

Lesson 9: Bar Graphs

Discussion:

Let's recall bar graphs from Grade 2:

✓ A Bar Graph is similar to the Pictographs we did last time, but instead of a picture for each piece of data, you create a bar that shows how many total

Let's look at an example:

✓ These students took a survey to decide what colour to paint their classroom.

✓ The bar graph shows how many students voted for each colour.

✓ Across the bottom of the graph are the options they chose from

✓ Down the side are the number of votes. In this case they decide to list every second number. So if the bar is in between two numbers, (look at yellow, it lands between the 4 and the 6). This means 5 people chose yellow.

Colors Students Wanted for Classroom

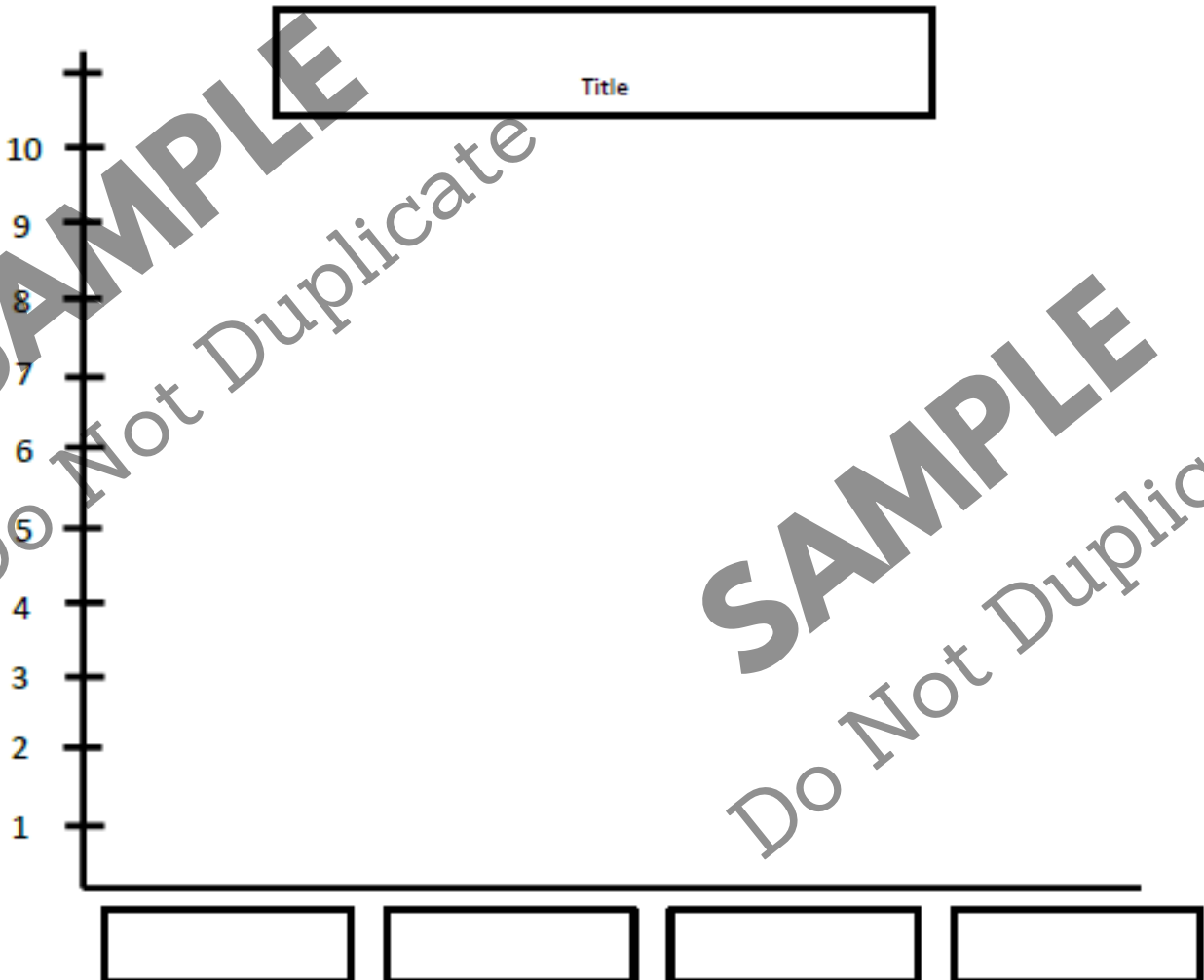


Practice Work:

Creating a Bar Graph

Creating a Bar Graph

Look at the collection of candies below, and then put the data into the blank bar graph. Be sure to colour each bar a different colour. Don't forget to fill in a title for your graph and label all the parts!



Lesson 13: Analysing Data

Discussion:

You've learned about collecting data and many ways to organize and present it, including methods like Pictographs, Bar Graphs, Venn Diagrams, Carroll Diagrams, and Tree Diagrams.

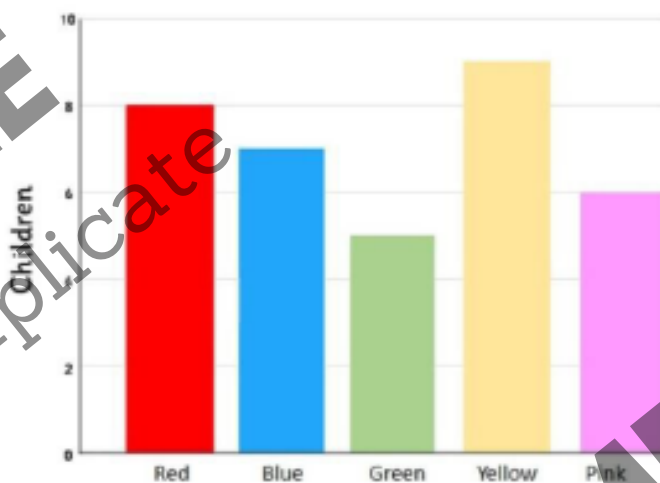
We've started learning about how to analyze all the collected and organized data. One way is by finding and using the Mode, and another way is by finding and using the Mean.

Today we will learn more about analyzing data that has already been collected, organized, and displayed.

Analyzing data is about asking questions, using the data to find the answers, discovering if there are unanswered questions (holes in the data), drawing conclusions from the data, and making arguments and informed decisions using the data.

Let's look at an example:

Favourite Colour



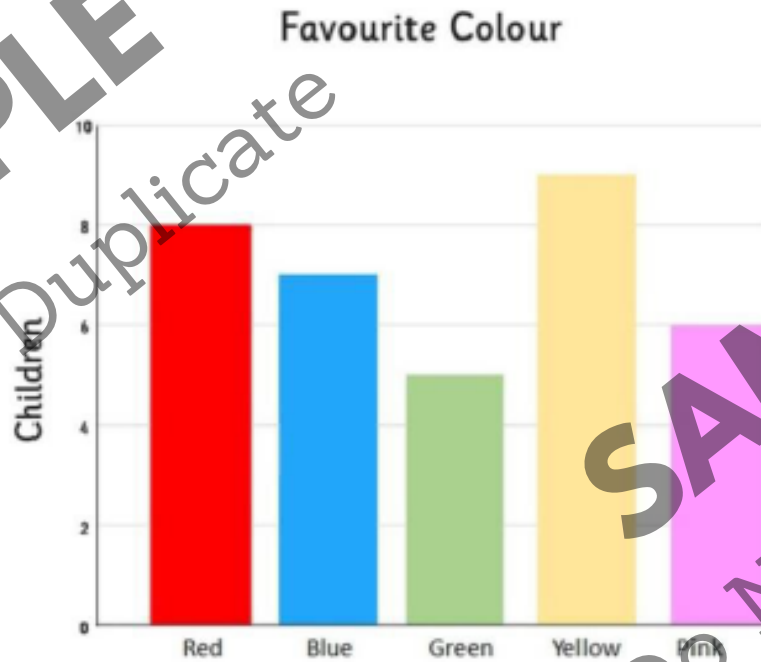
This bar graph shows us information about children's favourite colours.


What questions can we ask and get answers to from this data?

- ✓ What colour is the most popular? Yellow
- ✓ What colour is the least popular? Green
- ✓ How many children were surveyed? 35

Are there any unanswered questions in this data?

- ✓ What about other colours? Were they an option or did children have to pick from these five?
- ✓ Why did we want to know the favourite colours of the children?




 Imagine this survey was taken of children in a class. The teacher is going to repaint the classroom and wanted the children to help choose the colour.

✓ What arguments could be made for what colour to paint the classroom, based on this data?

- The “winning” colour is yellow with 9 children choosing it.
- More children chose yellow than any other colour.
- BUT 26 children wanted a colour other than yellow.

✓ Can you use the data to help the teacher make an informed decision?

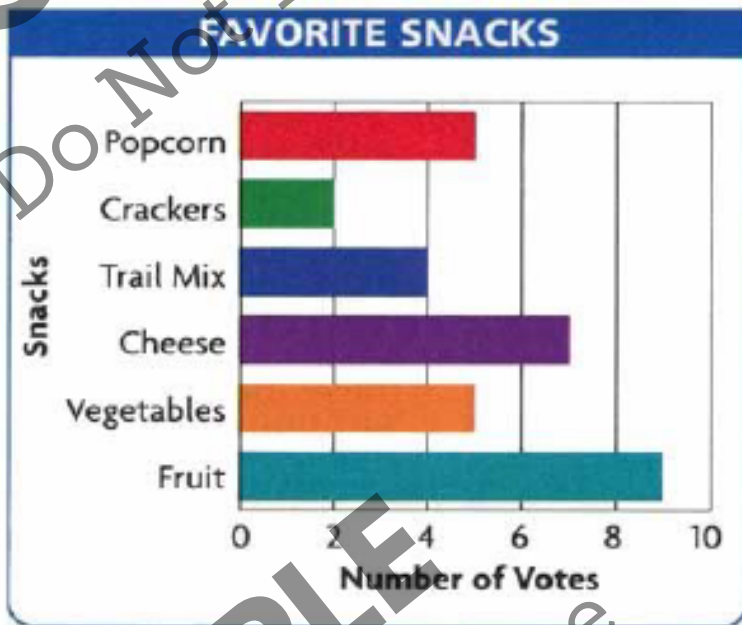
- Do you think the room should be painted yellow or not? Why or why not?

 This is how you analyze information from your data and use it to help you make decisions and answer questions!

Practice Work:
Analysing Data

Analysing Data

Look at the graphs and diagrams below and answer the questions.



The Student Council can choose 3 snacks to be served at the school movie night, so they take a survey of favourite snacks.

1. What is the most popular snack?

2. How many students did they survey?

3. Is there any missing data? What?

4. Which 3 snacks should the be served at the school movie night and why?

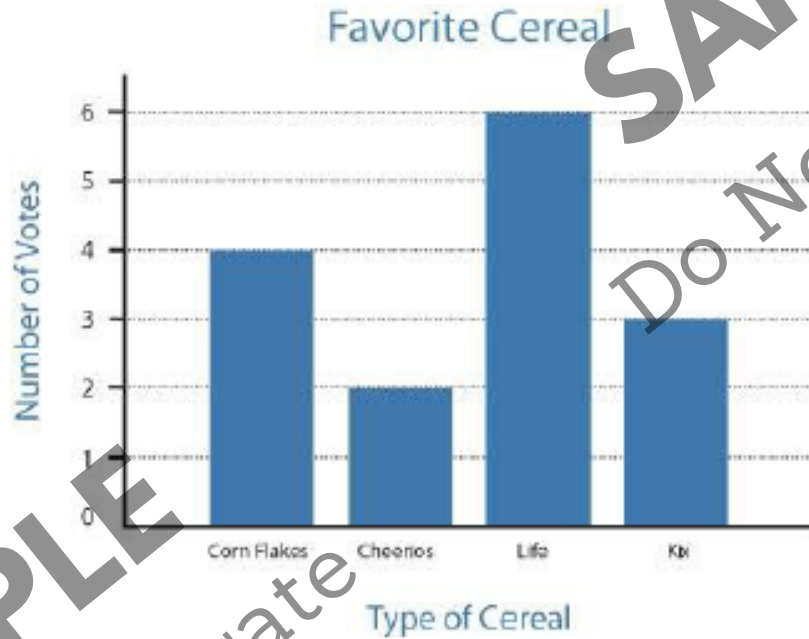
Ms. Shrute wants to buy some new blocks for her daycare, but she isn't sure which types of shapes to buy, so she sorts what she already has.

	Has curved lines	Has straight lines
Has more than three sides		
Has three sides or fewer than three sides		

5. What type of shapes does she have the most of already? _____

6. What attributes should the new blocks she purchases have and why? _____

Jagmeet is a counselor at a summer camp and is in charge of ordering cereals for campers' breakfasts. He isn't sure what kinds to order so he surveys campers to see what they like.



7. What information might be missing from this data? _____

8. Which cereal should he not order? _____

9. How many more children chose Life over Corn Flakes? _____

10. How many children did NOT choose Life cereal? _____

11. Which cereal do you think he should order? _____