

## THE CALENDAR

**Calendars** are systems for ordering time to enable planning for specific events. Some were developed for agricultural purposes, but most have been for religious purposes – to celebrate feast (festival) days. Judaism, Christianity and Islam each have calendars for their own religious purposes. Calendars also serve secular purposes, enabling us to plan for commercial, social, and political transactions. Calendars may be lunar (based on the moon's phases), solar (based on the earth's movement around the sun), or lunisolar (a combination of lunar and solar elements).

- Jewish – lunisolar; in 2014, start of Jewish year 5775
- Chinese – lunisolar; 2014 = start of Chinese year 4712
- Islamic – lunar; 2014 = start of Islamic year 1435

**Years** – In order to number a calendar's years, there must be a starting point. A certain historical event, such as the beginning of a person's reign, may be used. For example, the Victorian Era started with Queen Victoria's coronation. After the Revolution, the French numbered the years of the Republic, a practice that ended after the monarchy was restored. Years may be numbered since the calculated beginning of the world (e.g., the Jewish calendar). But with no way to verify that event, various such calendars don't produce the same results. Islam counts from the Hegira, Muhammad's emigration from Mecca to Medina. The ancient Romans used the founding of the city of Rome as their starting point. (Other than this numbering system for years, most of our calendar derives from the Roman calendar.)

The Christian Era calculates years from the Incarnation of Christ. This system was proposed around 527 by Dionysius Exiguus, a Roman abbot, and has become the universal standard. (Interestingly, Dionysius was off a few years in his calculation of the Incarnation, so that scholars now think Jesus was born around 6 BC, given that King Herod died in 4 BC.) Part of Dionysius' motivation was to drop the numbering system known as the Diocletian Era, as he did not want to keep using the name of an emperor known for persecuting Christians. Another factor was that it had been more than 500 years since the birth of Christ and there was an expectation that the Second Coming was imminent. Dionysius suggested in his numbering system that the Second Coming would not occur for hundreds more years. Dionysius referred to years by labeling them "anno domini ####" – "in the year of (our) Lord ####" – and the initials AD are still used for the years of the Christian Era. The years before Christ (BC in English), count backwards from Year 1 (there's no Year 0).

In the early 1600s, European Christians used the term "Vulgar Era" and "Christian Era" interchangeably – "vulgar" meaning "common" as opposed to "regal." It was an alternative to referring to a monarch's reign. In the mid-19<sup>th</sup> Century, Jewish academics introduced the CE abbreviation (Common or Christian Era) as an alternative to AD, to avoid an obvious religious conflict for them, as they don't consider Jesus to be Lord. In the late 20<sup>th</sup> Century, the BCE/CE notation ("Before the Common Era"/"Common Era") became popular in academic and scientific publications as a way of being neutral as well as sensitive to non-Christians.

**Roman calendar** – years were counted “from the founding of the city” (Rome, 753 BCE), by historians to show the time from one event to another, although the common usage was to refer to the year by the names of the two consuls who took office in it.

- Originally lunar – full months had 30 days, “hollow” ones, 29 (the lunar month averages 29.5 days).
- A year consisted of 10 months of 31 or 30 days, starting in March, with 61 days of winter not falling within the calendar.
- About 713 BCE, added January and February at the end of the year. Odd numbers were considered lucky, so months were given an odd number of days (29 or 31), except February (28). But February was split into 2 odd-numbered parts: 23 days and 5 days. From time to time, an intercalary month was added between February’s two parts; it had 22 days, plus February’s last 5 days. The Pontifex Maximus (High Priest) determined when to add this “leap month.”
- Since 153 BCE, the year started on Jan. 1, not March, except for the legal year.

**Julian calendar** – Julius Caesar was Pontifex Maximus when he decided to reform the calendar to provide for regularity and predictability of the solar year. He set months of 30 or 31 days, except February (28, except 29 every 4th year). The changes took effect in 45 BCE. Augustus did some correcting reforms regarding leap years in 12 BCE. (July and August were named for them, in part because of their calendar work.)

**Gregorian calendar** – because every “century year” (ending in “00”) in the Julian calendar was a leap year, the spring equinox fell earlier in March every century. In 1582, Pope Gregory XIII ordered that century years would be leap years only every 400 years. The change was adopted by countries at different times over the next 344 years. Greece adopted in 1923; Turkey, in 1926. Great Britain adopted in Sept. 1752 (and moved the start of the legal year to Jan. 1 that year also.) At the time of adoption, it was necessary to drop 10, 11, 12 or 13 days, depending on how many extra leap century years had been observed while under the Julian calendar. (The British Empire – including the American colonies – dropped 11 days, so that Wednesday Sept. 2 was followed by Thursday Sept. 14.)

**Liturgical year** – for worship purposes, our year focuses on the two great feasts of Christmas and Easter, each with periods of preparation (Advent and Lent) and each ending with outreach to the world (Epiphany and Pentecost). The remaining period is “Ordinary Time.” Each year begins four Sundays before Dec. 25, making Advent a season of variable length (22-28 days). The last Sunday of the year is the Feast of Christ the King. Thus we begin and end by preparing for the coming of the Lord.

**Easter** – determining Easter’s date was an issue for the early Christian churches, and even today the Western and Eastern Churches do not always agree (because of variances between the Julian and Gregorian calendars). Easter is the Sunday after the first full moon on or after the Spring equinox (Mar. 21). The earliest possible date is March 22 (1818; 2285); the latest possible: April 25 (1943; 2038). The cycle of Easter dates repeats every 5.7 million years. The most common date is Apr. 19 (3.9% of time, vs. a median average of 3.3%).