Why did the ancient egyptians prefer sundials to clocks



Nowadays it is impossible to imagine the world without time keeping. Wall clocks and wristwatches, clocks in our mobile phones and on the buildings help measure time and keep up with the events. A challenging questions arises – how did it all begin? How did ancient people start measuring time? Who was the first to invent minutes, hours, days and seasons? What devices were used to keep the track of time? The answers to these queries may be found in ancient Egypt.

The Egyptians are the first people who can be proven to take timekeeping as part of their culture. Because of its geographical position, Egypt got plenty of sunshine, and, logically, Egyptians began to use the sun for time measurement. Egyptian clocks were mainly of two types: sundials and water clocks. Egyptians divided the day in 24 hours, from Dawn to Dawn. Around 3500 B. C. the Egyptians built obelisks – tall monuments with four sides - and placed them to cast shadows from the sun. The shadow was a kind of a sundial and enabled citizens to divide the day into two parts by indicating noon. Later, they added marks around the obelisk base to indicate further time subdivision. Egyptians built CleopatraNeedles – a trio of huge granite columns. They had 12 marks on the ground to mark 12 parts of the day. When the sun touched the top, the length of an appeared shadow showed how much daylight remained (Using the Sun).

The oldest known sundial dates back to 1500 B. C. It consisted of a T-shaped cross rod with a vertical stick, marked with five lines, one line for one hour. In the morning, the stick was placed facing east to keep time and at noon it was placed to face west to indicate the following five hours (Joze Juan Gutierrez). Later, the Egyptians refined their design to make a device, facing https://assignbuster.com/why-did-the-ancient-egyptians-prefer-sundials-to-clocks/

south to be used throughout the day without being moved (Tony Allen). The invention of such portable sundials shows how important it was for the ancient Egyptians to keep time.

At the same time, sundials were only effective given enough sunlight. To tell time at night the Egyptians invented the water clock. The first water clocks appeared during the reign of Amenhotep I. It was a stone bowl filled with water at precise time of the day. It had slanting sides and a small hole at the bottom trough which water dripped at a constant rate. The time was determined by the level off the water along the markings on the inner walls of the vessel (Debopriya Bose). This devise enabled the Egyptians to divide time accurately and independently of the sun.

As for the year division, crop planting and harvesting made it significant to have knowledge about seasons' changes. Ancient Egypt had three different calendars. The first one, used for religious feasts, was a lunar calendar with 12 lunar months, each of which began on the first day when the old moon was not visible in the East at dawn. The second one, a civil calendar, was based on the rising on the Sirius star. It consisted of 365 days, was split into 12 months of 30 days with additional 5 days attached to the end of the year. A third calendar was used to match the lunar cycle to the civil year (Alistair Booddy-Evans).

The way in which we divide the day into hours and minutes and the year into seasons and month, owes much to the developments in ancient Egypt. Using the sun, the moon and stars they managed to create sophisticated and accurate systems of time measurement. Although today obelisks and

https://assignbuster.com/why-did-the-ancient-egyptians-prefer-sundials-to-clocks/

sundials are used mostly as decoration, they remind us of how inventive a human mind is.