Ponder the Portage County Skies with Paul

Sky events for March 2008

07 New Moon @ 11:14
10 Moon at perigee (227,607 miles from Earth)
14 First Quarter Moon @ 5:46
14 Albert Einstein born 1879 (pi day 3/14)
20 Vernal Equinox occurs @ 00:48
21 Full Moon @ 13:40
23 Mercury passes 1^0 south of Venus @ 5:00
23 Easter Sunday
26 Moon at apogee (251,713 miles from Earth)
29 Last Quarter Moon occurs @16:47

What's special in March '08? **Easter is always the Sunday following the first full moon of spring. Notice above that spring starts Thursday the 20th, the full moon is Friday the 21st, and of course Easter is Sunday the 23rd. According to this rule, the latest possible date for Easter is April 25, next occurring in 2038. The earliest is *277 years from now*, March 22 of 2285. I checked out Easter for the next 50 years and only six March dates came up with the earliest of the six being March 25th on both 2035 and 2046. Figuring out Easter this way follows the divinely ordained purpose of heavenly lights as markers for times and seasons. (Gen. 1:14)**

Is the amount of increasing daylight the most on the first day of spring?

The amount of daylight increase for Portage County in Jan. is 1 hr. 5 min; Feb. 1 hr. 13 min.; Mar. 1hr. 36 min.; and May 1hr 27 min.. Getting closer to the first day of Spring the results are the week before spring Portage County gains 22 min., the week after spring also 22 min. and the week after that 21 min.

Zeroing in much closer, note it falls on the 24th.

Date	Daylight (hrs.)	Change (hrs.)
19-Mar	11.8253509	
20-Mar	11.8780581	0.0527072
21-Mar	11.9307835	0.0527254
22-Mar	11.9835192	0.0527357
23-Mar	12.0362574	0.0527382
24-Mar	12.0889902	0.0527328
25-Mar	12.1417097	0.0527195

Decimals sure helped pinpoint the answer to my last question, are there different kinds of decimals? **Yes, decimals fall into two main categories. If a decimal terminates or repeats it can always be written as a fraction and is called a rational number (from the word ratio). Examples include ¼ = .250000…. terminates with 0's forever and 1/3 = .33333…. repeats with 3's forever, are both rational numbers. If the decimal is non-terminating and non-repeating it is called an irrational number. Examples of irrational numbers include any non-perfect square root (like the square root of 2), cube root, etc., most trigonometric and logarithmic functions, and pi and e.**

Fractions, yuck! Do you care much for fractions? **If you don't like fractions simply change them to a decimal and you don't have to worry about not liking fractions anymore. Decimals add, subtract, multiply and divide pretty much the same as whole numbers do.**

Why didn't someone tell me that before?

Thomas Jefferson on July 13, 1790 proposed a decimal-based system for the United States. Working with decimals instead of fractions evolved into the metric system.

I never thought about the metric system that way before, tell me more. **Metric has at least four other advantages besides not having to deal with fractions. 1). The rest of the world uses it, thus making trade easier. 2). The meter can be arrived at using nature. The meter is defined as 1/299,792,458 of a light-second. 3). Notice inches (12), feet (3), yards (1760), miles (5280), etc. all have different conversion factors whereas metric uses milli (.001), centi (.01), deci (.1), kilo (1000) all based on ten so the decimal point just moves and the digits stay the same. Example: 1.75 miles = 9,200 feet = 110,880 inches = 3080 yards. That required much fraction work. But 1.75 meters = 17.5 dm = 175 cm = 1750 mm = .0175 km required just shifting the decimal point, the digits 1, 7, and 5 didn't change. 4). Volume and mass units were invented using the meter. 1 dm^3 = 1 liter = 1 kg of water or 1 cm^3 = 1 ml = 1 g of water; whereas the equivalent in the English system is 1 ft^3 = 7.48 gallons = 62.4 lbs. of water. Example: I will tell you the volume and mass of 1.75 cm^3 of water in metric. Answers 1.75 ml and 1.75 grams. Now you tell me the volume and mass of 1.75 in^3 in fluid ounces and mass ounces. Just kidding, I wouldn't want to do it either. GNATS**