

by Scott\_LaFee

## ELECTRON INK

WHAT IS IT? - This is an empty shark egg case, which ancient mariner's sometimes called 'a mermaid's purse.' CNS Photo. PRIME NUMBERS - The Sahara Desert is 80 percent exposed rock. CNS Photo. ELECTRON INK - National Geographic's best pictures of 2007 can be seen at [uniontrib.com/more/top10pictures](http://uniontrib.com/more/top10pictures). CNS Photo. OUR IGNOBEL HISTORY - The popularity of medicinal leeches has risen and fallen over the centuries. CNS Photo. National Geographic's best pictures of 2007

[uniontrib.com/more/top10pictures](http://uniontrib.com/more/top10pictures)

Check out the magazine's best photos of the year, based on reader views, from "toygers" (cats that look like tigers) to giant catfish to a crystal cave rivaling Superman's Fortress of Solitude.

## BRAIN SWEAT

A riddle:

I am eight letters long - 12345678.

My 1234 is an atmospheric condition.

My 34567 supports a plant.

My 4567 means "to appropriate."

My 45 is a friendly goodbye.

My 678 is a name.

What word am I?

ANTHROPOLOGY 101

Many Far Eastern tribes once believed that the spirit of a dead person would try to reenter its home by the route its corpse had left the house. To prevent this, family members would cut a hole through a wall or the roof, push the corpse through, and then quickly reseal the hole.

SURELY YOU'RE JOKING

Einstein's other equation:  $E=mc^2$  or Energy equals milk chocolate square.

## PRIME NUMBERS

96 - Percentage of adult fleas killed when vacuumed up

80 - Percentage of the Sahara Desert that is exposed rock, not sand

10 - Number of times farther an Arctic Ocean oil spill would travel than previously thought, due to the complex nature of ice

Sources: Ohio State University, "The Pocket Idiot's Guide to Not So Useless Facts," Scottish Association for Marine Science

## BRAIN SWEAT ANSWER

Mistaken.

'TRUE FACTS'

Polar bear fur is hollow and transparent. It appears white because of the way it reflects and scatters light. Polar bear skin is black.

## VERBATIM

Don't worry about people stealing your ideas. If your ideas are any good, you'll have to ram them down people's throats.

- Computer pioneer Howard Aiken (1900-1973)

## OUR IGNOBEL HISTORY

The popularity of medicinal leeches has risen and fallen over the centuries. One drawback to using the little suckers is that sometimes they just don't want to do their job.

Some reported 19th-century remedies for invertebrate intransigence were immersing leeches in strong beer or applying a little sour cream to the patient's skin.

In 1994, Anders Baerheim and Hogne Sanvik of the University of Bergen in Norway decided to scientifically assess these alleged remedies. They discovered several things:

1. Leeches drunk on beer are too unstable to suck.
2. Leeches love sour cream, so much so that they tend to ignore their principle target: human flesh.
3. Leeches exposed to garlic tend to die.

The last item was a new discovery, but should have been expected given garlic's effect upon vampires.

## AN INVISIBILITY CLOAK, NO JOKE

The University of Maryland isn't quite Hogwarts School of Witchcraft and Wizardry and nobody's going to mistake Christopher Davis for Harry Potter, but all of the above do share something in common: They've got invisibility cloaks.

Davis and colleagues announced recently that they had created the (real) world's first invisibility cloak for visible light. Actually, it's not a cloak, but a two-dimensional pattern of concentric rings fashioned in a thin, transparent acrylic plastic layer on gold film.

Generally speaking, we see objects by detecting the visible light that strikes them and is reflected back into our eyes. In the UM "cloak," the plastic and gold components have different refractive properties so that when light strikes the object, light rays are bent rather than reflected. The result is that "cloak" and its contents are

rendered "invisible." (See Picture)

The UM cloak is hard to see for another reason, too: It's just 10 micrometers in diameter, less than a fifth the width of a human hair.

Incidentally, we were just kidding about the picture.

WHAT IS IT? ANSWER

An empty shark egg case, which ancient mariners sometimes called "a mermaid's purse." The size, shape and color of shark egg cases varies. Many have points or tendrils to help anchor the cases underwater while the unborn shark develops. This is the egg case of a Port Jackson shark.

*Eureka! Daily discoveries for the scientifically bent by Scott\_LaFee*