

# Cover Feature

Monday 29 February 2016









When?

#### Mummy, when is it a leap year?



There are three conditions. First, if the year can be divided by four, it is usually a leap year. That is why this year, 2016, is a leap year. Second, if the year can be divided by 100, but not 400, it is NOT a leap year. Therefore, 1900 and 2100 are both not leap years. Third, if the year can be divided by 400, it is a leap year. For example, 2000 is a leap year.





Why is it so complicated? Why not simply just have 365 days every year?



For a simple answer, a year in our modern Gregorian calendar (公曆) actually has 365 days, and 5 hours, 48 minutes, and 46 seconds. In four years, that adds up to almost one whole day, which explains why we have that leap day. The 100 and 400 rules are further fine-tuning.

## Iwo calendars?



What is that Greg-something calendar? Are there other calendars?



You mean the Gregorian calendar. Before that, we used the Julian calendar, which did not account for the extra day every four years. That created much trouble. That was why it had to be replaced by the Gregorian one.

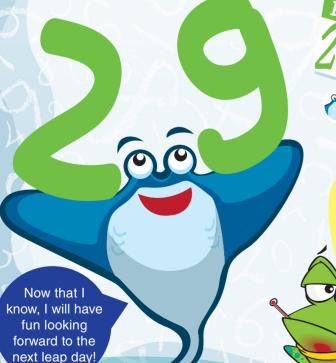
#### 30 February?



Are there 30 February and 31 February dates then?



They do not exist now. But there were times when 30 February existed! Sweden (瑞典) added it to its calendar in 1712 because of an error they made. And in 1930 and 1931, the former Soviet Union (蘇聯) introduced 30 February to make the working months more 'regular'.



### Rare disease



No matter what, a leap day is quite rare.



Not too rare actually, because we have it almost every four years. But because of this, 29 February is called Rare Disease Day (國際罕見病日).

> On this day, we remember those unfortunate people who have rare diseases.





What is a rare disease?



It simply means a disease that has very few patients. But there is no number that everyone agrees upon for which a disease is regarded as rare.