Eureka! Daily discoveries for the scientifically bent

by Scott_LaFee

BRAIN SWEAT

PRIME NUMBERS - A human eyeball weighs 1 ounce. CNS Photo. SECOND STRING - The combined pressure of all of the strings of a grand piano comes to 20 tons. CNS Photo. HALF-LIFE - Researchers say that some groups of birds, those with red, yellow and orange plumage based on carotenoids, have declined more than other species in the forest near Chernobyl. CNS Photo. SCOPE SCOOPS - The Hubble Space Telescope has been producing astounding, unprecedented images of the universe since the early 1990s. CNS Photo. Form a word from the letters ABCDEFGI using each letter once. (Hint: The word is hyphenated.)

ANECDOTAL EVIDENCE

During the French Revolution (1789-1799), the government introduced a metric clock with 10 hours in a day, each hour consisting of 100 minutes of 100 seconds each. A week was 10 days long.

The notion proved a flop, however. Workers accustomed to having every seventh day off complained that they were being shortchanged, and the system was soon abandoned.

PATENTLY ABSURD

Not-A-Venus Flytrap

U.S. Patent No. 5,193,302

Getting rid of pesky flies can be problematic. Hanging strands of sticky flypaper is effective but gross. Electric bug zappers are distracting.

There's a third option: a bug trap disguised as a potted plant. Patented in 1993, the "Artificial Flower Flytrap" consists of fake blooms attached to hollow plastic stems, which lead into a jar hidden inside the pot.

Insect attractant on the blossoms and inside the stems draw bugs downward toward the jar. Microfilaments lining the stems' interiors keep bugs from backing up. It's a one-way trip to oblivion.

ELECTRON INK

Expedition to the Arctic

www.polardiscovery.whoi.edu

Join researchers from the Woods Hole Oceanographic Institution as they explore the Arctic region, above and below the ice. There are daily dispatches, interviews with scientists, an image gallery and kid-related activities.

VERBATIM

To say that a man is made up of certain chemical elements is a satisfactory description only for those who intend to use him as a fertilizer.

- Nobel Laureate Geneticist Hermann Joseph Muller (1890-1967)

SURELY YOU'RE JOKING

Two caterpillars were sunning themselves in a garden when a butterfly passed overhead, fluttering and swooping before it drifted away.

One caterpillar turned to the other and said: "There's no way you'll ever get me up in one of those contraptions."

PRIME NUMBERS

530 - Number of cubic feet of air used in a typical day's breathing by the average person

151 - Number of large suitcases required to contain that much air

20 - Combined pressure, in tons, of all of the strings of a grand piano

7 - Percentage of world's icebergs produced by the Arctic

1 - Weight, in ounces, of a human eyeball

Sources: "The Book of Numbers" by William Hartston (2000); "The Sizesaurus" by Stephen Strauss (1995); "Uncyclopedia" by Gideon Haigh (2004); "Just Curious About Science, Jeeves" by Erin Barrett and Jack Mingo (2003)

BRAIN SWEAT ANSWER

Big-faced

HALF LIFE

Add this to the legacy of the Chernobyl nuclear plant disaster: The world today is a little bit less colorful. Researchers at the University of South Carolina and France's Universite Pierre et Marie Curie examined 1,570 birds from 57 species found in the forests around Chernobyl (near Pripyat, Ukraine) at varying distances from the nuclear reactor that melted down in 1986, ultimately spewing radiation worldwide.

They found that some groups of birds - those with red, yellow and orange plumage based on carotenoids, those that laid large eggs and those that migrated or dispersed the furthest - declined more than other species.

The results highlight the role of antioxidants - chemicals that help protect living organisms from free-radical damage to cells. Some biological functions tend to require large amounts of antioxidants. Among them: the production of carotenoid-based pigments for feathers, long migrations and large eggs.

The researchers suggest that because the worst affected bird species all used lots of antioxidants for survival, they had little in reserve to deal with the rise in free radicals that resulted from increased radiation exposure around Chernobyl.

Among the most affected species were robins (pictured), orioles, blackbirds and quails.

SCOPE SCOOPS

The Hubble Site

hubblesite.org/

The Hubble Space Telescope has been producing astounding, unprecedented images of the universe since the

early 1990s. You can see some of the best images here, plus lots of background information and astronomical news.

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