

## International Lesson Plan Eratothenes Experiment Revisted

Menlo students in Physics 1 worked with World History students at the Nanyang Girls High School in Singapore.

"Erastosanes experimented to measure the circumference of earth. He took a stick in Syria and measured the different shadow lengths from the different shadows and some geometry to measure the earth. It was tricky with us because we are at different longitudes. We measured things about 10 times, so we had to think about what the same time meant. We measured the difference in shadows, plus the geometric calculations, and got the circumference. The students learned a ton about non-Euclidean geometry, how to find the true north, a lot of little things (e.g., time differences, getting very accurate measurements), lots of cultural things, and learned a lot of things by accident and sharing documents".

— Dr. James Dan, Physics teacher