Name _Emily Quandt_____

Date _May 10, 2005_____

Trade Book Sheet

Title of book: _The Librarian Who Measured the Earth_____

Author's name: _Kathryn Lasky_____

Publisher: _Little, Brown and Company_ Copyright year: _1994_____

Reading level: _AD840L_____ Genre: _Nonfiction_____

Synopsis of story: Eratosthenes was a very smart man. Even when he was a child he would ask a lot of questions. He was very curious. He was smart in every subject but his favorite was geography. He then studied in Athens and began to become well known. Later he went to Alexandria to tutor King Ptolemy III's son. Here he studied and researched in the library and museums. He got the nickname Pentathlos. He became the chief librarian and helped solve problems. He still had a lot of questions about the earth so he started to do some research. From his research he wrote the first geography book. He wanted to measure the earth so he used the sun and angles to help him. He gathered all the numbers he needed to measure the circumference. He used this to make a map of the world that he put in his geography book.

Standard: 6.5.4 Understand the concept of the constant PIE as the ratio of the circumference to the diameter of a circle. Develop and use the formulas for the circumference and area of a circle.

Activity: Eratosthenes used a grapefruit to help him measure the earth. So we will use small objects to help measure larger objects. We will use a golf ball, baseball, and soccer ball. There will be milk duds, oranges, grapefruit, and other round foods. The students will be in small groups. Some of them would have a very small circle and very large circle and others will have circles that are relatively close in size. They will have a ruler, string, and a calculator. They will measure the small circle with the string and ruler and then calculate the circumference. They will then estimate what the circumference is of the large circle. They will then measure their large circle and compare it to their circumference. After the activity we will discuss the size of the earth compared to the grapefruit that Eratosthenes used. We will discuss how measuring something smaller but of the same shape can help to measure something larger.

Standard:

Activity: