



Oh, it's about time...

What you need:

PENCIL
LARGE SPACE WITH NO SHADOWS
CLOCK
PAPER PLATE
PLASTIC STRAW
RULER
MARKER

WHO NEEDS
A *CLOCK*,
RIGHT?



What's going on?

What to do:

FIND AN OPEN SPACE OUTSIDE WITH NO SHADOWS NEARBY.
USE A PENCIL TO POKE A HOLE THROUGH THE CENTER OF THE PLATE AND INSERT A STRAW WITHIN THE HOLE AT A SLIGHT ANGLE.
WRITE THE TIME ON THE EDGE OF YOUR PLATE AND DRAW A STRAIGHT LINE FROM THE TIME YOU WROTE TO THE HOLE IN THE CENTER OF THE PLATE.
CAREFULLY ROTATE THE PLATE SO THE SHADOW OF THE STRAW LINES UP WITH THE LINE YOU DREW.
CHECK YOUR SUNDIAL EVERY HOUR FOR 5-6 HOURS FROM WHEN YOU BEGAN. WRITE THE TIME ON THE PLATE WHERE THE SHADOW FROM YOUR SUNDIAL FALLS.
TAKE YOUR SUNDIAL OUT AGAIN A COUPLE OF WEEKS/MONTHS LATER AND SEE IF IT IS STILL JUST AS ACCURATE AS ON THE FIRST DAY!

IT MAY APPEAR THAT THE SUN MOVES ACROSS THE SKY THROUGHOUT THE DAY BUT THIS MOTION IS THE RESULT OF THE EARTH'S ROTATION ON ITS AXIS. THE SHADOW YOU SEE ON THE PLATE MARKS THE GENERAL POSITION OF THE SUN THROUGHOUT THE DAY. THE ACCURACY OF ALL SUNDIALS IS AFFECTED BY MANY DIFFERENT THINGS, INCLUDING THE "WOBBLING" OF THE EARTH AS IT ROTATES ON ITS AXIS AND THE FACT THAT OUR PLANET IS NOT 100% ROUND - WE HAVE A LITTLE BULGE AROUND THE EQUATOR! BECAUSE OF THESE FACTORS, PROFESSIONAL SUNDIALS HAVE TO BE CALIBRATED TO BE ACCURATE.