

It's two months until Christmas today. Have you written your letters to Santa? Have you been naughty? Do you think he will bring you anything? My daughter is reaching the age where she is just starting to doubt the existence of Santa. She came home from school the other day and asked me if Santa really existed. One of her classmates had told her that it was just children's mummies and daddies. I sidestepped the question. I guess, soon, she is going to know the truth. And that will be sad. I like pretending to be Santa.

Something Interesting (Mobile Phones)

1. The first mobile phone was made in 1973, however the first commercial phone was released in 1983. It weighed 1.2kg and cost about 400,000 yen.
2. So far, about 1.5 billion iPhones have been sold. It is estimated that there are over 5 billion mobile phones in the world.
3. On average, we look at our phones 110 times a day. What about you?
4. There is a word for the anxiety we experience when we don't have our phones or access to a phone signal. The word is "nomophobia". It is made from no-mobile-phone-phobia. The word was made as a joke in 2008, but it is now a real thing. There is also the word "ringxiety". A combination of "ring" and "anxiety". This is when you hear or feel your phone ringing or vibrating when it isn't.
5. About 20% of car accidents can be attributed to mobile phones.



Can you find all 16 differences in these pictures? Good luck. Some of them are pretty small.

Last week's answer



iPhone 12

Last week, Apple announced the release of the iPhone 12. They usually make announcements like this in September, but they have had to delay it by a month because of the corona virus. So, what does this phone have that the last one didn't have? Well, a higher price, to start with. The new iPhone is going to sell for about 120,000 yen. That is a little more expensive than the iPhone 11. It also doesn't come with a charger, so you are going to have to pay for that too.



However, there are a few things it does have that will make it a very impressive phone in the near future. Firstly, it can connect to 5G networks. 5G is being rolled out in many cities across the world and will allow incredibly fast Internet access. If you get a good connection, you should be able to download at over 1GB per second. As more apps depend on fast data transfer, this is going to make the iPhone 12 a good device but, unfortunately, 5G networks are not very good yet.

Also, the phone has something called MagSafe. Recent iPhones don't have a port to plug in a recharging cable. They use magnetic transfer of electricity through a magnetically attached charger. This iPhone is using that connection to attach other devices. Soon, you won't have to attach a device to your phone, but just stick it to the back. This could work for memory sticks and a whole range of things.



- 1.Exhausting 疲れさせる 2.Spare a thought for ~について考える 3.Appreciate 感激する
4.Explore 調査する 5.Confusion 混乱 6.Supreme Court 最高裁判所 7.Import duty 輸入税 8.Tax 税金
9.Poisonous 独の 10.Hideous 非常に醜い 11.Build up 積み上げる 12.Strategy 作戦

The ~est in the world



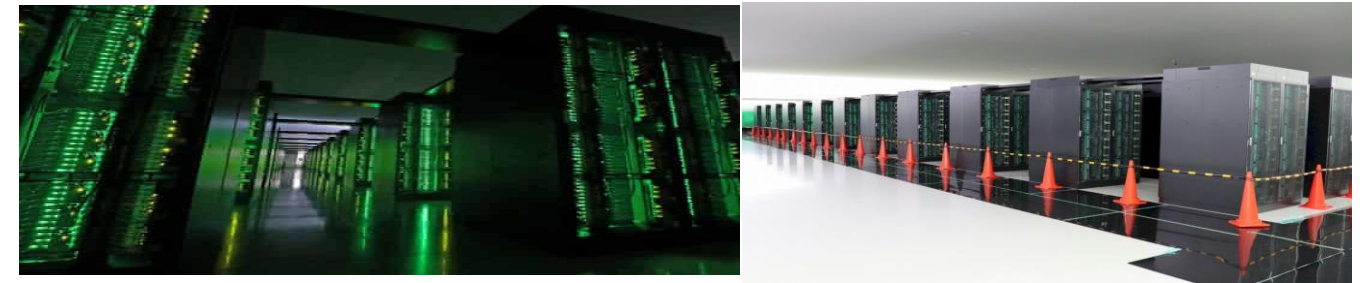
World Records

I'm sitting at my desk and I'm pretty hungry, so here are some Big Mac related records. Don Gorske has eaten over 30,000 Big Macs in his lifetime. He has OCD and writes down every Big Mac he eats. He ate his first one in 1972 and eats an average of 1.7 Big Macs every day. Joey Chestnut (the man who wins the Nathan's Hotdog competition every year) has the world record for most Big Macs eaten in one sitting. He managed to eat 32. That is 7.6kg! Matt Stonie (another food fighter) has the record for most Big Macs in one minute. He managed to eat 5 Big Macs in 60 seconds. I am quite hungry now, but I don't think I could eat 5 Big Macs. I would like to try, though. Do you think we could break any of these records here at school?



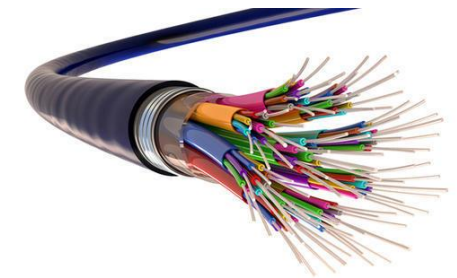
Stop being afraid of what could go wrong and start thinking of what could go right.

How fast can you think? What's $7+6$? How quickly did you get the answer? If you are fast, probably in about a second. The world's fastest computer right now is a Japanese computer called Fugaku. It can perform 415.53 petaflops of calculations per second. How does that compare to us doing the $7+6$ problem? The Fugaku computer could do 415.53 quadrillion of those calculations EVERY SECOND! That's 415,530,000,000,000,000! If it takes you one second to do $7+6$, then you would have to do one calculation every second for 13,167,351,129 years to equal what Fugaku can do in 1 second. But don't feel too bad. Fugaku can't tie its shoelaces.



Something You Probably Didn't Know

When you click on a Wikipedia link, you are retrieving data from a server somewhere in America. Do you complain how slow it is? The request you send travels about 11,000km, makes the request and then returns 11,000km. In about a second! I just checked and it took 3,000 milliseconds. Is that fast? If I decide to move my finger, it takes 0.15 seconds for the signal to go from my brain to my finger. So, why is it so fast? When you click the link on your computer, the signal goes to the server, into the network, and along fiber optic cables under the sea. The data goes as electromagnetic waves. These can travel at the speed of light in a vacuum. We cannot make a completely perfect vacuum, but they can travel at $2/3$ the speed of light along the optic fibers. That is about 200,000km/second. That is fast.



1.Wind 卷く 2.Blessing 幸なこと 3.Alloy 合金 4.Hollow 中は空洞 5.Nickel ニッケル
6.Phosphorous リン 7.Styrofoam 発泡スチロール 8.Despite ~なのに 9.Compressed つぶされた 10.Prove 証拠にする 10.1 in a X chance of X 文の 1 の確率