

Happy Leap Day!

February 29 only happens every four years. Why?

Why Leap Day?

- 1 Our calendar is normally 365 days long. It was created to match the cycles of the seasons. But Roman Emperor Julius Caesar noticed a problem: the Earth doesn't circle the sun in exactly 365 days. It actually takes 365 and one-quarter days. He figured out that the extra fraction of a day would cause the calendar to grow apart from the seasons over time. Over 100 years, the seasons would shift about 24 days. Caesar decided to add an extra day to the month of February every four years. His idea helped keep the seasons and calendar matched up. Even so, it still wasn't perfect – his calendar was adding too many days. In 1582, Pope Gregory XIII worked out a complicated solution. His calendar, called the Gregorian calendar, dictates that every year that is evenly divided by 400 is a leap year. Turn-of-the-century years, years ending in "00," would not be leap years unless they could be divided evenly by 400. These complicated equations help keep the calendar in balance with the orbit of the Earth. Today, we still use the Gregorian calendar. In about 3,000 years, the calendar will be only one day out of step with the seasons. It's still not perfect, but mathematicians decided it was as close as we could get.

A Complicated Birthday

- 2 So what happens when someone is born on Leap Day? Do these happy few celebrate their birthday each year, or do they instead have to wait four years to age? Statistics show that on non-leap-years, about 80 percent still celebrate their birthdays in February, rather than on March 1. Birth certificates and most government agencies use February 29 for people who were born on Leap Day, but some states use March 1 for official purposes. So how rare is a Leap Day birthday? The chance of someone being born on a Leap Day is 1 out of 1,461. Babies born on February 29 are sometimes known as leapers or leaplings.

www.timeforkids.com, 2017