



LESSON PLAN

SPEED GRAPHS

Series: World's Fastest

Objective

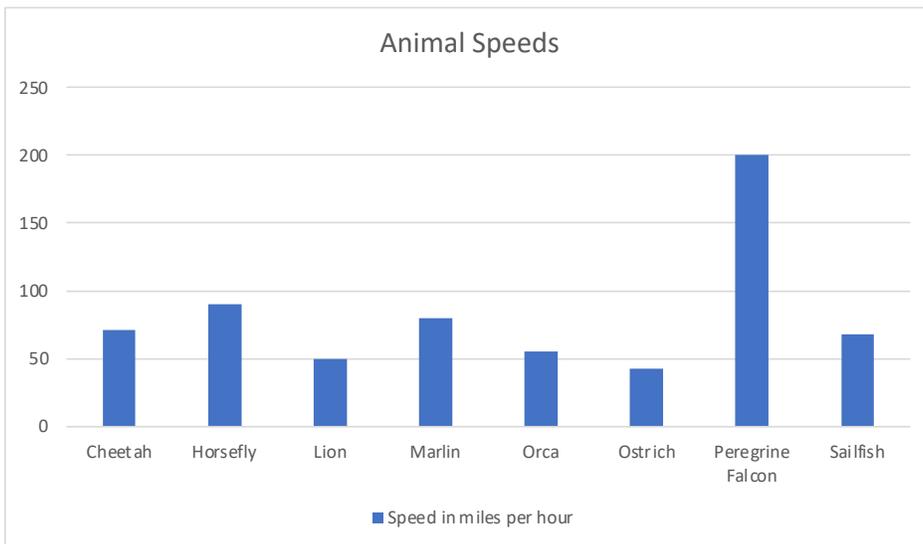
To help students practice using graphs to illustrate and compare numbers.

Supplies

- One or more books in the World's Fastest series
- Paper and pencils
- Whiteboard

Before the Activity

Draw an example of a bar graph on the whiteboard. The following sample graph uses numbers from *World's Fastest Animals*, but you can also pull statistics from any other book in the series:



Here are the numbers used in this sample graph:

- Cheetah: 71 miles per hour
- Horsefly: 90 miles per hour
- Lion: 50 miles per hour
- Marlin: 80 miles per hour
- Orca: 55 miles per hour
- Ostrich: 43 miles per hour
- Peregrine Falcon: 200 miles per hour
- Sailfish: 68 miles per hour



Activity

Have students look at the bar graph on the whiteboard. Explain that a bar graph makes it easy to compare a group of numbers.

First, point out the graph's x-axis, which runs from side to side. Explain that this axis lists the different numbers being compared. Each object—in this case, each animal—gets a bar. The height of this bar shows the size of the number. Point out the graph's y-axis, which runs up and down. Explain that this axis shows the units being measured. In this graph, the units are miles per hour. Larger numbers will go higher up along the y-axis. So, the graph makes it easy to compare numbers quickly—in this case, faster speeds will have taller bars.

Have students choose a book in the *World's Fastest* series. As students read through the book, they should write the top speeds of at least four vehicles on a sheet of paper. Students should use these numbers to create a bar graph. They should draw one bar for each vehicle. Like the bars on the sample graph, each bar should have a label underneath it. Students should also make sure to label the units along their graph's y-axis. Some graphs, like the sample graph, will be divided by 50s. Others might need to be divided by 10s or 100s. Provide prompting and support as needed to help students determine and label these units.

Evaluation

Collect the graphs at the end of the activity. Did students accurately copy each speed from the book? Did they use appropriate units along the graph's y-axis? Did they remember to label each bar along the x-axis? Did they draw each bar the appropriate height?