three responses at the end of the document or have students write on paper. We will write these down on the overhead projector. Reveal each word a sentence at a time by clicking on each box and pressing the delete key. Show them the form they will use to collect that information. Display a bar graph that the class has already made e. Have the students work at their table discussing what they notice about a bar graph. Write responses on chart paper in a list format. You may keep this posted and if students do not complete all components, you may add to it later. Explain that they will use the numbers data they collect from their survey to create a similar bar graph. Someone will cut out the pictures for these students if needed 2. Extra time will be given if needed 3. Have a signal or sign to let students who get anxious about being called on or asked a question know when they will be called on, so that they can better focus on what is being discussed instead of worrying whether or not they will be called on next. Also, allow enough time for each student to answer, and do not rush them. Make sure to speak slowly and clearly, with the simplest words possible to convey the idea. Repeat the instructions when needed. Also, it is important to model the activity for the students and allow time for questions. For students with fine motor difficulties, severe visual impairments, or communication difficulties have an alternate worksheet for them, or have the buddy up with someone else. Also make sure the worksheets have both words and pictures. The pictures should be representational and accurately colored. Assist students who need assistance to the carpet, or consider having the discussion from their desks. Extensions for Advanced or Gifted Students: May help their peers when they are finished 2. Change the worksheet key to 2 votes instead of 1 and have the students try it Evaluation to be completed after each lesson is taught:

**Chapter 3 : Learn Touch Typing Free - TypingClub**

*B: Organize and display data using pictures, tallies, charts, bar graphs and pictographs. C: Describe data displayed in a diagram, graph or table. E: Draw conclusions and identify patterns based on a comparison to data displayed in a graph.*

Students will be able to make a bar graph to represent data. Introduction Take a quick poll from students on what their favorite season is. Use tally marks, and record results on the board. Tell students that today they are going to use DataTo make Bar graphs. Explain to the students that data are facts or statistics that are collected to help use learn more about something. Say, "We can create bar graphs from the data we collect! A bar graph is a visual display of bars that compares quantities or numbers. Draw the bars on the chart paper to represent student answers. Write the title Favorite SeasonsAt the top of the graph, and explain to students that bar graphs should include a title. Explain to students that bar graphs also need a scale, scale label, categories and category label. Continue completing the bar graph by adding the rest of the labels and the data. Discuss each part of the graph with your students. Take a poll, asking students to name their favorite colors. Draw tally marks beside each colour as students name their favorites. Display a copy of the Blank Bar Graph worksheet for students to see. Write in the colour words at the bottom. Have students take turns shading one bar on the sheet to represent their favorite colors. Point to the bottom of the graph, and ask what label should be on it colors. Draw a line under the colour words for the label and write Colors. Point to the left side of the graph, and ask your students to label it. Write Number of StudentsOn the left side of the graph. Ask questions about the graph to check for understanding. Which colour is most liked? How many people like red? What does this information show us? What did we learn from collecting data and showing it in a bar graph? Read over the directions with the students. Have students complete the graph on their own. For advanced students, instruct them to create their own questions other students can answer by using the data in the graph. How many more people like green than red? Encourage your students to write comparison questions. Help students who need support write the labels on the graph. Instruct them to shade in the bars, showing them how the numbers on the left correspond with how many people like a certain colour. Have them create line plots instead of bar graphs until they see the correlation between the numbers on the axis and the number of items. Assessment Circulate and observe students as they complete their graphs. Review and closing 5 minutes Ask students to explain how to make a bar graph. Have a volunteer take a quick poll, and invite other students to quickly sketch a graph on the board. Measurement and Data 2 Guided Lessons are a sequence of interactive digital games, worksheets, and other activities that guide learners through different concepts and skills. They keep track of your progress and help you study smarter, step by step. Guided Lessons are digital games and exercises that keep track of your progress and help you study smarter, step by step. Measurement and data in year two includes such important concepts as comparing the length and weight of two objects using a third object. This guided lesson, designed by curriculum experts, takes students on an exploration of these measurement and data concepts. Once through with the lesson, kids can gain extra practise with measurement and data with the accompanying worksheets. This lesson includes printable activities: Download all 5 Song: Measuring with Nonstandard Units Song Game:

*Lesson plan. Interpreting Data by Creating Graphs Remind students that a bar graph is type of graph that shows the data divided in categories along a horizontal.*

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**Chapter 5 : Teaching All About Graphs: Three-Day Kindergarten Lesson Plan**

*Use the data from the board on favorite seasons to make a bar graph. Draw the bars on the chart paper to represent student answers. Write the title Favorite Seasons at the top of the graph, and explain to students that bar graphs should include a title.*

Choose four of the most common colors red, blue, green, yellow and write them across the top of the white board. You may want to use a red marker to write red, blue marker to write blue and so on. Then pass out the nametags to each student. Then one-by-one the students can place their magnetic nametags under their color choice in a vertical row. When completed, tell them that they have just made a graph. Explain that a graph gives them information without using a lot of words. Which color was the most liked or most popular? How do you know? Which was the least popular? Were there any colors that no one picked? If we place the information in horizontal rows, would it still give the same results? Explain that graphs can come in many forms. Now we are going to do a human graph! Look at the students clothing and decide if you are going to graph the color of shirts, socks or pants. Ask the students to join other students who have the same shirt color. When they are settled in the right group ask them to line up within the group. What does that tell us? Which line is shortest? The main character, Chrysanthemum, loves her name until she gets to school. The children tease her because it is too long. Write the numbers 2 through 14 across the top of the magnetic white board. Ask the students to count the amount of letters in their first names. One-by- one students should place their magnetic nametags under the number representing the amount of letters in their names. What is the most common amount of letters? Who has the shortest name? Who has the longest name? You may choose to repeat the activity using the last names of the students. Printable worksheet for the students to create a picture graph of the number of three items in their houses. Show an example when giving the assignment. Use the provided printable This is to illustrate to the students that data can be compiled in a variety of forms. Provide each student with a small piece of paper and ask each student to write his or her favorite color on the paper secretly, fold it and hand it to you. You may want to list eight choices on the board. Quickly sort the votes into piles of like colors. Gather the students around you and color the pie chart using the crayon with the same color as the vote. Color one section for each vote. Keep the same colors together. Looking at the pie chart, which color do you think is the most popular or well liked? Which color is the least popular? Why do you think this is called a pie chart? What other ways could we have shown the information? Use a large monthly calendar and draw a simple symbol of the weather for each day cloud, rain, snowman, sun At the end of each month discuss the data on the calendar. Were there more sunny days or cloudy days? How many rainy days? Student moves his or her nametag to the appropriate column when they enter the classroom each morning. Make a graph using dowel rods, clay, a wooden block and wooden beads. Download the illustration and directions 4. Suggestions for daily graphing:

## Chapter 6 : Different Kinds of Graphs - Free Lesson Plans by [www.nxgvision.com](http://www.nxgvision.com)

â€¢ A graphing packet that includes an example of each type of graph (bar, line, circle, picture, stem-and-leaf plot) and a tally chart. â€¢ Colored paper should also be inside the packet; must have at least two pieces, one for the graph and one for tally chart.

Class set of the Create a Picture Graph worksheet optional Projector Small sticky notes, two colors, one per student Key terms double bar graph Learning objectives Students will be able to create a double bar graph using an appropriate scale, with all parts of the graph included title, axes, labels, scale, bars. Introduction 10 minutes The class will start the lesson by generating a traditional bar graph and a double bar graph, both organized by gender. Write the categories under the horizontal line, spaced evenly with room for two bars above each category. Ask students to write down or tell a neighbor what they predict the graph will look like once they have all added their choice. Distribute two different colors of small sticky notes to students asking boys to select one color and girls to select the other. Have students come to the board and place their sticky note above their choice, creating one neat bar above each category ignoring the different colors for now. Remind students that a bar graph is type of graph that shows the data divided in categories along a horizontal line. It is good for comparing values in different categories. Instruct each student to place their sticker above the beverage choice that best represents the their favorite. Review the five parts of a graph title, axis, labels, scale, bars and explain that these parts each help you interpret the information. Discuss, "What do you notice right away? What are some of your initial observations? How is the graph the same or different from what you predicted? Is there anything that surprised you? Ask students how this graph is different than the other. What additional questions can we answer with a double bar graph? Note that with a double bar graph you are able to compare across two variables, sports and gender. Using the data provided, model for the class some different strategies for organizing the data making a table, using highlighters, etc. Create a double bar graph using the template on the sheet. Analyze the graph and complete the exercises at the bottom in pairs or as a class using student input. Distribute the Create a Double Bar Graph with your own data worksheet. Go over the instructions together. Students will be collecting their own data and creating a double bar graph. Independent working time 20 minutes Instruct students to complete the Double Bar Graph worksheet and answer the questions on the bottom independently. Collect a set of data using class responses and have students use that data set. Having a shared set of data will allow them to use classmates as collaborators in the graph creation. Have students complete the activity Create a Picture Graph. Assessment 5 minutes Sketch a quick double bar graph on the board using invented data. Ask students to interpret the data using the graph, writing their answers on an exit slip or on a personal white board. Circulate the room and spot check responses. Ask some or all of these suggested questions: Make a statement that can be supported using the data in this graph. What are two different questions that are being answered with this double bar graph? What are two ways the data has been organized? Review and closing 5 minutes Share out student graphs in small groups or as a class. Students could each hold up their graph for the class to see and make one conclusion statement based on their analysis of the data in the graph.

## Chapter 7 : Interpreting Data by Creating Graphs | Lesson Plan | [www.nxgvision.com](http://www.nxgvision.com) | Lesson plan | [www.nxgvision.com](http://www.nxgvision.com)

*Different types of graphs are the focus of this math lesson. Pupils manipulate data from Microsoft Excel in order to decide which graph would be best-used to represent the information: a bar, line, or circle graph.*