

Everyday Mysteries: Why we have daylight saving time

By Department of Energy, Department of Transportation and the U.S. Navy; adapted by Newsela staff on 03.10.17

Word Count **825**

Level **1130L**



Technician Oleg Ryabtsev performs maintenance work on a clock in Minsk, Belarus, March 29, 2008. Clocks in Belarus will move one hour ahead at midnight March 11, 2017, ushering in seven months of daylight saving time. AP Photo/Sergei Grits

Question: Why do we have daylight saving time?

Answer: The most likely answer you'll hear is that we change the clocks to help farmers have more time to work their fields. But in reality, the reason it is law today is mostly to conserve energy and save money. Does it save energy? We'll explain that soon, but first comes an explanation of what it is.

How Does It Work?

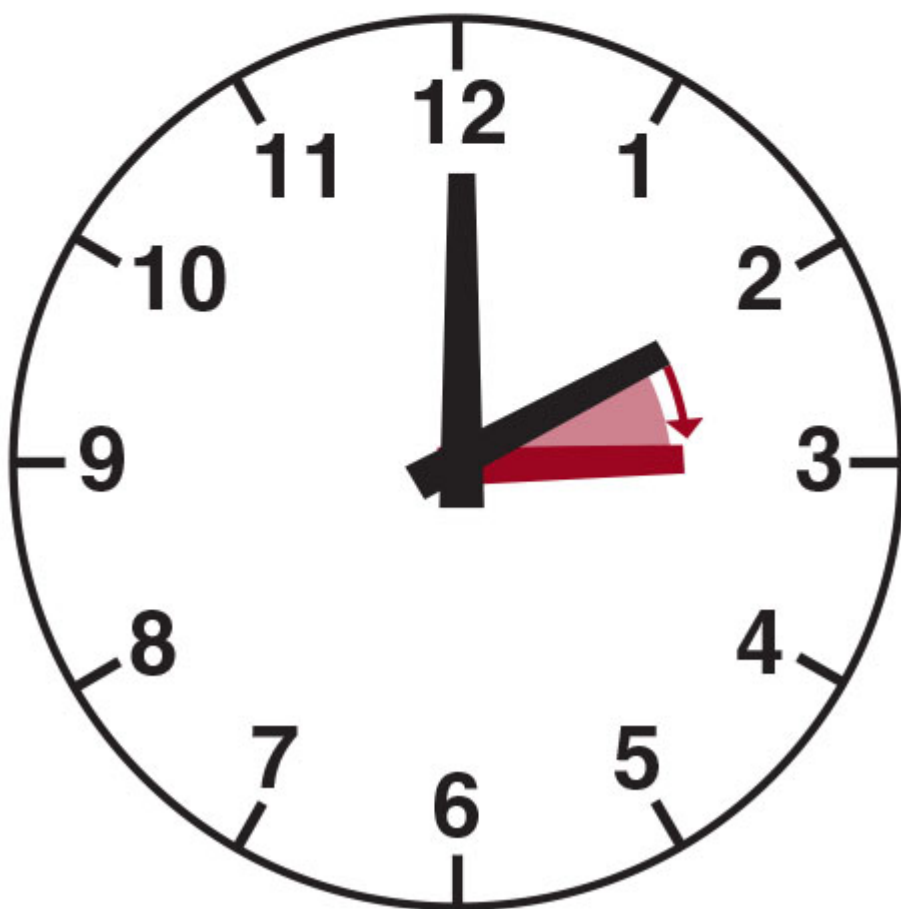
By law, clocks in most areas of the United States are adjusted ahead one hour in the summer months, known as daylight time. Clocks are returned back one hour in the winter months, known as standard time.

The dates for the beginning and end of daylight time have changed as Congress has passed new laws. Since 2007, daylight time begins in the United States on the second Sunday in March and ends on the first Sunday in November. On the second Sunday in March, clocks are set ahead one hour at 2 a.m. standard time, which becomes 3 a.m. daylight time. On the first Sunday in November, clocks are set back one hour at 2 a.m. daylight time, which becomes 1 a.m. standard time.

Spring forward

Daylight saving time begins at 2 a.m. Sunday.

Remember to set your clocks forward one hour before going to bed Saturday



Does Everyone Change Their Clock?

Not all places in the United States observe daylight time. Hawaii and most of Arizona do not use it. The most recent change to local daylight time policy was in 2006 when Indiana adopted the use of daylight time statewide.

Most of the Northern Hemisphere countries that observe daylight time are in Europe and North America. Parts of Iceland, Singapore, Uzbekistan, Belarus and Turkey have tried it. Russia used it under President Dmitri Medvedev, but President Vladimir Putin abolished daylight saving time in 2014 because people had grown annoyed with the late sunrises in winter. Russia is now back to “standard” or “winter time.”

A handful of nations in the Southern Hemisphere observe summer time, but their starting and ending periods are reversed because summer there occurs during the Northern Hemisphere's winter months. The dates when daylight time changes are made are various and not determined by any international agreements.

History Of Daylight Time In U.S.

Benjamin Franklin is credited with the idea of daylight saving. He came up with the idea when he woke up extra early one morning in Paris, France. His idea was to make the best use of daylight hours.

The reason it has stuck around is the idea of saving money. Franklin thought about this when he wrote a letter to the editor of the Journal of Paris in 1784, saying that the idea could save France money on candles if they slept when it was dark and woke when it was light.

When the light bulb was invented people proposed the idea again to save money on light bulbs and electricity.

Many countries adopted daylight saving during World War I to conserve coal during wartime. Daylight saving time was repealed in the United States in 1919, after the war's end. It was re-established nationally during World War II.

In 1966, President Lyndon Johnson signed a law choosing dates for daylight saving, but states can opt out of it.

It became widely adopted in North America and Europe, starting in the 1970s as a result of an energy crisis, when oil and gas shortages followed wars and conflicts in the Middle East. During the energy crisis, Congress enacted earlier starting dates for daylight time.

Does Daylight Saving Time Actually Work?

This is a big debate. Some economists point to studies that seem to show that because people are a little tired while their bodies adjust to the time change, their productivity at work suffers and workplace accidents could even go up. Other studies say that it saves lives

because traveling during the hours of daylight is safer, so fewer bicyclists, pedestrians and runners get hurt. Even other studies show an increase in traffic deaths and workplace accidents for the week following the spring time change after we lose an hour of sleep.

The same result seems to happen after we gain an hour in the fall. Why? Because altering sleep cycles affects health and alertness. But other studies say that is only for that week and the safety benefits of the months of daylight saving outweigh those two weeks of increased accidents.

The biggest debate is over cost. Some economists say that it can even cost more. Matthew Kotchen, a Yale University professor, did a study in 2006 in Indiana that found that Franklin was right about lighting, but that daylight saving time resulted in higher energy costs of \$9 million more annually because people were using more heating and air conditioning. He says the effect could be more severe for hotter states like Florida.

Some business owners think it generates more money for them. Representatives of the golf industry petitioned Congress in 1986 in favor of daylight saving time, saying that it made them about \$400 million extra each year.

Quiz

- 1 Which of these sentences from the article would be MOST important to include in an objective summary of the article?
 - (A) The most recent change to local daylight time policy was in 2006 when Indiana adopted the use of daylight time statewide.
 - (B) The dates when daylight time changes are made are various and not determined by any international agreements.
 - (C) When the light bulb was invented people proposed the idea again to save money on light bulbs and electricity.
 - (D) In 1966, President Lyndon Johnson signed a law choosing dates for daylight saving, but states can opt out of it.

- 2 Read the paragraph from the article.

The same result seems to happen after we gain an hour in the fall. Why? Because altering sleep cycles affects health and alertness. But other studies say that is only for that week and the safety benefits of the months of daylight saving outweigh those two weeks of increased accidents.

Does this paragraph support a main idea of the article? Why or why not?

- (A) No, because it focuses on what happens on time changes that occur only in the fall.
- (B) No, because it does not explain the benefits that are mentioned in the paragraph.
- (C) Yes, because it addresses both sides of the potential impact of daylight saving time.
- (D) Yes, because it explains the physical effects the changing time has on people.

- 3 Read the selection from the article.

Daylight saving time was repealed in the United States in 1919, after the war's end. It was re-established nationally during World War II.

The author uses the word "repealed" to mean:

- (A) approved
 - (B) canceled
 - (C) changed
 - (D) supported
- 4 Read the sentence from the last paragraph of the article.

Some business owners think it generates more money for them.

Which of the following phrases from the article provides the BEST context clues to the meaning of the word "generates"?

- (A) debate is over cost
- (B) it can even cost more
- (C) higher energy costs of \$9 million
- (D) made them about \$400 million