## Using the Watch

The oldest and most "natural" method of time measurement is to note the movement of the sun across the sky by tracking its shadow. Of course, it is actually the Earth that is moving, and not the sun.

Today it seems silly to think that the Earth was thought to be the center of the Universe. But 5,000 years ago, there were no telescopes to help people see the true nature of the heavens. People had to rely on appearances, and it does appear that the sun revolves around the Earth. In fact, it wasn't until the 1500 s that Nicholas Copernicus actually proved that the Earth revolved around the sun.

Following these simple instructions, you will soon be using your Stonehenge Watch to tell time and mark the coming of the four seasons. The Stonehenge Watch functions as a shadow clock, or sundial, to tell the "local apparent time."

1. Open the case of your Stonehenge Watch by pressing the button on the top. Place your watch on a level surface where sunlight is available.
2. "Orient," or point your watch to face north. Using the north arrow embossed on the stone plate, align the stone plate arrow with the north arrow of the compass built into the watch case. Turn the watch until the stone plate arrow and compass arrow are parallel. (See figure 1).
3. Remove the "gnomon" from its holder and insert it into the hole provided in front of the Altar Stone. A gnomon is the part of a sundial that casts a shadow. In Greek it means "to know", and is used because it knows, or indicates, the time.
4. Now, read the shadow cast by the gnomon as you would a sundial, with the north arrow signifying the 12 noon position. As time passes, you will see the shadow of the gnomon rotate around the dial in a "clockwise" direction. Clockwise is the direction that the hands on an analog clock move.

At midday, the shadow will be cast directly north parallel to the north arrow embossed on the stone plate. At noon, the shadow will also be its shortest. When the Sun rises and sets the shadows will be their longest, while at noon they are the shortest because the sun is at its highest point in the sky.

