



The Human Sundial

Introduction

How can people tell time without a watch? How did people know what time it was before the invention of clocks? They used the sun. *The Human Sundial* is a large-scale sundial that can be used to teach numerous mathematical and scientific concepts including trigonometry, geometry, cartesian and polar graphing, orienteering, astronomy, technical drawing and planning, and the history and origins of timekeeping.

This activity will also provide students with a solid base in physics, addressing topics such as different forms of energy, forces and motion. They will be able to visualize the apparent movement of the sun across the sky, which results in shadows of different lengths on the ground at various times throughout the day. This activity contains detailed instructions for two different mathematical methods for constructing human-sized sundials.