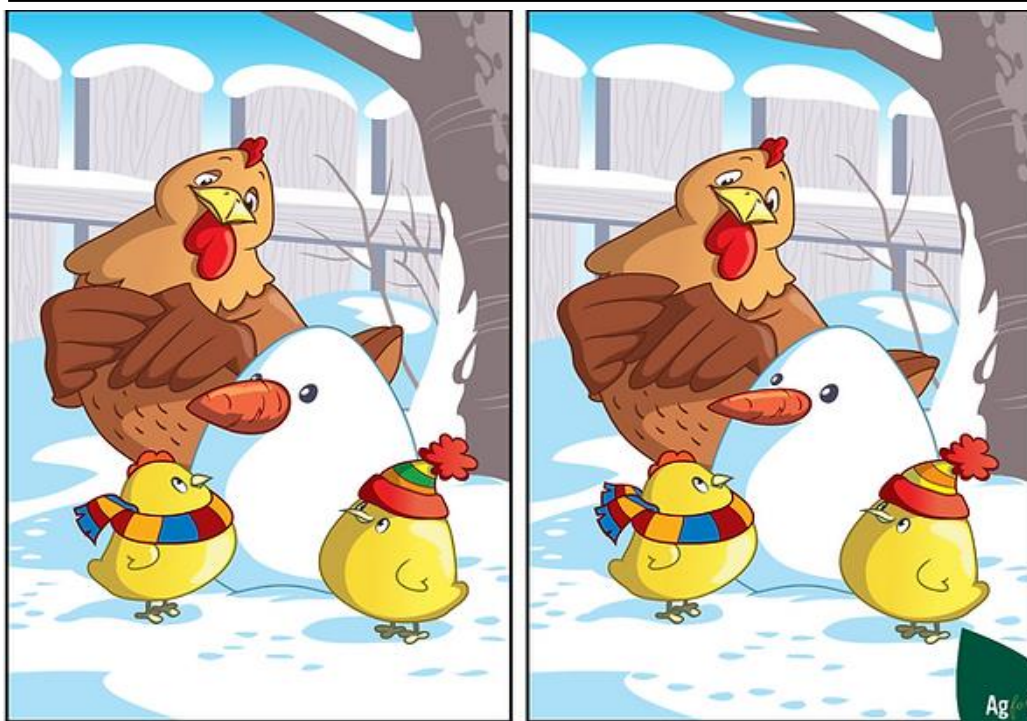


How did your tests go? Did you get 100 points on every test? I'm sure you did. And the snow is starting to melt, so I think spring might be almost here! Now you can relax as we start winding down¹ towards the end of the year. Are you all excited about going up a grade? This is the time of year to look at the things that we did well this year and the things that we didn't do so well. Then we need to think about what we are going to do next year. At least, that is what we are supposed to do. I find myself making the same mistakes year after year. Maybe one day I will start to learn from my mistakes.



10 differences
How quickly can you find them?

Last week:



Something interesting: Rockets

1. The first use of a rocket (a kind of firework) was in 1232. Chinese soldiers fired them at an invading² Mongolian army.
2. The first rocket with liquid fuel³ was launched in 1926.
3. In the Second World War the German army built the first rocket that could reach space. It was called the V2 rocket and could reach a height of 206km.
4. Rockets are very noisy but for the passengers they are completely silent because the rocket travels faster than the sound waves⁴ it makes.
5. To leave Earth's gravity⁵ a rocket has to travel at 40,000 km/h.

H3 Rocket Ordered to Self-destruct

Last Tuesday, a rocket launched by JAXA (Japan Aerospace Exploration Agency) had to be brought down. 19 minutes into the flight, JAXA said that the rocket's second-stage engine⁶ had failed. They spent some time considering what to do, and then they sent the self-destruct⁷ command to the rocket. The command shut off the rocket's engine and made it crash into the Philippine Sea. JAXA haven't said what caused the malfunction or why they had to issue the self-destruct command. They probably decided to do it to bring the rocket down as safely as possible in a place with no people. The rocket was carrying a satellite called DAICHI-3. The satellite was going to be used to monitor the land for natural disasters⁸ and to detect⁹ North Korean missile launches.



JAXA is going to start an investigation¹⁰ to try to find out what happened to the rocket. These days, a lot of private companies are trying to make rockets that can land and be reused. The H3 wasn't reusable, but a lot of its parts could be recycled. It cost 6,900,000,000 yen to launch the rocket and the rocket and satellite cost a lot more. Many people say that it is a waste of money, but JAXA will learn from this accident and future rockets will be better and safer. The goal is to make cheap reusable rockets that can fly into space and back very cheaply. The price per kilogram is coming down year by year. In 1981, the only rockets were owned by government organisations¹¹, such as NASA, and it cost \$85,000 to get 1kg into space. Now, there are many private companies and it costs \$951 to put 1kg in space. This will get cheaper.

- 1.winding down 徐々に静まり始める 2.invaade 侵攻する 3.liquid fuel 液体燃料 4.sound wave 音波
5.gravity 重力 6.second-stage engine 第2段のエンジン 7.self-destruct 自滅する 8.natural disaster 自然災害
9.detect 見つける 10.investigatio 調査 11.government organisation 政府機関



World record

Do you like heights? Have you ever tried to walk on a tightrope? I couldn't even take one step on one before I fell off. The longest tightrope walk is 2,200 meters! A Frenchman called Nathan Paulin walked on a tightrope from a crane to the abbey¹ of Mont Saint-Michel on an island. It took him two hours and he did it barefoot², which must have hurt after a while. He also had to find a way to support the wire in the middle, because his weight, coupled with³ the length of the wire and the weight of the wire, meant that it sank very low in the middle. Mr. Paulin has been tightrope walking and slacklining since he was 17 years-old. He said that he used to have a fear of heights⁴, but he doesn't anymore. What do you think? Is this a world record we should try to beat? I'm not sure we could.



Education is not preparation for life; education is life itself. – John Dewey

A capital city – Tarawa

Let's look at Tarawa this week. It is the capital city of the Republic of Kiribati. The Republic of Kiribati is an island country in the middle of the Pacific Ocean. It is about 500 km south of Hawaii. It is spread over 16 islands and has a population of 119,000 people. The islands that make up Kiribati were settled by Austronesian people⁵ about 5,000 years ago. In about 1300 AD, a lot of Samoans arrived, introducing Polynesian culture to the islands. Civil war broke out between the north and south islands in 1400 AD. In the 18th and 19th centuries, many ships stopped at the islands on their way across the Pacific and in 1892, they became a British colony. Japan occupied⁶ the islands, but they returned to Britain after the war. In 1957 and 1958, the USA and the UK tested nuclear⁷ and hydrogen bombs⁸ on Kiribati, one of the Kiribati islands. The Republic of Kiribati was formed in 1979 and the country gained independence. The international date line⁹ passes through the middle of the Kiribati island chain, so they moved it to the east in 1995 so that the whole country would be on the same day. Tarawa is the name of an island and also the capital city. 57,000 people, almost half of the population of Kiribati live here. Tarawa is a very narrow island and there is only one main road running in and out of the city, which causes a lot of problems. The government has been working to improve the road since 2014, with the help of the world bank¹⁰, and it was finished in 2019.



- 1.abbey 大修道院 2.barefoot はだし 3.coupled with～と結合 [合体] して 4.fear of heights 高所恐怖 5.Austronesian people オーストロネシア 6.occupied に占領される 7.nuclear bomb 原子爆弾 8.hydrogen bomb 水素爆弾 9.international date line 国際日付変更線