

A New Calendar

How many days are there in a year? Every school child knows the answer. There are 365 days in a year, but every fourth year, called a *leap year*, has an extra day. Did you know that there are a few exceptions to this rule? Although 1696 and 1704 were both leap years, 1700 had only 365 days. The same was true in 1800 and 1900. Those years also didn't have a February 29th.

Long ago, before 1582, every fourth year always had an extra day. There were no exceptions. The calendar in those days was similar to the calendar we use today. It also had twelve months, and each of the months, except February, had 30 or 31 days. February had 28 days in a regular year and 29 days in a leap year.

However, there was a problem with the old calendar. The old calendar year was a little too long. It was 33 minutes longer than the time it takes the Earth to go around the Sun. With every year the difference grew larger, and by 1581 there was a ten-day difference. As a result, spring of 1581 began on March 11 instead of March 21, summer began on June 11 instead of June 21, autumn began on September 11 instead of September 21, and winter began on December 11 instead of December 21.

The solution to the problem was a new calendar that didn't have as many leap years as the old one, a calendar with three fewer leap years every 400 years. They also had to move the new calendar ahead ten days for the seasons to begin at the correct time of year. Therefore, when many countries changed calendars in 1582, the day after October 4th (the last day of the old calendar) became October 15th (the first day of the new calendar). There wasn't any October 5, 6, 7, 8, 9, 10, 11, 12, 13, or 14 in Spain, Italy, Portugal, or Poland that year. For people in those countries, the year was ten days shorter. Because of this change in 1582, people who went to bed on the evening of October 4th woke up on the morning of October 15th!

- A leap year has _____.
 - 4 years
 - 29 days
 - 365 days
 - 366 days
- Which of these years was a leap year?
 - 1696
 - 1700
 - 1800
 - 1900
- Every fourth year is _____.
 - always a leap year
 - almost always a leap year
 - rarely a leap year
 - always longer than a regular year
- According to the old calendar, in 1581, _____.
 - fall started on March 11
 - the first day of winter was December 21
 - summer started ten days before June 11
 - all the seasons began ten days earlier than they do today
- In Italy, the day before October 15, 1582 was _____.
 - October 14
 - October 13
 - October 4
 - October 5
- In Portugal, _____.
 - 1581 was ten days shorter than the next year
 - 1582 had fewer days in February than 1581
 - October 1582 was longer than October 1581
 - October 1581 had ten more days than October 1582
- In October 1582 in Spain, _____.
 - there was only one week
 - there were two weeks
 - there were three weeks
 - there were four weeks
- In 1582 in Poland, _____.
 - there were 355 days
 - there were 365 days
 - there were 366 days
 - there were 360 days