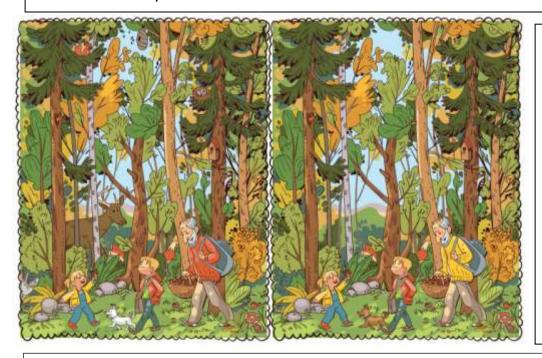


The junior high school festival finished last week. Each class did a 50-minute play on the stage in the auditorium. They were amazing. The students did everything themselves. They chose the script, they organized rehearsals, they made all of the props¹ and sets², they did all of the lighting³, and they directed themselves. The quality was very high. I hope that they are all very happy with the performances they did. And this week is the end of the first semester. Did you have a good time? It seems to have flown past⁴. It feels like only yesterday that we were all starting school in April and now, here we are, at the end of September!



### 7 differences



# Something you didn't know about ships:

- 1. The largest ship in the world was the Seawise Giant. It was 488 m long and it could carry 560,000 tons of oil. It was destroyed<sup>5</sup> for scrap<sup>6</sup> in 2010.
- 2. There are approximately 60,000 cargo ships in the world carrying all of the things we buy and sell.
- 3. The largest cargo ships can carry 24,000 shipping containers8.
- 4. Companies want to build larger ships, but they won't be able to sail through the Panama and Suez canals.
- 5. There are about 3 million shipwrecks<sup>9</sup> around the world. Some of them you can dive down to see.

### **Wind-powered Shipping**

A ship called Pyxis Ocean has been released by Mitsubishi. It is a windpowered ship. Up until about 1870, all ships were powered by wind. A ship could either be powered by the wind using sails, or powered by people using oars<sup>10</sup>. Then, in the 1800s, steam-powered<sup>11</sup> ships were invented. They burned coal to produce steam, but they still had sails in case they ran out of coal. In 1871, a ship called Devastation was built and it was the first ship not to have any sails. After that, oil-power engines were invented and the shipping industry has never looked back. These days, almost all ships have diesel<sup>12</sup> engines. This makes them fast, but it releases an enormous amount of CO2 and other gasses. A large container ship releases about 400 million tons of CO<sub>2</sub> every year. Pyxis Ocean have decided that they want to solve this problem and they think that going back to wind-power is the answer. Obviously, you cannot use sails to move a container ship across the ocean. Cloth sails would have to be so big that it would be impractical. However, Mitsubishi have discovered that there is a different kind of sail. They use something called WindWings. An airplane wing lifts the plane because the air moves faster over the top of the wing than under the bottom, creating lift. The WindWings use the same idea, but the lift pushes the boat forwards. The WindWings can't completely power the boat, but they cut down the amount of fuel it needs by 30% and the technology will improve with time. The WindWings can be folded down for when the boat is in port or goes under a bridge. It is amazing technology.



1.prop 小道具 2.set 大道具 3.lighting 照明 4.fly past あっという間に 5.destroy 壊す 6.scrap 廃物 7.approximately 大体 8.shipping container 輸送コンテナ 9.shipwreck 難破船 10.oar オール 11.steam-power 蒸気動力 12.diesel 経由









### World record

When I ride my bicycle, I like to go as fast as I can, which is not very fast. I am pretty slow on my bike, when I run, and when I drive. So, here are some people that like to go very fast. The fastest runner is obviously Usain Bolt. He ran 100 m in 9.58 seconds, which means he was moving at 37.58 km/h. The fastest person on a bicycle is Denise Mueller-Korenek, who managed to cycle at 296 km/h! That is a crazily¹ fast speed for a bicycle. The fastest car you can legally² buy is the Koenigsegg Jesko Absolut, which will reach 531 km/h! I'm not sure I would want to ride in that. That is slow, though, when compared to the land speed record, which is 1,220 km/h! Andy Green drove ThrustSSC at that speed

in 1997. It is not a car, it is a rocket with wheels. Planes are much faster. The fastest plane can in the world is the X-15. It can fly at 7,274 km/h. It could fly from Sapporo to Vancouver in about 50 minutes. But that is still slow because the International Space Station is flying above us at 28,807 km/h. And there is something faster still. Voyager 1, the space probe, is the fastest manmade object. It is flying at 61,500 km/h! And it is not coming back.



# Be kind, for everyone you meet is fighting a harder battle.

- Ian MacLaren

## One thing we can do to help the environment

### #4 Fast fashion

I buy a lot of cheap clothes. I can't tell you how cheap my suits are, but I think you would be surprised. I have always tried to buy the cheapest clothes I can find because I don't like spending a lot on clothes. I have never thought that fashion was very important. I thought buying cheap clothes was a good thing. But, it isn't. Most of my clothes are made of polyester<sup>3</sup>, which is one of the largest sources of plastic waste and microplastics<sup>4</sup> in the world. And, because my clothes are so cheap, they don't last very long and I have to buy new ones. My goal is to try to move away from fast fashion<sup>5</sup> and to buy more sustainable<sup>6</sup> clothes. Cotton clothes are not good for the environment either, but they will last longer than polyester and they can be recycled. One cotton shirt might last me as long as 5 polyester shirts. The best option is buying clothes that are made of 70% recycled cotton and 30% organic cotton. One shirt will be more expensive, but it will last longer. Another problem with fast fashion is that they use a lot of cheap, toxic<sup>7</sup> dyes<sup>8</sup> that pollute<sup>9</sup> rivers and harm the workers.



1.crazily 熱狂的に 2.legally 合法的に 3.polyester ポリエステル 4.microplastic マイクロプラスチック 5.fast fashion ファストファッション 6.sustainable 持続可能な 7.toxic 有毒な 8.dye 染料 9.pollute 汚染する