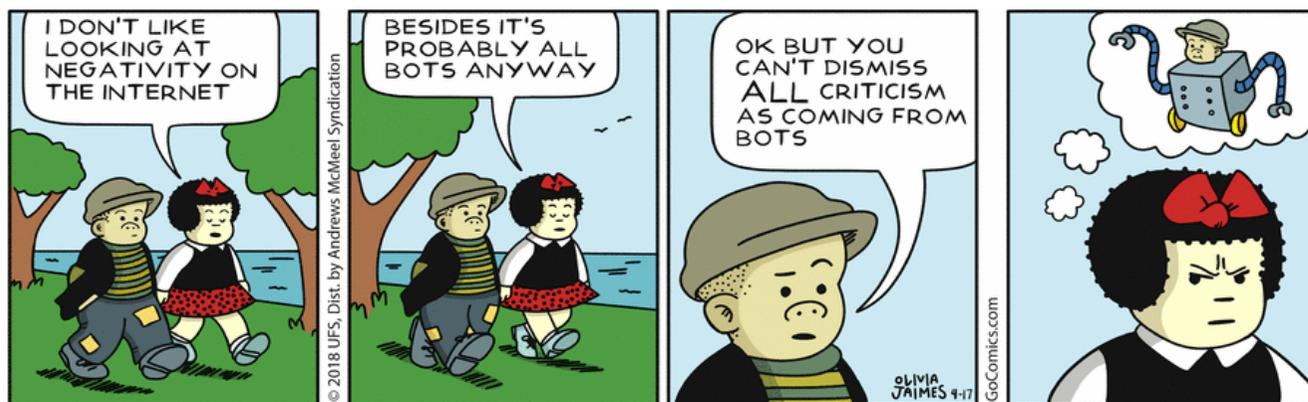


So, we have made it! We have reached the summer vacation! Yeah! What are you going to do? Are you going anywhere nice? I expect a lot of you have extra classes. That would be a very alien concept¹ to anybody from England. When school closes for the vacation, people never go back, under any circumstances². And summer vacations in the UK are very long. We finish school in early July and go back at the beginning of September. It is wonderful for all students, terrible for all parents. Ha ha. Anyway, have a great vacation and I will see you in August.

Something You Didn't Know (The Moon)

- 12 astronauts have walked on the moon. The first was Neil Armstrong in 1969 and the last was Eugene Cernan in 1972. People think we should go to the moon again, but it is too expensive.
- Neil Armstrong left a mirror on the moon. This is used to measure the distance³ between the earth and the moon. We can bounce a laser off⁴ it to measure how far it is.
- Gravity⁵ on the moon is 1/6th of earth's, so, if you are 60kg you will weigh 10kg on the moon.
- There is no air resistance⁶ on the moon so if you could jump four meters in the long jump on earth you could jump 44m on the moon!
- There is no wind or water erosion⁷ on the moon so the footprints the astronauts left on the moon will stay there for millions of years, unless they are hit by a meteorite.



A year from now,
you will wish you
had started today.

Last Week's Answer:



50th Anniversary of Landing on the Moon

Last Friday, 19th of July, at 1PM ET (2AM Saturday morning here in Japan) was the 50th anniversary⁸ of the moment when Neil Armstrong stepped off the Apollo 11 lunar landing module. You can find video of it on YouTube. He pauses at the bottom of the ladder and then jumps down onto the surface of the moon. He says those immortal words⁹, "This is one small step for a man, one giant leap for mankind." He became the first person ever to set foot on a body that was not part of Earth!



The Apollo 11 rocket launched on July 16th. One million people turned out to watch the launch live from Kennedy Space Center. Many more watched it on TV. TVs were not as widely owned as they are today, so viewing figures were not as high as they would be now. 650 million people watched him step off the ladder. Shortly after, Buzz Aldrin joined Neil Armstrong and the two spent a while taking samples to bring back to Earth. They also laid a plaque.



There are some people who think the whole moon landing was a conspiracy¹⁰, but they have just not thought about it carefully enough. Many of the things that the astronauts left on the moon can actually be seen from Earth. Neil Armstrong stepping on the moon showed people that they could do anything. It has taken a while, but hopefully, in the next few decades, people will stand on Mars as well.



1. Alien concept 思いもよらない概念 2. Under any circumstance どんな場合でも 3. Measure distance 距離を測る 4. Bounce ... off 反射させる 5. Gravity 重力 6. Air resistance 空気抵抗 7. Erosion 浸食 8. Anniversary 記念 9. Immortal words 不朽の言葉 10. Conspiracy 陰謀

★ English News Page 2 ★

World Records

We have some pretty flowers at school. How many do you think we have? 5 million? I doubt¹ it. But, that is how many we will need if we want to break this record. In the Dubai Miracle Garden, Emirates Airline has made an Airbus A380 out of 5 million flowers. The whole garden has over 45 million flowers. Also, don't forget that Dubai is a city in the desert, so this garden requires² an enormous amount of water every day. Right, I think we need to start small. We can start by making a flower unicycle, then work up from there.



What can you see?



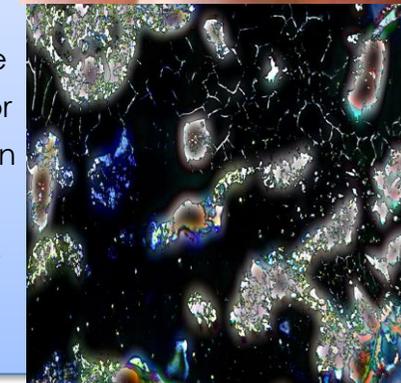
★ Something Big ★

From 3000BC until 1311, the tallest building in the world was the Great Pyramid at Giza. Then, in 1311, Lincoln Cathedral was built in the UK and it became the world's tallest building for another 238 years. I'm not sure how many people knew that at the time, though. Since then, well, once the elevator was invented, buildings have grown taller and taller. The current world's tallest building is the Burj Khalifa in Dubai. It is 828m tall. However, there is another building under construction³ in Dubai that will be the world's first 1km tall building. The Jeddah Tower will be opened in 2021 and it will be exactly 1000m tall! This tower will have to deal with many challenges: the strong wind, the weight of the building, the limitation of⁴ elevators, the temperature changes, and the settling⁵ of the frame!



Seeing Stars

Have you ever seen stars? I don't mean the ones outside in the night sky. I mean when you have been bending over⁶ and you suddenly stand up. These stars that you see are called "phosphenes". The word comes from the Greek words *phos* (light) and *phainein* (to show). Pressure on your eye (you can see them if you rub your eye) stimulates⁷ the optic nerve⁸ and the optic nerve translates this pressure into images of light. When you bend over or lie down for a long time, blood pressure⁹ to your brain drops. When you stand up, this low pressure can be dangerous, so your brain stimulates your heart to increase blood pressure to your head. This increased blood pressure causes the pressure in your eyes to increase, which causes you to see phosphenes.



1. Doubt ~を疑う 2. Require ~が必要 3. Under construction 建築中で 4. Limitation of ~の制限
5. Settle 沈下する 6. Bend over かがむ 7. Stimulate 刺激する 8. Optic nerve 視神経 9. Blood pressure 血圧