



photo by JLS Photography

As the temperatures get colder this season, have you noticed that the days seem shorter and that the darkness creeps in earlier? Today The Mini Page takes a look at the winter solstice.

Sun's path

The **winter solstice** takes place in the **Northern Hemisphere**, or top half of Earth, around Dec. 21, depending on the year. The winter solstice marks the lengthening of days and the shortening of nights. "Solstice" comes from the Latin words "sol," which means "sun," and "sistere," which means "to stand still." So "solstice" translates to something close to "sun standing still."

Earth rotates on an axis that is tilted. During winter solstice, the axis is tilted away from the sun, making it appear to people in the Northern Hemisphere to be at its lowest point in the sky. The North Pole is aimed farthest from the sun, and the sun shines over the Tropic of Capricorn, an imaginary circle around the Earth south of the equator.

Since the sun takes a very short route through the sky that day, there are fewer

hours of daylight, which means the night is longer. After the winter solstice, days become longer, which continues until the summer solstice in June.

While the countries in the Northern Hemisphere celebrate winter solstice in December, the Southern Hemisphere observes it in June because those countries are below the equator, and the seasons are reversed based on hemisphere.

Astronomical winter

The winter solstice is the beginning of astronomical winter. Some people believe this should be the coldest day of the year since we see the least amount of sunlight, but this is a **myth**, or false idea that a lot of people believe. The coldest day of the year usually takes place weeks later, depending on where someone lives, since it takes time for the water and land to lower in temperature.

Shadows

The sun is lowest at noon during the winter solstice, so people who take a look at their shadows on the ground at that exact time might notice that their noon time shadows seem longer than they do on any other day of the year. And they're right! Due to the location of the sun, shadows lengthen.



Stonehenge

Stonehenge is a huge stone, or **megalith**, monument in England that is in the shape of a circle. It is one of the Wonders of the World. It dates back to prehistoric times, and while there is a lot of mystery about the stones, their purpose and how the monument was assembled, people still gather at Stone-

henge each

winter solstice to see a rare view of the sun. Thousands of years ago, these huge stones were aligned in a way that frames the winter solstice sunset.

Newgrange

In Ireland, a 5,200-year-old burial ground named Newgrange is also a well-known site during the winter solstice. Around Dec. 21, a beam of light shoots through the mound's "roof-box," which sits above the entrance to the passage. The rising sun floods the passage and chamber with light, making for a **unique**, or one-of-a-kind, sight to those selected through a drawing to see it in person.



Resources

On the Web:

- bit.ly/MPWinterSolstice

At the library:

- "The Shortest Day: Celebrating the Winter Solstice" by Wendy Pfeffer
- "The Tomten" by Astrid Lindgren



Try 'n' Find

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

AXIS, COLD, DAYLIGHT,
DARKNESS, DECEMBER,
EARTH, EQUATOR,
HEMISPHERE, MYTH,
NEWGRANGE, NIGHT,
ROTATE, SHADOW,
SHORT, SOLSTICE,
STONEHENGE,
SUNLIGHT, WINTER.

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



Cook's Corner

Orange Cranberry Bread

You'll need:

- Cooking spray
- 2 cups flour
- 1/2 cup sugar
- 1 teaspoon baking soda
- 1 teaspoon salt

- 1/4 cup butter, melted
- 1 egg, beaten
- 1 cup orange juice
- 1 cup pecans, chopped
- 1 cup dried cranberries



What to do:

1. Grease a loaf pan with cooking spray and set aside.
 2. In a large bowl, combine flour, sugar, baking soda and salt.
 3. Add the remaining ingredients and mix well.
 4. Pour mixture into loaf pan.
 5. Bake in a preheated 350-degree oven for 50 minutes. Let cool, slice and serve.
- Makes 6 servings.

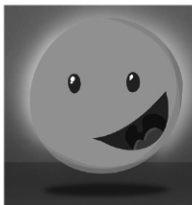
* You'll need an adult's help with this recipe.

7 Little Words for Kids

Use the letters in the boxes to make a word with the same meaning as the clue. The numbers in parentheses represent the number of letters in the solution. Each letter combination can be used only once, but all letter combinations will be necessary to complete the puzzle.

1. pants for summertime (6) _____
2. plastic building block (4) _____
3. get into different clothes (6) _____
4. all of your bones together (8) _____
5. the "Red Planet" (4) _____
6. place with a judge and jury (5) _____
7. where a teacher teaches (9) _____

O O M	L E	T O N	C L A S
R T S	N G E	L E	U R T
M A	S K E	C O	S R
G O	C H A	R S	S H O



Answers: shorts, Lego, change, skeleton, Mars, court, classroom.

Mini Jokes

Trina: What do you call a snowman's dog?
Tyreek: A slushpuppy!



Eco Note

Increased runoff from the melting of Greenland's ice sheet is heightening the risk of global coastal flooding, according to new research. Scientists from Britain's University of Leeds say Greenland's runoff has risen by 21% over the past four decades, and has become 60% more erratic from one summer to the next. They found that global heating has melted 3.5 trillion tons of ice during that period, which flowed into the ocean.

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For later:

Look in your newspaper for articles about the winter solstice.

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