



Terrific Trivia Tidbits

Use the fun facts below to get your mind thinking about the fun theme (time travel/science lab) and our spiritual theme (discovering Jesus throughout all eternity). They can be used during arrival and dismissal times or during any downtime while kids wait to get to their next rotation.

Trivia About Time and Travel

- Do you know how long it takes the average person to fall asleep? 7 minutes.
- How long is a day? Did you say 24 hours? In reality, it's more like 23 hours, 56 minutes, and 4.2 seconds. But who's counting?
- How long do you think a day is on Mercury? Answer: About 176 earth days.
- When was the last time you got hiccups? For future reference, a bout of hiccups usually lasts about 5 minutes.
- There are estimated to be over 100 billion known galaxies. Even if we could travel at the speed of light, that could be a lot of ground to cover!
- What time do you get up? If it's after 8 a.m., you're in a small minority! According to one research study, one out of five people is awake by 5:30 a.m. The peak wake up time is between 6 and 6:30 a.m. (23%), with almost everyone awake by 7:30 a.m. (83%).
- Lightning bolts and time travel kind of go together, don't you think? There are a lot of lightning bolts out there! In fact, more than 100 lightning bolts strike the earth every second.
- A flash of lightning has enough energy in it to toast 1,000,000 slices of bread.
- Since an earth day is slightly less than 24 hours, once every four years (with a rare exception) we add an extra day in what is called a Leap Year. That helps to make up that little bit of lost time (which is due to the earth taking a little longer than 365 days to go around the sun each year).
- Can you think of any animals that fly? Did you say insects, birds, and bats? They are the only living things capable of flight. But in the not-too-distant past, flying reptiles were also around!
- Maybe we should rename the flying squirrel because it can't technically fly, but instead it glides. Bats are the only mammals that can truly fly.
- Did you know it takes one week to make a jelly bean? Don't you think it's worth the wait?
- If you want to see the oldest clock in the world (created in 1386), hop on a plane and travel to Salisbury, England.
- Have you ever been told to "synchronize your watches"? There are people whose job it is to synchronize the worldwide clocks and add something called a leap second. That's because our 24-hour day is ever so slightly not a 24-hour day due to the earth's rotation slowing down. We lose about one second a week.
- Do you like to sleep? Good, because the average person spends 25 years of his life asleep.
- It's cool to know that even if an analog clock is broken, at least it shows the correct time twice a day! (What's an analog clock? They're the kind that have hour and minute hands, rather than digital displays.)
- Isn't the word *nanosecond* cool? Did you know a nanosecond is one billionth of a second?
- Guess what airships and blimps are filled with? Typically, it's a gas such as helium (the stuff used to fill party balloons). Helium is lighter than air and allows the blimps to rise and float, kind of like balloons.
- Imagine driving to the sun. (Bad idea—major sunburn.) But if you could drive to the sun at a speed of 55 miles per hour, it would take around 193 years to get there.
- Have you ever seen a sundial? In ancient times, people used them to tell time. As you may guess, the sun is involved with this method of telling time. A sundial contains a "gnomon" (the thing in the middle) that casts a shadow onto a platform etched with different times. And in case you are wondering how they could figure out what time it was after dark—they used the stars!
- Did you know there are 31,536,000 seconds in a year? Wonder how we figured that out?
- Originally, wristwatches were popular for women, while men carried pocket watches. But during World War I, men who were soldiers couldn't just leisurely reach into their pockets to look at a pocket watch, so they began to wear wristwatches, too.

Inventions Inspired by God's Design of Plants and Animals (Biomimicry)

- Here's an idea that really "stuck"! When walking through the woods, inventor George de Mestral noticed seed burrs clinging to his clothes. After studying them closer, he came up with the idea of Velcro®.
- Ever have trouble seeing your computer screen in bright sunlight? Scientists have discovered that God made butterfly wings to shine colorfully even in direct sunlight. They are studying them to help design computer screens that are bright no matter what time of day.
- Do you know what a gecko looks like? Yeah, it's like that little critter on the GEICO® commercials! Geckos' toe pads stick to anything, allowing them to climb on ceilings and glass. Wouldn't it be cool if we could make astronaut boots that would hold that securely? Or tape and other adhesives that wouldn't get dirty and lose their stickiness?
- Heard of the Wright brothers? Did you know they studied birds to figure out how to build flying machines?
- Flowers are cool, huh? The lotus flower looks sparkly and beautiful. But what you can't see are teeny tiny, microscopic nail-like structures that keep dust from settling on its petals. When water drops roll over the leaf, the "nails" collect the dust and specks and leave the leaf looking shiny clean. A company spent lots of years studying the lotus flower and made a house paint that also helps fend off dust and dirt.

Accidental Inventions

- Post-it® notes. These handy little notes stick to just about anything. Originally, the inventor was supposed to come up with a really strong sticky substance. Instead, he came up with a really weak one that wouldn't permanently stay stuck. Eventually, someone got the idea to put the sticky substance on paper so the paper could be peeled off and on. Everyone loved it, and Post-it® notes were born!
- Do you own a Slinky®? An engineer named Richard James invented it. He intended for it to be used on naval ships during World War II to stabilize instruments on the ship. While Richard was working on his invention, it fell on the floor and sprang along. A new idea was born, and he decided to turn it into a children's toy instead.
- Milk Duds® were first thought to be a dud! The machine was supposed to be making round candies, but they kept coming out in oval shapes. A worker called them "duds" because they weren't round. But people still loved them, so they just went with the name "Milk Duds®" and continued to make them.

- Have you ever played with Silly Putty®? This fantastic toy was accidentally invented during World War II by an engineer trying to find a substitute for synthetic rubber. When he dropped boric acid into silicone oil, it made a stretchy and bouncy compound. The strange thing was it could also pull the print off a newspaper if it landed there. Called Nutty Putty at first, it eventually became known as Silly Putty® and has been a favorite ever since.
- Aren't you glad someone invented safety glass that doesn't shatter and spread all over the place when hit? A French chemist named Edouard Benedictus accidentally knocked over a flask. It broke, but stayed pretty much in the shape of the flask without sending pieces of glass flying everywhere. Edouard remembered the flask had had something in it (cellulose nitrate) that coated the inside and caused the glass to stay intact. A new idea was born, and safety glass is now widely used in windshields, bank windows, gas masks, shower doors, skyscraper windows, and many other things.

Famous Scientists Who Believed the Bible

- Ever heard of Morse Code? It was invented by Samuel Morse, the same guy who invented the telegraph. The poor guy endured many long, hard years when his inventions were rejected. He did not see any conflict between his scientific knowledge and Christianity—in fact, quite the opposite. Morse remained a humble Christian to the end of his days, describing his life's work by saying, "It is his work. Not unto us, but to thy Name, O Lord, be all the praise."
- Have you flown in an airplane? You can thank the Wright brothers if you have. They studied birds and eventually came up with the idea of the plane. They believed in God and used his creations to give them ideas.
- You may have heard of this guy—Sir Isaac Newton. He discovered calculus, the three laws of motion, and the law of gravitation. He also invented the refracting telescope and much more. He loved God and believed the Bible.
- You know how the Bible tells us God created everything? Guided by this belief, Louis Pasteur made many important medical discoveries like pasteurization and immunizations.
- Does your mom make you wash your hands before you eat? That's so you can wash all those nasty little germs off. In the past, people didn't realize how sick we can get from germs. Joseph Lister helped hospital staff realize they needed to wash hands and sterilize surgical instruments with antiseptics to kill germs. His discovery has saved countless lives, and what's cool is, he believed in God!