

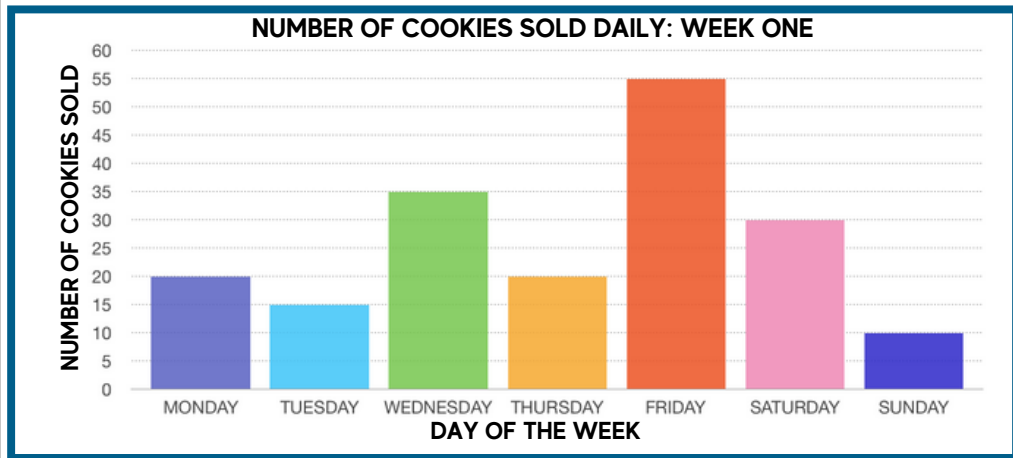


Power-Up Adventure

STEM WINTER ADVENTURE 6-8

Using Bar Graphs to Solve Word Problems

The graph below shows how many cookies you sold each day the first week that the bakery was open. Use the graph below to fill out the table. Then, answer the questions. Use scratch paper to do your math.



MONDAY	20
TUESDAY	15
WEDNESDAY	35
THURSDAY	20
FRIDAY	55
SATURDAY	30
SUNDAY	10

1. You want to close the bakery down once a week. What day would be the best day to close? Explain your answer.

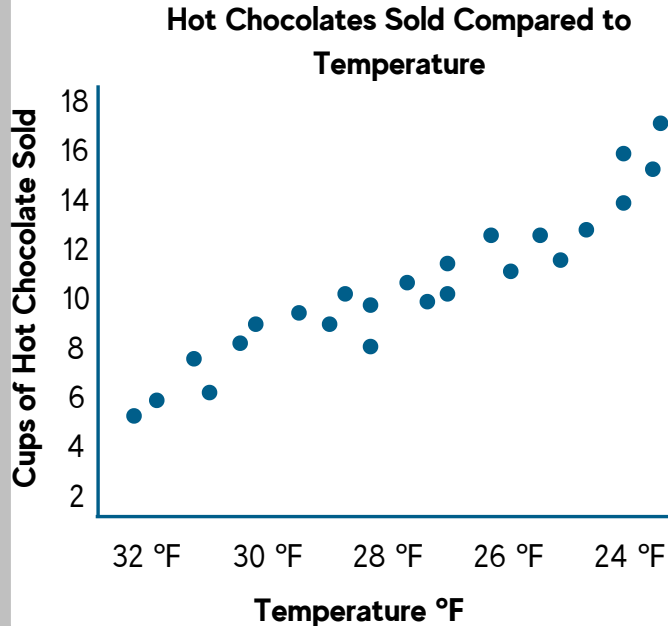
Sunday. It is the day with the least amount of sales.

2. Each cookie costs you \$0.50 to make and you sold each for \$1.25. How much money (profit) did you make this week? **\$138.75**

3. You are thinking about changing the prices. You want to sell each cookie for \$1.50 on Mondays and Tuesdays. For the rest of the week, you want to sell them for \$1.75. How much money (profit) would you have made with these prices if they still cost you \$0.50 to make. **\$222.50**

Using a Scatter Plot to Make Decisions

You decide to start selling hot chocolate at your bakery. The scatter plot below shows how many cups of hot chocolate were sold depending on the temperature. Use the scatter plot to answer the questions.



1. What does the scatter plot tell us about the temperature and the number of hot chocolates sold?

The colder that it is the more hot chocolates are sold.

2. What kind of correlation does the graph show between the amount of hot chocolate sold and the drop in temperature?(positive, negative, or none).

Positive.

3. Would you describe the correlation as strong or weak? Explain.

Strong, There are no outliers and it is a consistent path.

4. You are trying to decide if you want to keep hot chocolate on the menu for the summer. The temperature in summer where you live is between 85°F-95°F. Should you keep hot chocolate on the menu? Why or why not?

No, the higher the temperature the lower the sales. When the temperature is that high people will not buy it.

Use the key to reveal the hidden question! Each emoji represents a different letter.

Write your answer on the line at the bottom of the page!



Answer: _____

Plot the points below on the graph. Connect the points with the assigned color as you graph each point. Connect the points using the line tool. You can use straight lines or you can use the "scribble" tool. You must connect the lines in the order they are listed in order to reveal the correct picture. Once you reveal your picture. Use your knowledge of symmetry to complete the picture.

1

Dark Blue

- 0, 2
- 2, 1
- 2, -1
- 0, -2

2

Dark Blue

- 0, 4
- 3, 6
- 3, 3
- 6, 2
- 0, 4
- 2, 6
- 3, 3
- 6, 3
- 0, -4

3

Light Blue

- 0, 3
- 0, 6
- 0, 8
- 2, 8

4

Gray

- 2, 2
- 5, 5
- 5, 8
- 8, 5

5

Light Blue

- 3, 0
- 6, 0
- 8, 2
- 8, -2

6

Gray

- 2, -2
- 5, -5
- 8, -5
- 5, -8

7

Light Blue

- 0, -3
- 0, -6
- 2, -8
- 0, -8

