



Math Activities

Title: **My Shadow**

Author: **Robert Louis Stevenson**

Illustrator: **Ted Rand**

Math Concepts:

- measurement
- size relationships
- time
- estimation

Measurement

Working in pairs, have students measure the lengths of their shadows in the morning when they first arrive at school, in the middle of the day, and before they go home. Compare measurements at the different times. Compare shadow lengths with each other. At one of the times when shadows are longest, have them measure their shadows and compare the length with their actual height. Before they compare, have them predict if their shadow will be longer, shorter, or the same as their height. Students can graph the results of the various measurement activities.

Comparing Sizes

Demonstrate the concept that the size of the shadow depends on the distance the object is from the light. Move an object varying distances from the light source and outline it on a chart.

Time

Discuss how shadows have been used to help people determine the approximate time of day. Brainstorm other means of telling time, conventional and otherwise. Which are exact and which are approximate?