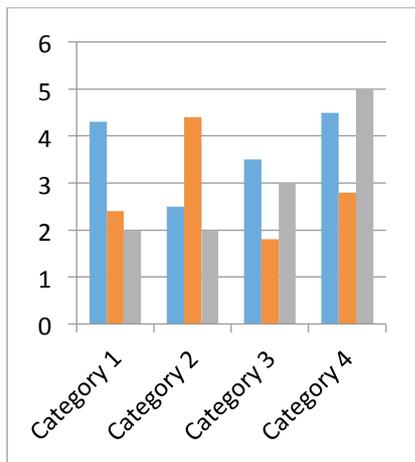


Interpreting Bar Graphs



Essential Questions

- HOW TO INTERPRET DATA IN A BAR GRAPH TO ANSWER QUESTIONS?
- HOW DOES USING A BAR GRAPH HELP IN ORGANIZING DATA?

Learning Intention / Overview

In this activity students will develop an understanding of bar graphs. A bar graph uses horizontal or vertical bars to organize and display data for quick easy generalizations. The bars represent amounts or qualities of things being compared.

Methods / Teaching Strategies

- Individual Practice
- Group Discussion
- Personalized Learning Task

Assessment of Learning

- Bar Graph Sheet (included)
- Individualized Learning (Student Bar Graphs)
- Performance Task 1 and 2

How might you customize or alter this lesson?

Key Learning Areas

Reading, Creating, and interpreting Bar Graphs

Concepts Taught

Data in bar graphs

Target Age

8-10 Year Olds

Duration

2 x 60 minute Session

You will need:

Interactive Board/Overhead Projector, Pencil, Paper, Students, Bar Graph Sheets



edgalaxy.com
Cool Stuff for Nerdy Teachers

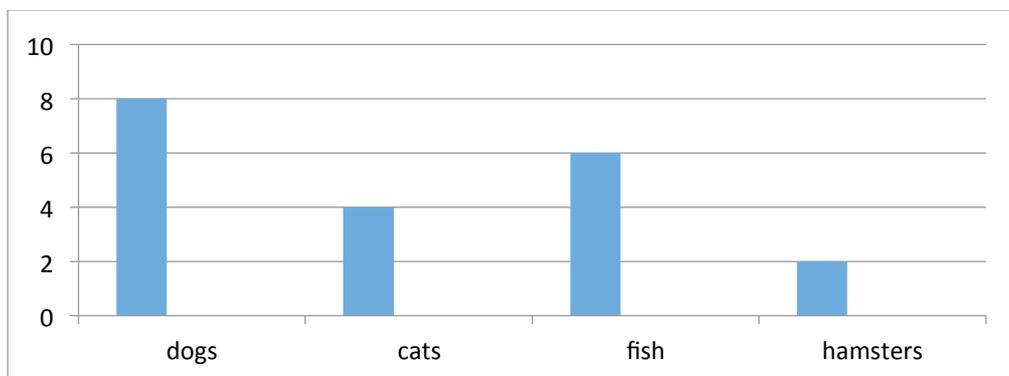
Online Resources:

- <http://edgalaxy.com/educati>

Teaching Instructions

1. Discuss Bar Graphs.
 - Bar Graphs are vertical/horizontal bars whose lengths represent amounts or numbers.
 - Bar Graphs are visual representations of collected data that visually allows for quick, easy conclusions.
 - The higher or longer the bars the greater the quantity of what is being measured.
 - Bar Graphs are a graphic organizer for data.
2. Display the following chart and bar graph for discussion. The chart matches the bar graph. Discuss how the bars are easier to determine most and least number of votes.

PETS	VOTES
Dogs	8
Cats	4
Fish	6
Hamster	2



What was the most voted for pet? (dogs)

Which was the least voted for pet in the survey? (hamsters)

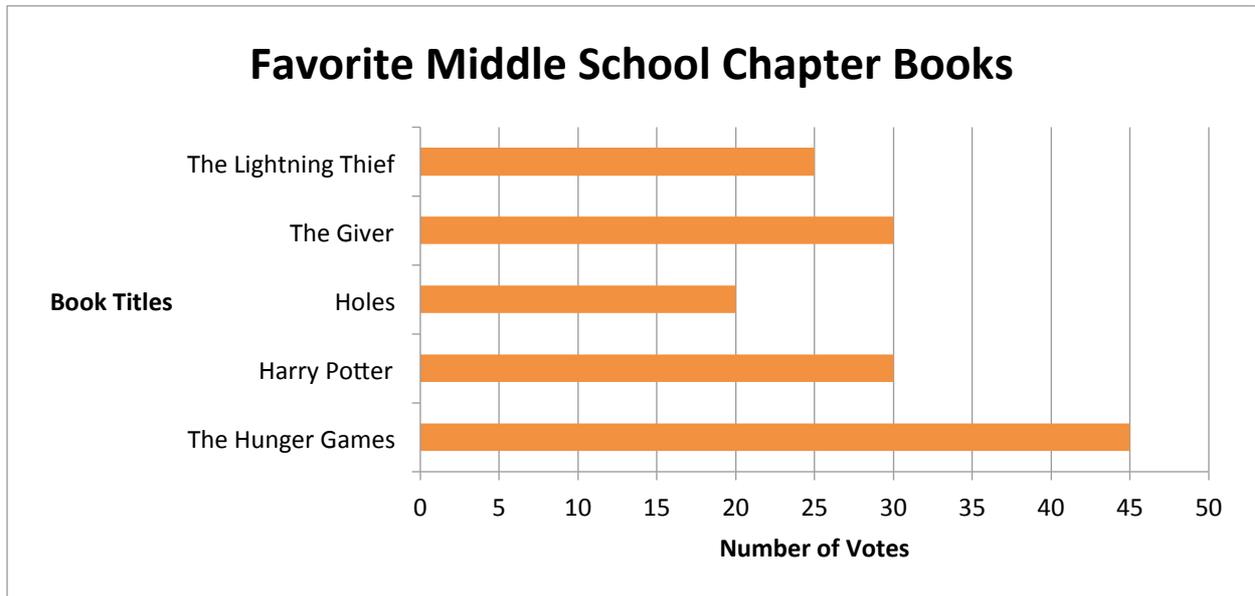
How many more people voted for fish than cats? ($6 - 4 = 2$)

What is the scale counting by and why? (twos-the votes were in factors of 2)

How many voted in all for pets? ($8 + 4 + 6 + 2 = 20$)

3. Once the students seem to understand bar graphs distribute the “Interpreting Bar Graphs” sheet for students to complete.
4. As homework or extension activity have students complete “Performance Task 1 and 2.”

Using Bar Graph Data



Use the BAR GRAPH above to answer each question.

1. What was the **most** popular chapter book chosen by middle school students? _____
2. How many different books were chosen by students? _____
3. What was the **least** popular chapter book chosen by middle school students? _____
4. Which chapter book was chosen by 20 students? _____
5. Which TWO books had equal amount of votes?

6. How many more students chose The Hunger Games than Holes?

7. List the chapter book titles from **least to greatest** in popularity.

Individual Performance

Task 1

The sixth grade students conducted a survey of favourite lunches. Below is a chart of their findings. Create a bar graph using the information gathered by the sixth graders.

Lunches	Number of Votes
Spaghetti and Meatballs	10
Pizza	16
Hamburger and Fries	12
Tacos	6
Hotdog and Baked Beans	8

Create Bar Graph Below

Individual Performance

Task 2

Directions: Choose a topic below. Conduct a survey of at least 30 middle school students on your chosen topic. Fill in the chart below with your survey information. Then create a bar graph of your findings. Your chart and bar graph should match.

TOPICS:

- 1. Favorite Middle School Sports (choose only five for choices)**
- 2. Favorite Breakfast Meals (choose only five for choices)**
- 3. Favorite School Subject (choose only five for choices)**
- 4. Favorite After School Activity (choose only five for choices)**
- 5. Other: Please get topic approved by teacher (choose only five for choices)**

Topic:	# of Votes

BAR GRAPH:

Using Bar Graph Data

Answer Key

Use the BAR GRAPH above to answer each question.

1. What was the **most** popular chapter book chosen by middle school students? The Hunger Games
 2. How many different books were chosen by students? 5
 3. What was the **least** popular chapter book chosen by middle school students? Holes
 4. Which chapter book was chosen by 25 students? The Lightning Thief
 5. Which TWO books had equal amount of votes?
Harry Potter The Giver
 6. How many more students chose The Hunger Games than Holes?
 $45 - 20 = 25$
-
7. List the chapter book titles from **least to greatest** in popularity.

Holes

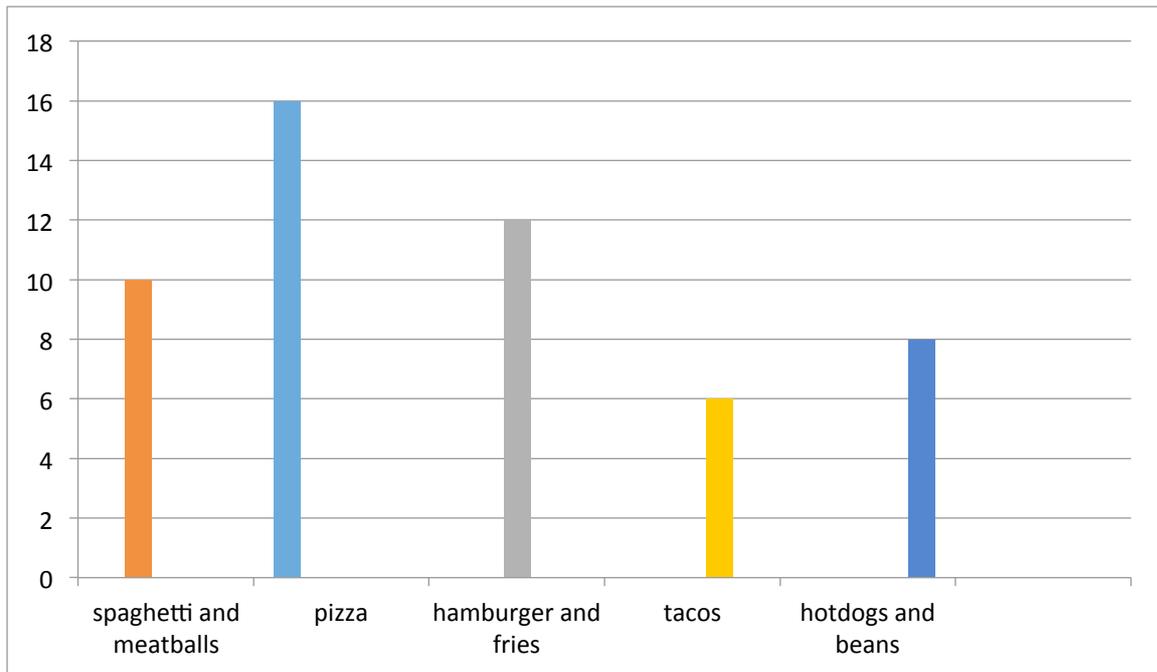
The Lightning Thief

Harry Potter and The Giver (tied)

The Hunger Games

Individual Performance

Task 1: Answer Key



Individual Performance

Task 2: Answer Key

Answers will vary