

I know a place where the Sun never sets.

It's a mountain, and it's on the Moon. It sticks up so high that even as the Moon spins, it's in perpetual daylight. Radiation from the Sun pours down there day and night, 24 hours a day—well, the Moon's day is actually about 4 weeks long, so the sunlight pours down there 708 hours a day.

I know a place where the Sun never shines. It's at the bottom of the ocean. A crack in the crust there exudes nasty chemicals and heats the water to the boiling point. This would kill a human instantly, but there are creatures there, bacteria, that thrive. They eat the sulfur from the vent, and excrete sulfuric acid.

I know a place where the temperature is 15 million degrees, and the pressure would crush you to a microscopic dot. That place is the core of the Sun.

I know a place where the magnetic fields would rip you apart, atom by atom: the surface of a neutron star, a magnetar.

I know a place where life began billions of years ago. That place is here, the Earth.

I know these places because I'm a scientist.

Science is a way of finding things out. It's a way of testing what's real. It's what Richard Feynman called "A way of not fooling ourselves." No astrologer ever predicted the existence of Uranus, Neptune, or Pluto. No modern astrologer had a clue about Sedna, a ball of ice half the size of Pluto that orbits even farther out. No astrologer predicted the more than 150 planets now known to orbit other suns.

But scientists did.

No psychic, despite their claims, has ever helped the police solve a crime. But forensic scientists have, all the time.

It wasn't someone who practices homeopathy who found a cure for smallpox, or polio. Scientists did, medical scientists.

No creationist ever cracked the genetic code. Chemists did. Molecular biologists did.

They used physics. They used math. They used chemistry, biology, engineering. They used science.

Computers? Cell phones? Rockets to Saturn, probes to the ocean floor, PSP, gamecubes, gameboys, X-boxes?

All by scientists.

Those places I talked about before—you can get to know them too. You can experience the wonder of seeing them for the first time, the thrill of discovery, the incredible, visceral feeling of doing something no one has ever done before, seen things no one has seen before, know something no one else has ever known.

No crystal balls, no tarot cards, no horoscopes. Just you, your brain, and your ability to think.

Welcome to science....