

Application: Elementary Social Studies

A wagon train was traveling from St. Louis, Missouri to Denver, Colorado. The distance is 850 miles. The wagon train travels at a pace of 4.5 miles per day. Every fourth day the wagon train breaks down. How many days will it take the wagon train to arrive in Denver, Colorado?

Application: Elementary Science

Have students place thermometers in various locations outside. Have the students record the temperature on a table in 30 minute intervals. Once the data has been collected, have the students create the appropriate graph to display the temperature data.

Application: Elementary Writing

Given a problem (see example below), have the students use a beginning, middle, and end graphic organizer to write their thought processes down as they solve the problem. The students should describe what they did at the beginning of the problem. Then the students should describe how they worked through the middle of the problem and lastly, how they checked their work at the end of the problem.

Problem: There are \$200 worth of coins in a jar. There is the same number of nickels, dimes, and quarters. How many of each coin are in the jar?

Application: Elementary Reading

Here are several children's literature books that can be integrated into mathematics lessons.

- Burns, M. (1998). *Spaghetti and Meatballs for All!* New York, NY: Scholastic Press.
- Hutchison, P. (1989). *The Doorbell Rang*. New York, NY: Harper Collins Publishers.
- Murphy, S. (1998). *Lemonade for Sale*. New York, NY: Harper Collins Publishers.
- Neuschwander, C. (1997). *Sir Cumference and the First Round Table*. Watertown, MA: Charlesbridge.
- Schwartz, D. M. (1989). *If You Made a Million*. New York, NY: Scholastic Press.
- Williams, R. L. (1995). *The Bugs Go Marching*. Cypress, CA: Creative Teaching Press.

Application: Physical Education

How much can you do in a minute? Put the students into groups of 3 or 4. The students will need a recording sheet, stop watches, and a list of different activities. For example, how many times can you hop on one foot in a minute? Have each of the students participate in the activities. While one student is participating, one student is timing, and the third student is counting and recording the information. The students switch roles each time a student participates in the activity. Once all of the activities have been completed, the students will decide how to best display their data.

Application: Fine Arts

Music: Have students clap to the beats of different songs that are played with a different time signature. Determine the patterns in the length of notes in a measure.

Art: Working with colors is an excellent opportunity to use mathematics in the elementary classroom. Use this scenario to encourage exploration: a crayon company has asked the students

to create 4 new colors. Each color includes 10 drops of paint. The students must determine the ratio and percent of each color used. Then the students need to give their new color a name.