

Leap Year

Reading comprehension

Y5

Y6

We all know that February usually has 28 days, but did you realise that every four years we benefit from having an extra day in February? This gives us an extra day, which is the 29th February.

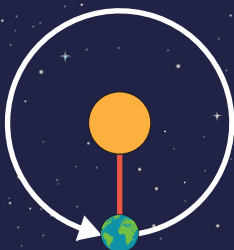
FEBRUARY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Why do we have an extra day?

According to our calendar, there are 365 days in a year. However, Earth actually takes 365.24 days (roughly 365 days and six hours) to complete one full orbit around the Sun. This is called a tropical year. An extra day is added to the calendar every four years to make a leap year: it is added to keep calendar seasons synchronised with solar seasons. If we didn't follow this practice, then the seasons would shift around the calendar, and in 750 years' time June would be in the middle of winter!

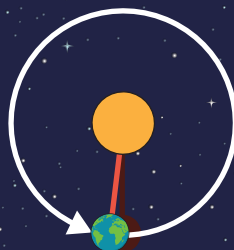
TROPICAL YEAR



365.24 DAYS

One complete orbit
around the Sun

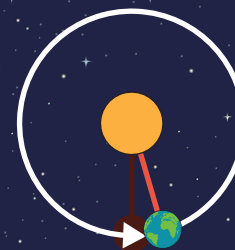
COMMON YEAR



365 DAYS

-1/4 day short of a
complete orbit

LEAP YEAR



366 DAYS

+3/4 day over a
complete orbit



The history of leap years

The calendar we use now dates back to the Roman times. Julius Caesar introduced the 'Julian' calendar in 46 BC, which consisted of 365 days with 366 in every fourth year. In his calendar, February had 29 days (30 on a leap year) and August had 29 days. When Caesar Augustus became emperor he changed this so "his" month had the same amount as Caesar's, so he took 1 day from February (to make it 28 days) and added it to August.

In 1582, the UK switched to the Gregorian calendar when it was noted the Julian calendar didn't accurately reflect the actual time the Earth takes to orbit the sun, or the tropical year. The Gregorian calendar follows a key rule to determine which years are leap years. The rule is: The year must be evenly divisible by 4. If the year can be evenly divided by 100, it is not a leap year; unless, the year is also evenly divisible by 400. Then it is a leap year.

What happens if you are born on a leap year?

The chances of being born on 29th February is 1 in 1,461. Globally, around 0.08% or 4.8 million people were born on this leap day. People who are born on a leap year are invited to become a member of the Honour Society for Leap Year Babies, which currently has 11,000 members. A person born on 29th February may be called a leapling or a leap-year baby. In non-leap years, some leaplings celebrate their birthday on either 28th February or 1st March, while other leaplings only celebrate their birthdays on their authentic date, 29th February!

Are there any special leap year traditions?

The custom of women proposing to men is the most famous leap year tradition. This custom comes from an Irish legend that St. Bridget complained to St. Patrick about women having to wait too long for men to propose, so as a consequence St. Patrick allowed women to propose on 29th February. In some countries (including Scotland), they used to believe you were unlucky if you were born on the 29th February.

