Date:

YEARS
The earth travels around the sun every 365.242199 days, or what we call a "solar year." The ancient Romans devised the Julian calendar that lasted 365.25 days, but the solar year is eleven minutes and fourteen seconds shorter. The slight difference added up over time.

By 1582, the Julian calendar was ten days behind the solar calendar. Most western nations began using the Gregorian calendar, named for Pope Gregory XIII. The Gregorian Calendar synchronized the calendar year with the solar year by skipping the next ten days. The day after October 4, 1582 was October 15, 1582. The governments of England and its American colonies did not follow the teachings of the pope, so it did not adjust to the Gregorian calendar until 1752. By this time, the Gregorian calendar was twelve days ahead of the Julian calendar.

Most of our calendar years last 365 days, but every four or eight years we add one day to February. February usually has only 28 days, but the month lasts a day longer in what we call "leap years." Years divisible by four are usually leap years. The last four leap years were 2008, 2004, 2000, and 1996. Our next leap year will be 2012. We have to make another adjustment to the calendar because leap years would make the calendar year last 365.25 days, and the solar year is . 007801 of a day shorter, so we have to make further changes. Centennial years are years that end in 00. Centennial years are not leap years unless they are divisible by 400 . This means that 1700 , 1800, and 1900 were not leap years, but 2000 was. The next time someone says that there are 365 days in a year; you'll have a lot of corrections to offer!

Fill in the Blanks

A s $\qquad$ year lasts 365.242199 days, but the R $\qquad$ created a calendar that lasted 365.25 days. We began using the G $\qquad$ calendar * $\qquad$ years ago. The
G $\qquad$ calendar s $\qquad$ the

S $\qquad$ year with the c $\qquad$ year. Most years
d $\qquad$ by f $\qquad$ are 1 $\qquad$ years, where an extra
$\qquad$ is added after February $\qquad$ .

## Answer in complete sentences

## YEARS

*4. From the list below, circle the leap years in the Gregorian calendar. Five are leap years and five are not.
$2000 \quad 2006 \quad 2008 \quad 2010 \quad 2012 \quad 2013 \quad 2014 \quad 2015 \quad 2016 \quad 2020$
*1. Why does the Gregorian calendar have leap years?

