

# THE WORD

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MOMENTS WITH FRIENDS.

*Why is time divided as it is?*

In order that man may keep a record of events; that he may estimate the distances of events in the perspective of the past, and anticipate those to come. As defined by some philosophers, time is "a succession of phenomena in the universe." That man might keep track of his life and business, as well as of other peoples', he was obliged to devise means of fixing events in time. It was natural to measure events on earth by the "succession of phenomena in the universe." The measures or divisions of time were furnished him by nature. Man had to be a good observer and to keep account of what he had observed. His powers of observation were keen enough to notice his life was marked off by a succession of periods of light and dark, of day and night. The light period was due to the presence, the dark to the absence, of the sun. He saw the seasons of warmth and cold were due to the sun's position in the heavens. He learned the constellations and noticed their changes, and that the seasons changed as the constellations changed. The sun's path appeared to pass through star clusters, constellations, which the ancients numbered as twelve and called the zodiac, or circle of lives. This was their calendar. The constellations or signs were called by different names among different peoples. With few exceptions the number was counted as twelve. When the sun had passed from any one sign through all the twelve and began at the same sign, that circle or cycle was called a year. As one sign passed down and another came up, the people knew from experience that the season would change. The period from one sign to another sign was called a solar month. The Greeks and the Romans had trouble in dividing the number of days in a month, and even the number of months in the year. But finally they adopted the order as used by the Egyptians. We use the same today. A further division was made by the phases of the moon. It took 29 days and a half for the moon to pass through its four phases from one new moon to the next new moon. The four phases constituted one lunar month, of four weeks and a fraction. The division of the day from sunrise to the highest point in the heavens and to sunset

was marked according to the plan suggested in the heavens. The sun dial was later adopted. A marvel of astronomical knowledge is shown by the accuracy with which the stones at Stonehenge at Salisbury Plain in England were set up, in prehistoric times. Instruments were devised, such as the hour glass, and water clock to measure periods. Finally the clock was invented and patterned after the twelve signs of the Zodiac, except that the twelve was, as they thought, for convenience sake, numbered twice. Twelve hours for day and twelve hours for night. The complications of life made by civilization necessitated the division of the hour into minutes and the minutes into seconds, and in order to record the occurrence of certain phenomena the second is too great a period of time, which is therefore divided into fractions running into almost unlimited number.

Without a calendar, to measure and fix the flow of time, man could have no civilization, no culture, no business. The watch which may now be had for a trifle, represents work done by a long line of mechanics and thinkers. The calendar is the result of the sum total of the thought of man to measure the phenomena of the universe, and to regulate his affairs by this measure.

A FRIEND [H. W. Percival]



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