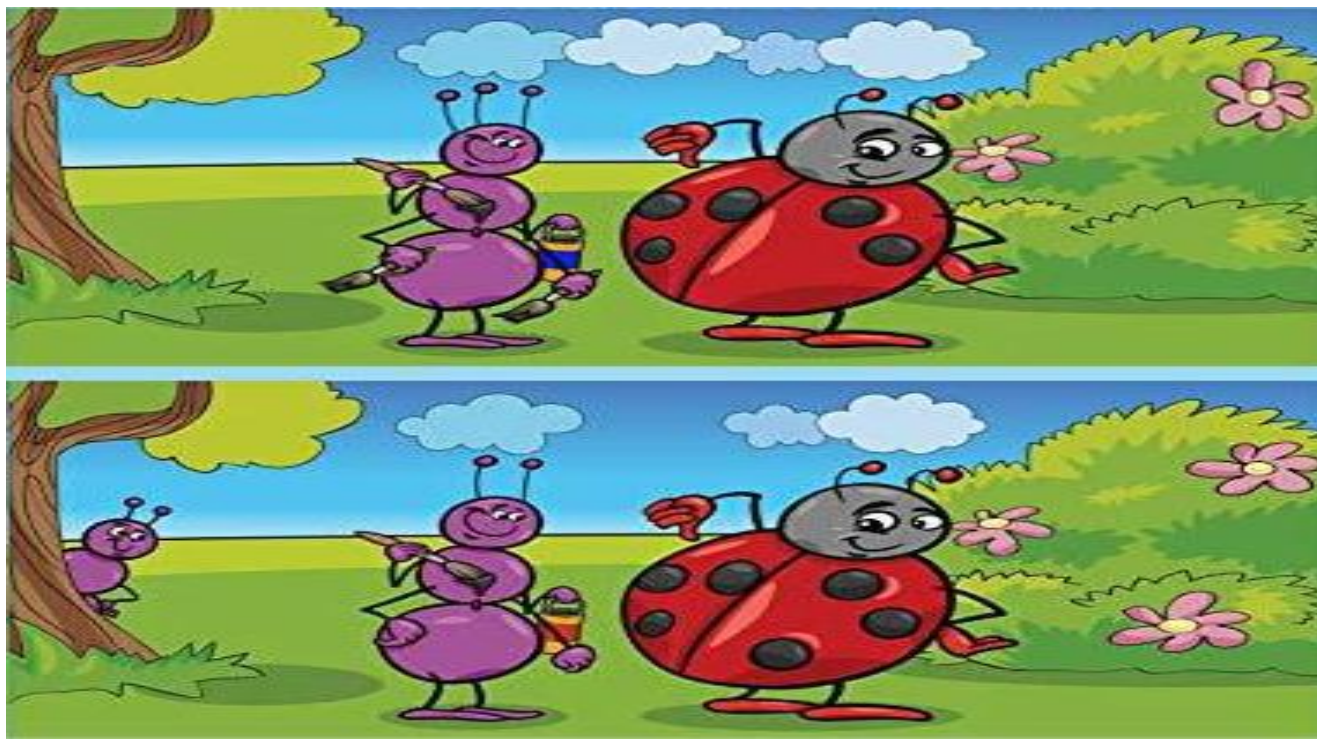


Hi! I'm so happy that you are all back at school. It is always a lot more fun when students are in a school. A school without students is just a big empty building. One of the best things about being a teacher is interacting<sup>1</sup> with all of the students. Teachers get a lot of their energy from the students. If a teacher is tired or stressed, when the students respond<sup>2</sup> to the class or laugh at a joke, it can reenergize<sup>3</sup> the teacher. Did you know that? If you respond more to your teacher, the way they teach will improve. Teaching is a two-way process!!

### Something You Don't Know (Mars)

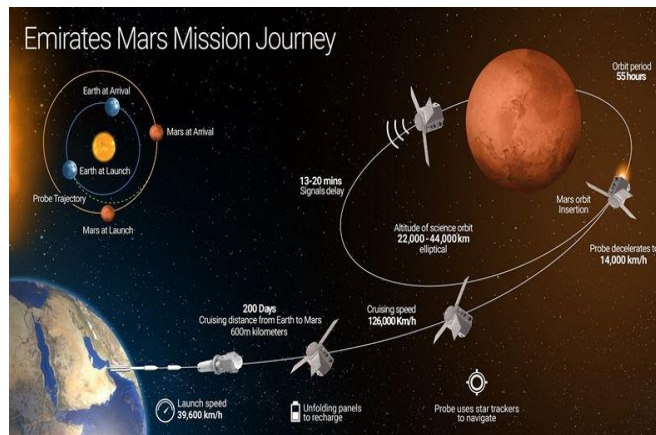
1. Mars is half the size of Earth but twice the size of our moon.
2. A year on Mars is twice as long as a year on Earth but a day is only 40 minutes longer.
3. The average temperature on Mars is -68°C.
4. The tallest mountain in the solar system<sup>4</sup> is on Mars. Olympus Mons is 25km high.
5. Mars has dust storms<sup>5</sup> that can last for months and cover the whole planet.
6. Gravity<sup>6</sup> on Mars is one third that of Earth, so if you can jump one meter on Earth you would jump three meters on Mars. This also means it is easier for spaceships to leave the surface.
7. Mars has two moons, Phobos and Deimos, but they are very small.
8. Mars can easily be seen from Earth with the naked eye<sup>7</sup>.

### Spot the difference – 10 differences



### UAE due to launch probe to Mars from Japan

The UAE (United Arab Emirates) are getting ready to launch their first space probe. The probe is called “The Mars Hope” and will be an unmanned mission<sup>8</sup>. The probe will be launched this summer from Tanegashima, in Japan. Tanegashima is the home of JAXA (the Japan Aerospace Exploration Agency) and is used because it has some of the clearest and most predictable<sup>9</sup> weather in Japan. The probe and its engineers travelled from the UAE to Japan last month but, because of the Corona virus, they had to spend two weeks in quarantine<sup>10</sup>.



The probe will be carried out of Earth's atmosphere<sup>11</sup> on a rocket built by Mitsubishi Heavy Industries on August 13<sup>th</sup>. It will then be released and begin its journey towards Mars. The journey is predicted to take about 7 months and the probe will arrive in Mars orbit in time for the 50<sup>th</sup> anniversary of the UAE. Once it is there, the probe will spend about one year orbiting Mars and carrying out tests.

The main aim of the probe is to monitor Martian weather in the lower atmosphere and dust storms. It will also try to understand why Mars is losing oxygen and hydrogen into space. If people really want to really live on Mars, these are some of the things that scientists must understand. The UAE's probe will be the first one launched by an Arab nation and they want to say that it is not only America, Europe, China and Japan that can put probes into space.



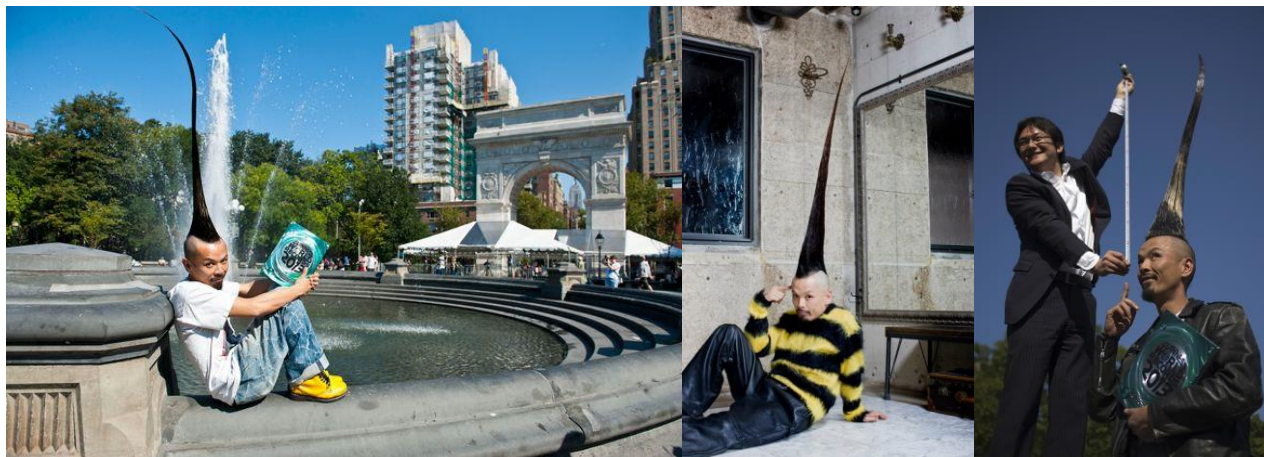
- 1.Interact** 交流する **2.Respond** 反応する **3.Reenergize** 元気を回復させる **4.Solar System** 太陽系 **5.Dust storm** 砂嵐 **6.Gravity** 重力 **7.Naked eye** 肉眼 **8.Unmanned mission** 無人ミッション **9.Predictable** 予測可能な **10.Quarantine** 隔離する **11.Atmosphere** 大気





### World Records

A lot of people have been making fun of<sup>1</sup> my or lack of hair recently. So, I thought I would use this world record, one I can never get. Kazuhiro Watanabe, a Japanese fashion designer has the world record for the tallest mohawk in the world. It is 114cm tall. It took him 15 years to grow his hair that long and it takes 2 hours and four cans of hairspray to style the mohawk. I wonder how long it would take me to grow my hair that long. I don't think I would be able, no matter<sup>2</sup> how many years I had. What about you? Are there any students with longer hair that want to try and break this record?



Push yourself<sup>3</sup>, because no one else is going to do it for you.

## The ~est in the world

Do you know what the deepest point on Earth is? It's the Mariana trench. However, the deepest manmade point on Earth is the Kola Superdeep Borehole<sup>4</sup> in Russia. It is a scientific project and the aim was to see how deep it is possible to drill into the Earth's crust<sup>5</sup>. It turns out that the answer is 12,262m. They started drilling in 1970. In 1989, the hole reached 12,262m. The scientists thought they would be able to go to 15km, but the temperature reached 180°C, which was much higher than they had anticipated<sup>6</sup>, and they were forced to stop drilling. There was talk of trying to go further, but everything stopped when the Soviet Union broke up in 1991. Now, the drill has gone and the hole has been welded shut<sup>7</sup>. You can visit it if you go to Russia, although it is not easy to get to.



## Something You Probably Didn't Know

Lake Superior is the largest freshwater<sup>8</sup> lake in the world. It is so big that it contains 10% of the world's freshwater and it is the same size as Hokkaido. When you fly over it, you cannot see the shore on either side. The lake is so big that it can have enormous waves and very unpredictable weather patterns. Many ships have sunk in the lake. The biggest island in the lake is called Isle Royale and it is half the size of Sapporo. The English name is Lake Superior, but the original name was "gichi-gami", in the Ojibwe language and means "great lake".



**New words:** 1. Make fun of からかす 2. No matter how many years 何年やっても 3. Push yourself 自分を駆り立てる 4. Borehole 掘削孔 5. Crust 地殻 6. Anticipate 予想する 7. Weld 金属を溶接する 8. Freshwater 真水