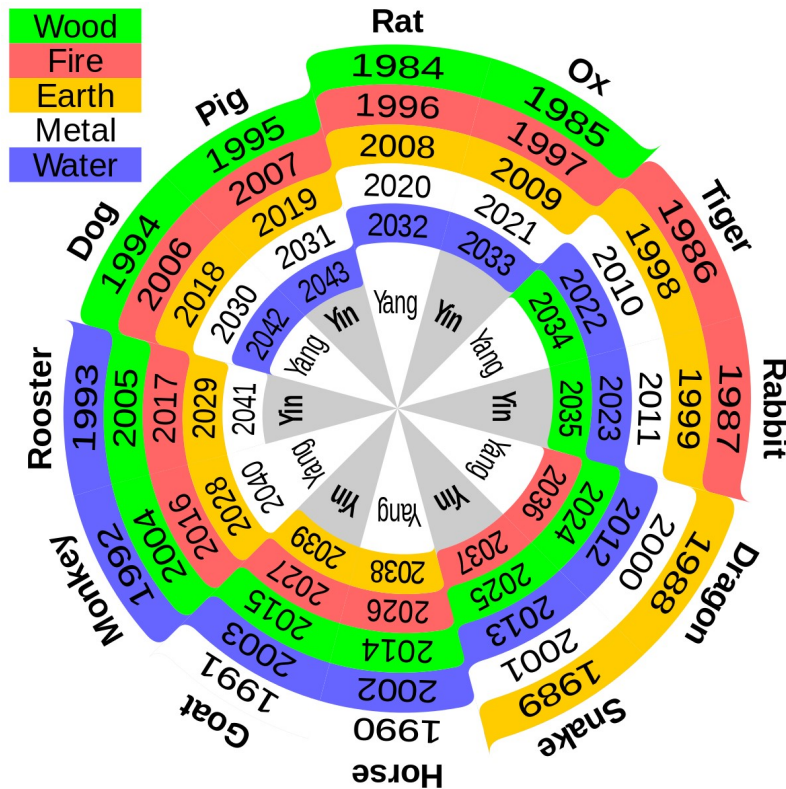


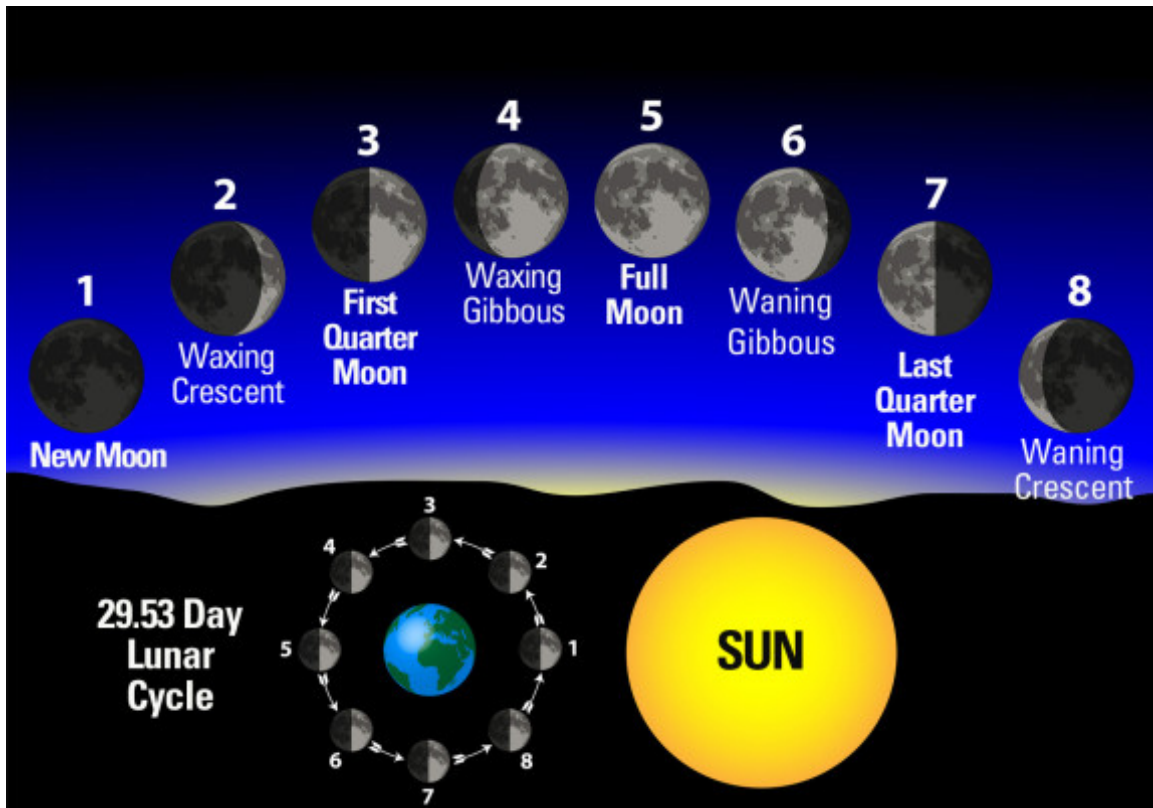
# Lunar calendar, Solar calendar, and the Chinese calendar



## The differences between the three calendars.

The most commonly used calendar in the world is the Gregorian calendar, named after Pope Gregory XIII who introduced it in 1582. It is based on the Earth's rotation around the sun which is approximately 365 days with a correctional day inserted every 4 years. The Gregorian calendar is a solar calendar and it actually evolved from the much more ancient lunar calendar.

The lunar calendar is based on the moon's rotation around the Earth as indicated by moon phases starting with a new moon. A lunar month is the time from a new moon to the next new moon which is approximately 29.5 days.



The Chinese calendar is a *lunisolar* calendar which is based on exact astronomical observations of the sun's longitude and the moon's phases. Being that a lunar month is typically shorter than a solar month, a correctional 13<sup>th</sup> month is inserted approximately every 3 years. The Chinese calendar runs on a 60 year cycle consisting of 10 heavenly stems (5 elements: water, wood, fire, metal and earth; each in its yin and yang form) and 12 earthly branches (12 zodiac animals). If all of this seems complicated, not to worry, Modern China officially uses the Gregorian calendar. But, the Chinese calendar is still used for traditional purposes such as determining when is Chinese New Year. The difference between the Chinese calendar and the Gregorian calendar will explain why Chinese New Year never seems to fall on the same day each year.