### **Ask Us**





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How did kissing
first start?



Can a tunnel be dug straight through a mountain?



Why is the South Pole so cold?

## Do women bruise more easily than men?

**Although formal studies** haven't been conducted to prove it, the conventional wisdom that women bruise more easily than men is perfectly plausible, says Amy Derick, a dermatologist in Barrington, Illinois.

Bruises form when the small blood vessels in the skin break after some kind of impact, allowing blood to leak out into surrounding tissue. Bruises appear red at first, as blood collects under the skin, but after a few days, the color of hemoglobin—the oxygencarrying protein in red blood cells—begins to change as it depletes in oxygen, and bruises take on their characteristic black-and-blue look. Finally, the hemoglobin is broken down into biliverdin and bilirubin, which are greenish and yellow, respectively.

Men and women have structural differences in the deeper layers of the skin (hence cellulite in women). Female skin is slightly thinner because it contains less collagen, a connective-tissue protein, and because the organization of fat cells in women determines the skin's structure. "It's possible that these differences allow male skin to cushion the impact of trauma better," Derick says.

### WHICH ARE THE WORLD'S MOST POISONOUS SPIDERS?

Australia's Sydney funnel-web spider and Brazil's wandering spider (also known as the banana spider) are among the most venomous species. Even these bad biters aren't big killers, though. Even before the introduction of antivenom, only about 1 percent of their bites resulted in death.



# How long did the first space dog survive?

**Until 2002**, the Soviet government claimed that Laika, the first animal to orbit Earth, lived for a few days after her 1957 launch aboard *Sputnik 2*. But the small stray actually died of overheating and stress after just hours in orbit.

Scientists have sent animals into space—chimps for the Americans, for example—to test the effects of zero gravity on the body. Although the Soviets never intended to bring Laika home, they did plan to give her a comfortable weeklong voyage in the spacecraft while they monitored her vital signs. Along with providing enough oxygen, food and water to last for her journey, they installed a fan and a system to regulate the temperature in the cabin.

In 2002, the Soviets admitted that

the system had failed, allowing the cabin to overheat and killing Laika within seven hours of takeoff.

Despite the dog's untimely death, she fulfilled her mission: to prove that weightlessness aboard an orbital spacecraft does not seriously affect the body. Today, Laika is credited with helping to usher in the era of human space travel.

### The First Animals in Space

Laika was the first animal sent on a mission to orbit Earth, but others were previously sent into space by the U.S. to determine the effects of weightlessness:

1947: fruit flies 1948: Albert, a rhesus monkey 1950: a mouse