



Math Unit | Grades 5-7 | Lesson 2: Hot Chocolate!

Lesson Description

Using the statistics given in this activity, students are asked to help Mary figure out why there has been a slump in Hot Chocolate sales at her stand. She has kept a diary over the past two weeks as to what she's been doing different and is looking for the insight of a bright student to help her increase sales once again. Students can do this activity individually or in pairs.

Concepts

Statistics
Graph

Objectives

Students will:

- Understand the purpose and practicality of statistics.
 - Represent numerical data in chart and graph form.
 - Use Silver Dollar City examples to connect a math topic to real-life scenarios.
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Content Standards

National Standards in Mathematics

Topic: Mathematical Reasoning

- **Standard 1:** Uses a variety of strategies in the problem-solving process.
 - Benchmark 7, Grades 3-5: Uses explanations of the methods and reasoning behind the problem solution to determine reasonableness of and to verify results with respect to the original problem.
 - Benchmark 6, Grades 6-8: Generalizes from a pattern of observations made in particular cases, makes conjectures, and provides supporting arguments for these conjectures (i.e., uses inductive reasoning).

Topic: Uses of Mathematics

- **Standard 9:** Understands the general nature and uses of mathematics.
 - Benchmark 1, Grades 3-5: Understands that numbers and the operations performed on them can be used to describe things in the real world and predict what might occur.
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- Benchmark 1, Grades 6-8: Understands that mathematics has been helpful in practical ways for many centuries.
- Benchmark 2, Grades 6-8: Understands that mathematics often represent real things using abstract ideas like numbers or lines; they then work with these abstractions to learn about the things they represent.

Grade Level Expectations

Algebraic Relationships: Understand patterns, relations, and functions. Create and analyze patterns.

Time Required

Approximately 20 minutes, varies by student

Materials

- Student Activity Sheet found on Kids-U-Cation website
 - Writing utensil
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Procedures

1. Students will need to be aware of statistics and graphs before completing this exercise.
 2. Print off student activity sheet from Kids-U-Cation website (teachers).
 3. Complete and turn in activity to the teacher for a participation or accuracy grade.
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Closure

Review the key points of this lesson by discussing the following:

- How do statistics play an important role in every-day life?
 - Why might graphs explain mathematical equations better than charts or worded exercises?
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Assessment/Independent Practice

Give an assignment or test of your choice.



Name/Date: _____

Hot Chocolate!

Mary keeps track of how many hot chocolates she sells each week. Here is the information Mary has collected in the last two weeks:

Day	# of Hot Chocolates Sold	Notes:
Monday	76	Warm day
Tuesday	88	Switched to another brand of marshmallows
Wednesday	82	Offered a variety of sprinkles
Thursday	92	Cold day
Friday	96	Santa was spotted drinking hot chocolate around the park
Monday	84	Switched to a new brand of chocolate mix
Tuesday	68	Warm day
Wednesday	72	Cold day
Thursday	65	Offered hot chocolate in a mug
Friday	58	Gave free whipped cream with order

Make a graph that shows Mary's Hot Chocolate statistics for these two weeks. Then look at Mary's notes.

What advice would you give to Mary to help her sell more hot chocolates? Explain your answer.

Use this paper to make your graph

