

Teaching Suggestions

Science and Mathematics Lab

(Course 1, Lesson 2-6; Course 2, Lesson 2-7; Course 3, Lesson 9-4)

It's Raining, It's Pouring

OVERVIEW

This activity provides students with the opportunity to interpret data by graphing and averaging decimal numbers. Students will graph local monthly rainfall totals, find the total annual rainfall, and calculate seasonal rainfall averages.

RECOMMENDED TIME

1 class period

MATERIALS

- local rainfall data for each month of the previous year
- average annual local rainfall
- current local rainfall total for this month

PREPARATION

Obtain rainfall data from your local newspaper office, television station, or the Internet.

TEACHING THE LAB

1. Have students work individually.
2. You may wish to have advanced students find rainfall data on their own.

Teaching Suggestions

Science and Mathematics Lab

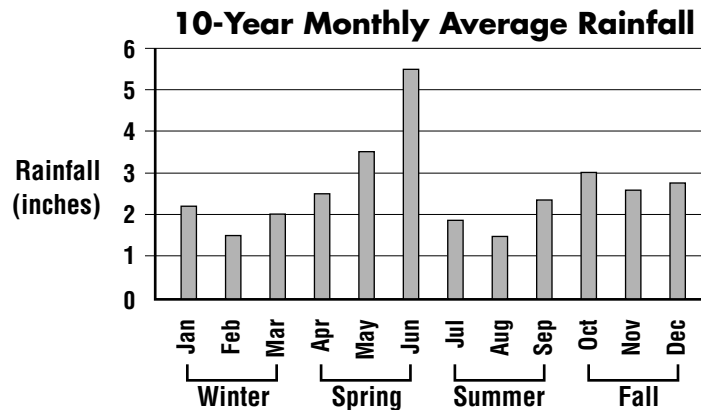
(Course 1, Lesson 2-6; Course 2, Lesson 2-7; Course 3, Lesson 9-4)

It's Raining, It's Pouring (continued)

DATA AND OBSERVATIONS

Sample Rainfall Data for 1997

Month	Rainfall (in.)
January	1.8
February	1.9
March	1.1
April	3.0
May	5.2
June	4.7
July	1.5
August	1.3
September	2.1
October	2.8
November	2.2
December	2.0
Total	29.6



Answers and Conclusions

1. Sample answer: May
2. Sample answer: March
3. Sample answer: greatest—spring; least—winter
4. Sample answer: 29.6 in.
5. Sample answer: 2.46 in.
6. Sample answer: The area has received more than the average monthly rainfall by 0.34 inches.

EXTENSION

Sample answer: The 10-year monthly averages are slightly higher except in February, April, and May. The 10-year data show a slightly higher yearly total.

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It's Raining, It's Pouring

INTRODUCTION

Rain is very important to plants and animals. Farmers depend on rain to ensure the success of their crops without expensive irrigation. Rain is the source of water for rivers, lakes, and aquifers that provide us with drinking water. Rainfall patterns vary throughout the world and from city to city. In this activity, you will graph your local monthly rainfall totals, find the total annual rainfall, and calculate seasonal rainfall averages.

OBJECTIVES

In this lab, you will:

- graph the monthly rainfall totals.
- find the total annual rainfall and compare it to the average monthly rainfall for the year.

MATERIALS

- local rainfall data for each month of the previous year
- average annual local rainfall
- current local rainfall total for this month

PROCEDURE

1. Fill in the monthly rainfall amounts of the previous year in the Data Table. Be sure to include the unit of measurement.
2. Add the monthly rainfall amounts to find the yearly total.
3. Construct a bar graph from information in the Data Table.

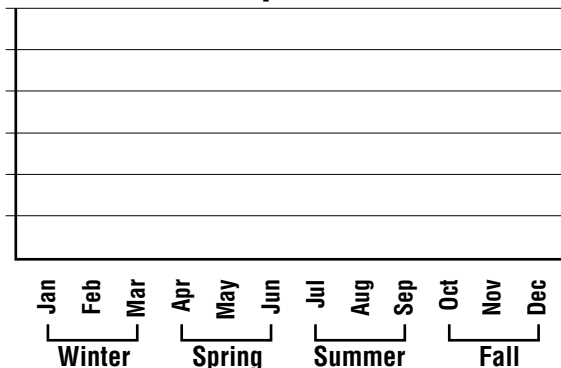
DATA AND OBSERVATIONS

Rainfall Data for _____

Month	Rainfall (in.)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
Total	

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It's Raining, It's Pouring (continued)**Rainfall Graph for _____****Questions and Conclusions**

1. Which month received the greatest rainfall?
2. Which month received the least rainfall?
3. Examine the graph and Data Table. Which season had the greatest average rainfall? Which season had the least average rainfall?
4. What was the total rainfall for the year?
5. What is the average monthly rainfall for the year?
6. Ask your teacher for the current rainfall total for this month. Has your area received more or less than the average monthly rainfall calculated in Question 5? by how much?

EXTENSION

Find the monthly rainfall data for the past 10 years. Calculate the average rainfall for each month over this 10-year period. Graph these averages on a bar graph. Compare this graph with the graph above. How do last year's data compare with the 10-year monthly averages?