## Leaping Into 2016



Mini Fact:
The year 2100 will not be a leap year. Can you figure out why?

Does 2016 feel a bit different to you? Perhaps it's because this year is a leap year - a year when we have one extra day in the calendar.

## Calendar history

We define a year as the number of days it takes for the Earth to orbit the sun. (A day is one rotation of the Earth on its axis.)

The problem is that the Earth doesn't orbit the sun in a round number of days. In fact, it takes $3651 / 4$ days for our planet to circle the sun.

If we didn't have leap days and leap years, eventually our months would shift to different seasons. For example, July might be in the springtime.
In 1582, Pope Gregory XIII introduced the Gregorian calendar. This version of the calendar helped solve the problem of the shifting calendar. This is how it works:

- Every year that can be evenly divided by

4 is a leap year, EXCEPT

- Years that can be evenly divided by 100 (centuries) are not leap years, BUT
- Years that can be divided by 400 are leap years.


## Let's try it

This year is 2016. Let's do some math.

## $2016 \div 4=$

Therefore, 2016 is $\square$ is not $\square$ a leap year. (Check one.)

## $2017 \div 4=$

$\qquad$
So 2017 will $\square$ will not $\square$ be a leap year because it isn't evenly divisible by 4. And neither 2016 nor 2017 is evenly divisible by 100 or 400 .

## How about the centuries?

We celebrated the last year of the century ( 100 years) and millennium ( 1,000 years) 16 years ago, in 2000.

$$
\begin{aligned}
& 2000 \div 4= \\
& 2000 \div 100= \\
& 2000 \div 400=
\end{aligned}
$$

So 2000 was $\square$ was not $\square$ a leap year.
Leap day
What do we do with the added day in a leap year? It is tacked on to the end of February. It becomes February 29. It's called leap day.

## Take a leap!

Leap day traditions and superstitions are fun to learn about. For example:

- In Greece, it's considered unlucky to marry during a leap year.
- In France, a newspaper called La Bougie du Sapeur (The Soldier's Candle) is published only on leap days.


## Leap birthdays

Do you know anyone with a leap birthday? You might think that someone born on Feb. 29, called a leapling or a leaper, would have a birthday only every four years. But most leap birthdays are celebrated on Feb. 28 or March 1 in non-leap years.

## A rhyme to remember <br> You may already know this rhyme.

 There are many versions of it. The poem helps us remember the differences in the number of days in each month.Thirty days hath September,
April, June and November;
Thirty-one the others date,
Except in February, twenty-eight;
But in leap year we assign
February, twenty-nine.


- bit.Iy/1IZdXs2
- bit.ly/1Oec8pK


## At the library:

- "Leopold's Long Awaited Leap Year Birthday" by Dawn Desjardins
- "It's My Birthday Finally! A Leap Year Story" by Michelle Whitaker Winfrey


## Try 'n' Find

Words that remind us of leap years are hidden in this puzzle. Some words are hidden backward or diagonally, and some letters are used twice. See if you can find:


BIRTHDAY, CALENDAR, CELEBRATE, CENTURY, DAY, DIVIDE, EARTH, EXTRA, FEBRUARY, GREGORIAN, LEAP, MILLENNIUM, NEW, ORBIT, PLANET, RHYME, SEASONS, SUN,
TRADITION, YEAR.

| E | $R$ | $A$ | $E$ | $Y$ | $K$ | $Y$ | $R$ | $U$ | $T$ | $N$ | $E$ | $C$ | $Y$ | $G$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $T$ | $E$ | $N$ | $A$ | $L$ | $P$ | $A$ | $Z$ | $S$ | $O$ | $U$ | $A$ | $R$ | $R$ | $Y$ |
| $A$ | $C$ | $J$ | $E$ | $D$ | $M$ | $D$ | $E$ | $I$ | $D$ | $L$ | $A$ | $E$ | $E$ | $A$ |
| $R$ | $G$ | $A$ | $Z$ | $A$ | $O$ | $A$ | $T$ | $I$ | $E$ | $U$ | $G$ | $K$ | $A$ | $D$ |
| $B$ | $P$ | $B$ | $R$ | $R$ | $S$ | $I$ | $V$ | $N$ | $R$ | $O$ | $Y$ | $L$ | $R$ | $H$ |
| $E$ | $M$ | $T$ | $B$ | $O$ | $D$ | $I$ | $D$ | $B$ | $R$ | $P$ | $W$ | $J$ | $T$ | $T$ |
| $L$ | $X$ | $I$ | $N$ | $A$ | $D$ | $A$ | $E$ | $I$ | $X$ | $E$ | $M$ | $Y$ | $H$ | $R$ |
| $E$ | $T$ | $S$ | $R$ | $E$ | $R$ | $F$ | $A$ | $H$ | $N$ | $U$ | $S$ | $M$ | $W$ | $I$ |
| $C$ | $G$ | $T$ | $M$ | $U$ | $I$ | $N$ | $N$ | $E$ | $L$ | $L$ | $I$ | $M$ | $K$ | $B$ |

## Cook's Corner

## Barbecue Baked Potato Chips

You'll need:

- Cooking spray
- 4 medium Yukon gold potatoes, sliced $1 / 4$ inch thick
- 2 teaspoons mesquite seasoning



## What to do:

1. Preheat oven to 375 degrees. Coat a large baking sheet with cooking $\frac{\text { 亲 }}{}$ spray
2. Arrange the potato slices on the baking sheet. Spray the potato slices with cooking spray and sprinkle with mesquite seasoning.
3. Bake for 20 to 25 minutes, until potatoes are golden brown and crisp. Serves 4.

## Puzzling

Unscramble the words below that remind us of calendars.
tmnoh

## $s$



## Mini Jokes

Carrie: Why did the pig


Claire: Because he was such a ham!
Callie: What do you call the smartest pig in the world?
Chad: Einswine!

## Deo Note

Belgian researchers
found in 2015 that
the unpopular cockroach can have a variety of personalities, which could explain why the insect has been so successful in adapting to the planet's harshest conditions.

## For later:

Do you know anyone with a Feb. 29 birthday? Ask your family to help you plan a party with a leap year theme.

## Teachers:

For standards-based activities to
accompany this feature, visit:
bbs.amuniversal.com/teaching_guides.html


