



**Standards and Benchmarks:** 1A, 1B, 1C, 1E, 1F, 1K, 2B, 3A, 3C, 3D, 3K, 4A

# Problem and Solution: Piece of Pie

The students will use pie charts to support their writing.

## Materials

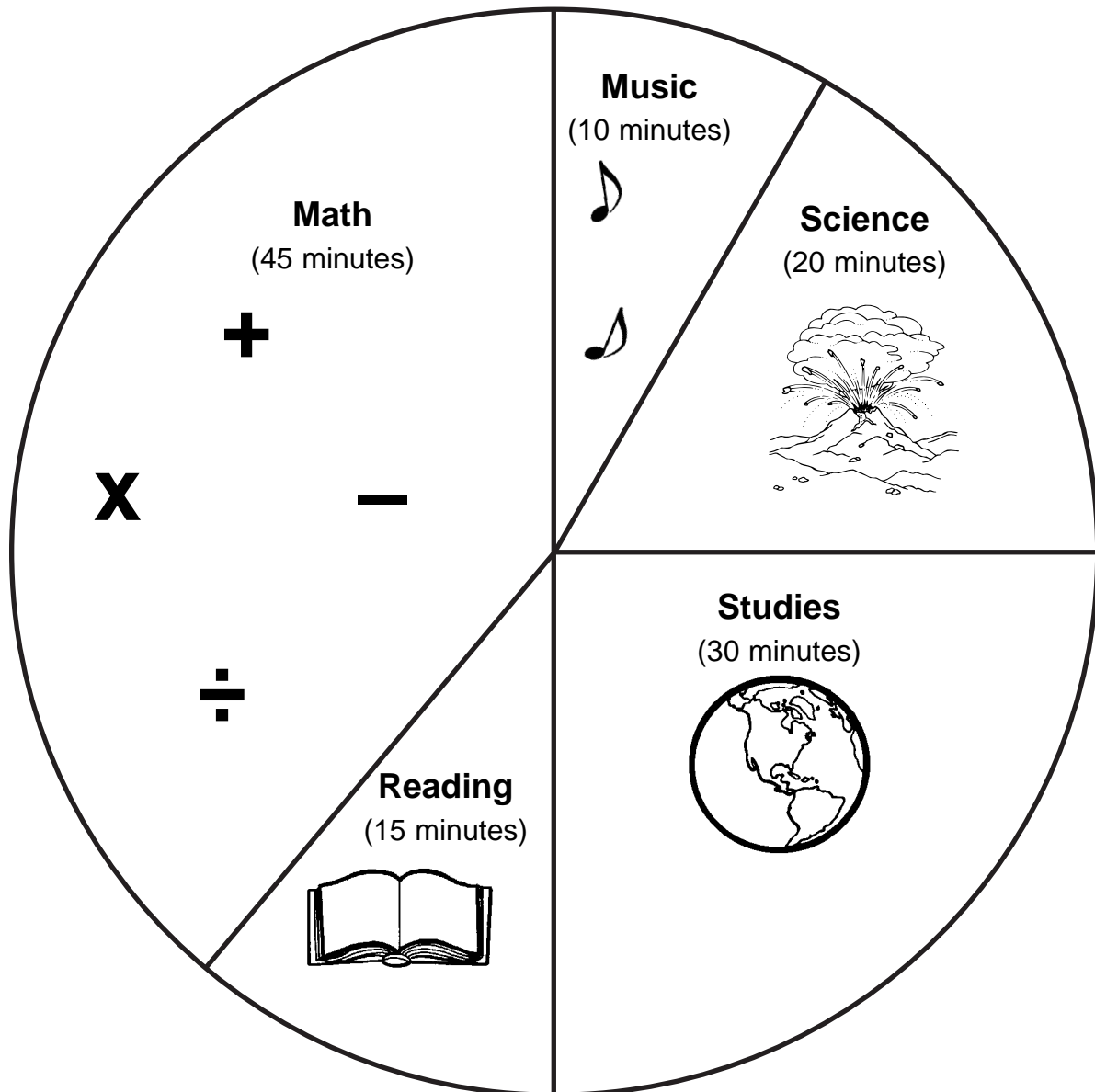
- copy of “Piece of Pie Chart” (page 83) for each student
- two copies of “Pie Chart Template” (page 84) for each student
- pencils
- writing paper
- pens or pencils
- crayons

## Directions

1. Instruct each student to write a list of everything he or she does during a normal day and approximately how much time he or she spends doing each thing. You might wish to have each student keep track of his or her time over the course of a day or two.
2. Distribute page 83. Discuss the chart with the students. Explain how each segment represents a percentage. (Review percentages and fractions, if necessary.)
3. Draw the chart from page 83 on the board, but change the percentage information. Have the students come to the board to reconfigure the chart, reflecting the new statistics.
4. Distribute one copy of page 84 to each student. Have the student use the gray guidelines to complete the chart for the way he or she spends the day. The gray lines mark every hour. The student should trace over the appropriate lines with a crayon. The represented segment (label) can then be written darkly in the space with pencil or pen, and then the space filled in lightly with crayon so as not to cover the label. Each segment should use a different color crayon so they are easily distinguishable from one another.
5. Looking at the completed pie chart, each student should consider the use of time it reflects and find a problem area (e.g., too much television time or too little sleep). Now, distribute a second copy of page 84. Determining the problem, the student should complete a new pie chart that reflects a solution—a better use of time.
6. With pie charts in hand, the student will write a problem-and-solution essay: the problem is the original use of time, and the solution is the new arrangement. The neat and colored pie charts can be bound with the completed writing and displayed for others to see.

# Piece of Pie Chart

This pie chart shows a student's homework over two hours.



The chart shows that the student spent the two hours in the following way:

- math = 45 minutes
- science = 20 minutes
- reading = 15 minutes
- social studies = 30 minutes
- music = 10 minutes

Each segment of the chart represents a percentage of the total, which is two hours of time in this case. The size of the segment shows how much time is spent. The chart is also labeled with the time for easier reading.

# Pie Chart Template

Use this template to make your own pie chart. Each gray line marks one hour out of 24, or  $\frac{1}{24}$  of the whole.

