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| BAR GRAPHS | 3.20.2019 |

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| Subject |  | Overview |
| |  | | --- | | Mathematics | | Prepared By | | [Instructor Name] | | Grade Level | | 3 | |  | This lesson plan covers teaching content for;   1. Grouping data according to category 2. Drawing and constructing bar charts 3. Recording solution and findings accurately. 4. Determining the mode of a bar chart |

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| Materials Required  * Blank sheets * Pencils * Graph booklet * Whiteboard * Index cards |
| Additional Resources  * <https://za.pearson.com/content/dam/region-growth/south-africa/pearson-south-> * <https://www.cpalms.org/Public/PreviewResourceLesson/Preview/31899> * <https://www.teachervision.com/lesson/explaining-how-make-bar-graph> |
| Additional Notes |

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| **Objectives** Students should be able to;   1. Draw and construct horizontal and vertical bar graphs of given data. 2. Use the data to solve, simplify, put together, take apart, and compare problems. 3. Record their solutions accurately and consistently using information presented in the bar graph. 4. Review work done in pictographs 5. Determine the mode of a bar graph generated from their environment. |  | **Activity Starter/Instruction**  1. Introduce this topic by explaining to the class why it is important to be able to collect and display data. 2. If possible, show them examples of easy graphs and tables from the media. 3. Ask them easy questions about why data is used in the world around us. 4. For example, you may ask them questions like: “What is this graph/table about? Why do you think this information was used in this way?” 5. Encourage your pupils to ask questions about the graphs and data. 6. It is important that you allow them time to engage with the questions and give them time to think about the answers.   **Guided Practice**  **Day 2/ Lesson 2: 20 Mins**   1. Have students write 5-7 words or phrases that explain the process of creating a bar graph. 2. Divide students into groups of 3 or 4. Review and assign group roles. Possible roles include: Recorder, Questioner, Organizer, and Encourager. 3. Remind students that the collaborative skill that they are working on is "taking turns talking." 4. Give students a time limit of 10 minutes and remind them that you will give them a 5-minute warning. 5. Have students combine and order their 5-7 words or phrases and then use them to write the steps for making a bar graph. This should include the best of each individual student's list, and will be the bar graph process the group presents to the rest of the class. 6. Check in with each group to ensure that they understand the objectives. Encourage students to use the class bar graph to help them. |  | **Teacher Guide** **Day 1/ Lesson 1: 15 Mins**   1. The teacher will write four different kinds of foods on the board. Then ask each student to place a tally mark next to his or her favorite food. 2. When all have done so, ask what kind of food was named most often? 3. Now display a large bar graph with the four different kinds of foods. 4. Label the columns with foods named and fill in the number of squares in that column that is equal to the number of tallies each food received. 5. Now ask the students to compare the columns of the graph by posing a question such as, "How many more students liked pizza than cheeseburgers?" 6. Next, encourage the students to generate a similar question, and call on their peers to answer them.   **Guided Practice**  **Day 3/ Lesson 3: 25 Mins**   1. Break the class up into two groups. 2. On one index card write, "What is your favorite subject?" (math, reading, science, social studies) Students must choose from one of the given subjects. 3. On a second index card write, "What is your favorite P.E. game?" (kickball, foursquare, dodgeball, basketball) Students must choose from one of the given games. 4. Next distribute recording sheets to each group (attached). 5. Group one will record their favorite subjects and group two will record their favorite P.E. games. 6. Have each group sit in a circle and record their group's results on the tally chart at the top of the recording sheet. 7. Then each student will represent their results on their individual bar graph and answer questions at the bottom of their recording sheet. |
| Assessment Activity |  | Assessment Activity  1. From observations, group activity, and recording sheets the teacher will be able to determine if the students reach their learning target. 2. The teacher will measure the students' ability to draw a bar graph and interpret the results to determine if this activity had an impact on their learning. |  | Assessment Activity  1. Ask children to collect data on how many children in their class like sport. How many like tennis, cricket, running, hockey and soccer. 2. Ask them to draw a pictogram of the data. |
| Summary |  | Review and Closing The teacher should ensure that   1. Pupils are able to interpret data in a table and a tally chart. 2. They should be able to write numbers in the form of tallies and keep accurate records of data. 3. They also need to be able to draw a pictogram and a bar graph and find mode from a bar graph. |  |  |