

## The History of Clocks

The movement of the sun through the sky makes possible a simple estimate of time, from the length and position of a shadow cast by a vertical stick. If marks are made where the sun's shadow falls, the time of day can be recorded in a consistent manner. The result is the sundial. An Egyptian example survives from about 800 BC, but the principle may have been familiar to astronomers a few centuries before. However it is difficult to measure time precisely on a sundial, because the sun's path through the sky changes with the seasons. Earlier attempts at precision in time-keeping rely on a different principle.

The water clock, known from a Greek word as the clepsydra, attempts to measure time by the amount of water which drips from a tank. This would be a reliable form of clock if the flow of water could be perfectly controlled. In practice it cannot. The clepsydra has an honourable history from perhaps 1400 BC in Egypt, through Greece and Rome and the Arab civilizations and China, and even up to the 16th century in Europe. But it is more of a toy than a timepiece.

The hourglass, using sand on the same principle, has an even longer career. It is a standard feature on 18th-century pulpits in Britain, ensuring a sermon of sufficient length. In a reduced form it can still be found timing an egg.

### Questions 1-5

Decide if the following questions are true, false or not given.

True = the statement matches the information in the passage

False = the statement contradicts the information in the passage

Not Given = the information is not found in the passage

1. Sundials are able to provide accurate time using the sun's paths through the skies.
2. The existing Egyptian sundial was entirely new at that time.
3. Water clocks provide a more reliable method of telling the time than sundials.
4. The water clock is older than the sundial.
5. Water clocks make good toys.
6. Hourglasses work using sand to measure time.
7. Hourglasses were found in Britain earlier than the 18th century.
8. Hourglasses are no longer used by modern people.

Answers can be found on my blog: [www.ieltsliz.com](http://www.ieltsliz.com) on the main reading page.