

Gullibility Test Answers

1) *Thomas Crapper invented the flush toilet.*

False

Thomas Crapper was a real person, who operated a plumbing business in 19th century London, but he didn't invent the flush toilet. This is credited, instead, to Joseph Adamson, who took out the first patent for a flush toilet in 1853. A 1969 book by Wallace Reyburn, *Flushed with Pride: The Story of Thomas Crapper*, has helped to propagate the myth that Crapper was the inventor of the toilet. Reyburn's biography of Crapper is simply a fabrication.

2) *The Eskimo language has over 100 words for snow.*

False

The Eskimo languages have two root words for snow: "qanik," which means snow in the air, and "aput," which means snow on the ground. Modifying nouns can be added to these root words to create more words, but root words in any language can be modified indefinitely by adding new endings. Think of snow in English (snowfall, snowdrift, snowshoe, etc.). The idea that Eskimo languages have more words for snow has been traced to a 1940 article by Benjamin Lee Worf in *Technology Review* in which he said that there were seven different words for snow in Eskimo (he never said what those words were). The concept that Eskimo languages have a very large number of words for snow grew from there.

3) *Early Dutch traders bought the entire island of Manhattan from a Native American tribe for a few coins worth around \$700 in today's currency.*

True

This is one of those stories that sounds like a myth, but as far as historians can tell, it's actually true. A 1626 letter exists in which a Dutch merchant reports having heard that representatives of the West India Company "purchased the Island Manhattes from the Indians for the value of 60 guilders." 60 guilders was approximately \$24 in 1846, when a historian first dug up this reference. It's closer to \$700 in present-day currency. It sounds like the Europeans got a pretty good deal for such a valuable piece of property, but the real joke was on the Europeans. It turned out that the Indian tribe that sold Manhattan to the Dutch didn't live there, so by Indian custom they didn't have the right to offer the Europeans any kind of use of it. In other words, the Europeans were conned out of \$700 by an Indian tribe that just happened to be passing through the area.

4) *When the Pilgrims landed in the New World they were surprised to discover that one of the first Native Americans they met had lived in England for many years.*

True

The story of Squanto, the English-speaking Native American whom the Pilgrims met when they disembarked from the *Mayflower*, is one of the stranger stories American history has to offer. Squanto had been taken from his village by a British captain around 1605. He lived in England for nine years, and was sold into slavery in Spain in 1614. He eventually made his way back to England, and from there back to Massachusetts in 1619. By that time he had crossed the Atlantic a total of six times, making him far better travelled than the Pilgrims who arrived soon thereafter. By the Pilgrims' own admission, they would have had difficulty surviving their first years in Massachusetts without the help of Squanto.

5) *The idea to build Stanford University came to Leland Stanford during a seance while he was contacting the ghost of his son, Leland Stanford Jr.*

True

Leland Stanford and his wife were strong believers in spiritualism, as were many people during the late 19th century. When their son, Leland Stanford Jr., died young, they repeatedly tried to contact his spirit through seances. Reportedly, his spirit (or what they believed to be his spirit) asked them to use the inheritance that would have gone to him to found a place of learning. Another popular story about the founding of Stanford relates that the Stanfords decided to create their own university after being rebuffed when they tried to donate money to Harvard. This second story is false.

6) *There is a lake in Massachusetts called Lake Chargoggaggoggmanchaugagogg-chaubunagungamaug. The name is a Native American word that means "You fish on your side, I'll fish on my side, nobody fish in the middle."*

False

Lake Webster in Massachusetts was once called Chabungungamug Pond. Larry Daly, editor of the Webster Times, made up the longer, more fanciful name in 1921. He meant it as a joke, but people took his story seriously and continue to repeat it to this day.

7) *When Columbus sailed to America in 1492, most Europeans believed that the earth was flat.*

False

Very few people alive anywhere in the world in 1492 believed that the earth was flat. After all, you can see the curve of the earth simply by looking at the horizon. Washington Irving, in his 1828 biography of Columbus, first popularized the myth that most Europeans believed the earth to be flat back in 1492.

8) *The Ancient Sumerians worshipped a deity named Ninkasi. She was the Goddess of Beer.*

True

Archaeologists discovered a [3,800-year-old recipe for beer](#) on a clay tablet in Sumeria. The recipe appeared as part of a hymn to the goddess Ninkasi. Apparently beer played a major role in Sumerian culture. Those who have brewed the Sumerian recipe report that it produces a beer with a taste similar to hard apple cider but retaining the fragrance of dates. It should be no surprise that there was a goddess of beer. After all, the Greeks worshipped Bacchus, the god of wine.

9) *At least ten people are known to have survived two atomic bomb blasts, having been in both Hiroshima and Nagasaki when the bombs were dropped on those cities during World War II.*

True

These people are either extremely lucky, or extremely unlucky, depending on how you look at it. Having survived the bomb dropped on Hiroshima, they fled to Nagasaki, where they were met by a second atomic bomb, which they also survived.

10) *Lewis and Clark claimed to have seen a living dinosaur on their 1806 expedition to the American West.*

False

Though this is false, it's not as obviously false as most might imagine. Thomas Jefferson, who organized the Lewis and Clark expedition, believed that dinosaurs still existed in the American West, and he instructed the explorers to search for these creatures. Unfortunately they never found any.

11) *Cockroaches can survive for up to a month with their heads cut off.*

True

Cockroaches do not have blood pressure as mammals do. Therefore, cutting off their head would not cause them to die from bleeding. Nor do cockroaches need their heads to breathe. They only require their heads to eat. After about a month without their head, they would die of starvation.

12) *Sharks do not get cancer.*

False

Sharks definitely do get cancer. However, they get it far less often than humans do. The idea that sharks are immune to cancer was popularized by the title of William Lane's 1992 book *Sharks Don't Get Cancer*. However, inside his book even Lane admitted that sharks can get cancer. Although it is theorized that shark cartilage might inhibit the growth of tumour blood vessels, studies have shown that ingesting shark cartilage does not confer anti-cancer benefits.

13) *Long-tailed, South American monkeys have an unusual way of crossing rivers. Clinging to each other, they form their bodies into a long, living chain of bodies that stretches between the trees on either side of a river. Other members of the pack then climb across this 'monkey chain' to reach the other side.*

False

Monkey chains have long been rumoured to exist, but no contemporary naturalist has ever seen one. If the phenomenon were real, it would indicate that monkeys were capable of a level of social organization and planning that is usually only attributed to people. The illustration to the right, from an 1897 book of natural history, shows what a monkey chain would look like if monkeys actually exhibited such behaviour. The idea of monkey chains appears to be a myth that was started by the early European explorers of South America.

14) *The laws of physics change over time.*

True or False

This was a trick question because either answer is potentially correct (ensuring that everyone gets at least one question correct and also showing that not every claim can be neatly categorized into true or false). Physicists are still very undecided about whether or not the laws of physics change over time. Some current research in physics does seem to indicate that the laws of Nature have subtly changed since the birth of the universe, but other physicists dispute these findings. The change is apparently due to the shifting elasticity of atomic bonds. For more about this topic, check out the work of [John Webb](#), a researcher at the University of New South Wales.

15) *Turtles, once they reach maturity, do not continue to grow old.*

True

Turtles exhibit what is known as "negligible senescence." In other words, unlike humans, they do not continue to age once their bodies reach maturity. In theory, they might be able to live forever, though in practice this would never happen. Injury, predation, or disease eventually kill them. However, turtles have been known to live beyond 150 years without exhibiting any signs of old age. Fish and amphibians also share this enviable characteristic.

16) *Lemmings commit suicide by hurling themselves, en masse, off cliffs.*

False

Lemmings do not periodically commit suicide by hurling themselves off cliffs. The idea that they do is just a myth. Belief in this myth was strengthened by a 1958 Disney documentary, *White Wilderness*, in which the filmmakers herded some hapless lemmings off a cliff in order to show this supposedly natural behaviour.

17) *There is a small village in Ecuador, called Vilcabamba, whose inhabitants have an average lifespan of over 100 years.*

False

It was believed for many years that the Ecuadorian village of Vilcabamba possessed an unusually high number of very old people. This belief stemmed from a 1971 census that listed nine of the village's 819 residents as being over the age of 100. However, when anthropologists investigated this claim, they discovered that it was a hoax. Apparently, the Vilcabamans were lying about their age in order to attract more tourists to their village.

18) *Lightning occasionally imprints photographic images of the surrounding scenery onto the skin of those it has struck.*

False

19th century scientists dubbed this phenomenon Keranography, and anecdotal accounts of it have long persisted, but an actual example of it has never been documented. Lightning might leave strange markings on those it strikes, but scientists do not believe that it possesses any photographic properties.

19) *Physicists recently announced that they were able to slow down light waves until the waves were frozen in place.*

True

Researchers at the [Harvard-Smithsonian Centre for Astrophysics](#) recently announced (in January, 2001) exactly this. The researchers used super-cooled vapour to slow down the velocity of the light waves to zero, thereby freezing the energy of the light in an atomic "spin wave." It may seem odd to think of light being frozen in place. After all, light moves faster than anything else in the universe, travelling at 186,282 miles per second. But that's only in a vacuum. Light does slow down when it hits a substance such as air, water, or glass. It was essentially a matter of finding the right material to slow down the light without destroying the delicate light photons altogether. The researchers hope that they can use their technique to create super-fast 'quantum' computers. The physics of the matter is very complicated, but you can read all about it [here](#).

20) *Gravity has a stronger pull at the Earth's poles than it does at the equator. As a result, a person who weighs 150lbs at the equator, would weigh almost a pound heavier if they stood at the North Pole.*

True

The earth is not perfectly round. It flattens out somewhat at the poles. Therefore, a person standing at the poles is actually 13 miles closer to the centre of the earth than they are when standing at the equator. The pull of gravity increases as you move closer to the centre of a gravitational mass, making objects heavier (just as when you move away from the centre of a gravitational mass, such as when you fly into outer space, gravity weakens). In addition, the centrifugal spin effect at the equator slightly counteracts the pull of gravity. All of this translates into a difference of almost a pound between what a person would weigh at the equator versus the poles. See this [article](#) for more info.