Why and when we have leap years
By Brogna Brunner

2016 is a leap year, which means that it has 366 days instead of the usual 365 days that an ordinary year has. An extra day is added in a leap year—February 29—which is called an intercalary day or a leap day.

Why is a Leap Year Necessary?
Leap years are added to the calendar to keep it working properly. The 365 days of the annual calendar are meant to match up with the solar year. A solar year is the time it takes the Earth to complete its orbit around the Sun—about one year. But the actual time it takes for the Earth to travel around the Sun is in fact a little longer than that: about 365 ¼ days (365 days, 5 hours, 48 minutes, and 46 seconds). The solar calendar and the solar year don’t completely match—the calendar year is a touch shorter than the solar year.

It may not seem like much of a difference, but after a few years, the calendar would fall behind the solar year by nearly a month later in July. Every kid looking forward to summer vacation knows—calendar or no calendar—that’s way too late! So every four years a leap day is added to sync the calendar with the solar year. It becomes the first to designate February 29 as the leap day.

But Wait! It’s Not Quite that Simple!
The math seems to work out beautifully when you add an extra day to the calendar every four years to compensate for the extra quarter of a day in the solar year. As we said earlier, however, the solar year is just about 365 ¼ days long, but not exactly! The exact length of a solar year is actually 11 minutes and 14 seconds less than 365 ¼ days. That means that even if you add a leap day every four years, the calendar would still overshoot the solar year by a little bit—11 minutes and 14 seconds per year. These minutes and seconds really start to add up: after 128 years, the calendar would gain an entire extra day. So, the leap year rule, “add a leap year every four years” was a good rule, but not good enough!

Calendar Correction, Part II
To rectify the situation, the creators of our calendar (the Gregorian calendar, introduced in 1582) decided to omit leap years three times every four hundred years. This would shorten the calendar every so often and rid it of the annual excess of 11 minutes and 14 seconds. So in addition to the rule that a leap year occurs every four years, a new rule was added: a century year is not a leap year unless it is evenly divisible by 400. This rule manages to eliminate three leap years every few hundred years.

It’s Smooth Sailing for the Next 3,300 Years
This ingenious correction worked beautifully in bringing the calendar in sync with the solar year. As we said earlier, however, the solar year is just about a half a minute off. At that rate, it takes 3,300 years for the calendar year and solar year to diverge by a day.

http://www.infoplease.com/spot/leapyear2.html

The Chinese Zodiac
The animal designations of the Chinese zodiac follow a 12-year cycle and are always used in the same sequence. They are part of a larger 60-year rotating name cycle of years used by the traditional lunisolar Chinese calendar, which is consulted for special events (such as Chinese New Year), astrology, and Moon phases. This 60-year cycle is called the stem-branch, or sexagenary, cycle. Each year’s name contains two parts: the celestial stem and the terrestrial branch.
The celestial stem is taken from a rotating list of 10 terms concerning the yin/yang forms of five elements (wood, fire, earth, metal, and water): jia, yi, bing, wu, ji, geng, xin, ren, and gui. The terrestrial branch is taken from a rotating list of the 12 animal names of the Chinese zodiac: zi (rat), chou (ox), yin (tiger), mao (rabbit), chen (dragon), si (snake), wu (horse), wei (sheep), shen (monkey), you (rooster), xu (dog), and hai (boar/pig). For example, the first year in the 60-year cycle is jia-zi (Year of the Rat); jia is the celestial stem, and zi (rat) is the terrestrial branch. The next year is yi-chou (Year of the Ox), etc. The 11th year is jia-xu, and so on, until a new cycle starts over with jia-zi.

The Chinese lunisolar year has 12 months of 353 to 355 days, or during a leap year, 13 months of 383 to 385 days. The Chinese year usually begins several weeks into the western 365-day year, so the animal designation changes at that time, not on January 1 of the Gregorian calendar.

http://www.almanac.com/content/chinese-zodiac

Birthday of Martin Luther King, Jr. 2016

Martin Luther King, Jr. Day is a federal holiday in the United States honouring the achievements of Martin Luther King, Jr. - the chief spokesman for nonviolent activism in the Civil rights movement to end racial segregation. It is observed on the third Monday of January each year, which is close to January 15, the King's birthday.

Martin Luther King, Jr. was the most influential of African American civil rights leaders during the 1960s. He was instrumental in the passage of the Civil Rights Act of 1964, which outlawed discrimination in public accommodations, facilities, and employment, and the Voting Rights Act of 1965. Dr. King was awarded the Nobel Prize for Peace in 1964. He was assassinated on April 4, 1968.

The bill establishing the holiday was signed by President Ronald Reagan on November 2, 1983. The first observance nationwide was in 1986, but some states were opposed to observing it as a paid holiday for state employees. As of the year 2000, all of the states officially recognize the holiday.

Martin Luther King, Jr. is one of the only three people who have national holidays in the USA, the other two are Christopher Columbus and George Washington.

http://www.calendar-12.com/holidays/martin_luther_king_day/2016

New Staff Interpreter Profile: Yasmin Naveed

Yasmin Naveed is a Pakistani American. She graduated from River City High School in West Sacramento in 1990. She was part of the Academic Decathlon team three out of the four years there. She attended Sacramento City College for general education and got a certificate in Medical Assisting and Phlebotomy. She also worked for Alta California Regional Center for seven years as a Punjabi, Urdu and Hindi language interpreter.

One of her biggest accomplishments for Yasmin is returning to UC Davis Medical Center to become a part of the medical interpreting team. Her very first job was here at UCD - she was 17 years old when she worked at the M.I.D.A.S clinic as a blood pressure study tech. In 2006 she worked in the patient billing department. She always wanted to come back to UC Davis family and she’s glad she had that opportunity.

During her free time, Yasmin loves to garden and grow exotic fruits and plants. She also likes to dine out with friends and family.

We asked Yasmin how does she feel about joining the MIS Department? In her own words, “I am happy to be part of the MIS department. I had the opportunity to meet hardworking people here, who have great talent of multiple language skills. Much of my work experience is interacting with multicultural people, and I am glad I was given the opportunity to grow here at MIS”.

Welcome aboard, Yasmin! We are happy to have you as a part of the UC Davis Medical Center Interpreting Team.