

The Horizon Newsletter

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Qantas Breaks Air Travel Records

By: Shrihan Dadi

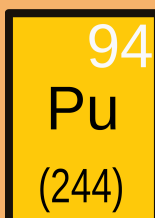
Qantas has just completed the first non-stop flight from New York City to Sydney in just over 19 hours. This test was actually a part of a great project (Project Sunrise) to research the effects of very long flights on pilots and passengers. Of course, this test offers much potential since time and money can be saved; however, in order to save fuel, Qantas put a limit on the number of people on the flight. If these flights were commercialized, passengers would most likely have to pay more to compensate for the less amount of people on the flight. Project Sunrise also has two more similar flights coming, and a decision about moving forward with these flights will be revealed at the end of 2019.



“Impossible” Stable Form of Plutonium Discovered

By: Shrihan Dadi

A team of scientists has just discovered a new stable form of plutonium that was previously deemed to be chemically impossible. The oxidation state that was created from the experiment gone wrong was unexpected,



and scientists suspected it to be an intermediate phase in radioactive waste repositories. Initially, with the experiment, the scientists were trying to create plutonium dioxide nanoparticles. Usually, this reaction is pretty quick, but halfway through the reaction, something weird happened. After more analysis with detectors and further experimentation, the scientists deemed the state to be a stable pentavalent oxidation state of plutonium. This discovery will actually help with the management of radioactive nuclear waste because this state will have to be taken into account for future predictions.

Disney+

By: Sumant Anantha

Disney has just announced a new entertainment platform, called Disney plus. It is realistically a Netflix with only Disney movies, shows, and cartoons. Any shows owned by Disney will also appear on the platform. Disney Plus is the next step in advancing the future of the Disney Corporation. For those who watch and love Disney Movies, this



is the right entertainment platform for you. People who are carriers of Verizon are lucky because Disney made a deal with Verizon to give the carrier's unlimited wireless customers a free year of Disney Plus. Disney plus competes with Netflix, HBO, Hulu, Amazon fire stick, and Apple tv. It is \$7 a month for Disney plus and \$70 a year for Disney plus. Disney plus still runs on the same

tech platform as the others, so users can still subscribe to them with the same password and Credit card info.

What is Impeachment?

By: Amuktha Dasari

Today, a topic that is coming up more frequently in conversation is the topic of impeachment. Our current president is under investigation by the House, in order for them to vote to impeach him.

A common misconception about impeachment is that it results in a President's removal from office. There have been two Presidents to have been impeached in our nation's history- Andrew Johnson and Bill Clinton- and both went on to serve the rest of their terms. Impeachment simply means that a government official is *charged* with a crime. The House of Representatives can vote to impeach a President, which means they are put on trial in front of the Senate. *If* the Senate finds the President guilty of the crime, they may be removed from office.

A New Marine Mammal Epidemic has been linked to Climate Change

By: Arya Bharti

Currently, the Arctic is warming twice as fast as the rest of the planet from excess greenhouse gases that are being pumped out into our atmosphere. This severely impacts the organisms that live there and has recently contributed to the spread of a deadly virus, Phocine distemper virus (PDV), throughout the world. The virus appeared to be limited until 2004 when an outbreak occurred in seal & otter populations in the Alaskan Pacific. PDV is essentially the seal and otter version of measles and spreads when animals are in close contact with each other. This disease began to have massive outbreaks after the melting ice in the north opened up previously blocked pathways. This allowed the disease to travel between the North Atlantic and North Pacific oceans in the past couple of years. But melting ice and climate change will affect humans too as rising sea levels threaten coastal populations, fishing industries and beaches around the world.



10 Tips for Better and More Fluent Writing

By: Abhiram Dasari

Lots of people want to be better at writing. Whether it's for a job application or just a silly short story, we all want to captivate our reader's attention for as long as possible. However, sometimes we need an extra bit of a push in order to really get our writing on track.

Hopefully, this list can be that push. Without further ado, here are 10 tips for better and more fluent writing.

1. Word Choice

Word choice is the primary factor holding most people back. If we use better word choice, we can make the passage more intriguing and interesting to our readers. Something as simple as replacing the word “sad” with the word “melancholy” can make a world of difference, especially in an already long, drawn-out article.

2. A Good Hook

Why have a good hook? Well, it gets the reader invested in the passage. When a reader reads a good hook, they immediately want to know what happens next. A good hook will both ‘hook’ in the reader, and also keep them engaged until at least the end of the paragraph so that they can find the answer

3. Details Matter

When writing, especially in short stories, it’s easy to gloss over details. In fact, you should be doing the opposite. Elaborate on those details. If you imagine a certain scene playing in your mind, you will put that into words in a unique way. Keep describing those details to set the scene for what will happen later in the paragraph, or even the chapter.

4. Use Sensory Language

Building off of the last tip, use lots of sensory language. Think of adjectives that would suit the situation you have in your mind and use them. Paint a picture in the reader’s mind. One method that might help you is if you ask somebody who has had no exposure to your writing to read what you wrote. Then, ask them to describe what they see in their mind’s eye. If that scene doesn’t match what you had in mind, change up the description. Keep doing this until what you have in your head is the same as what the reader has in their head

5. Don’t use run-on sentences

What more is there to say? Run-on sentences are often the mark of an inexperienced writer. If you can’t read a sentence out loud at a reasonable speed without having to breathe again, consider splitting it in half. A good general rule for splitting a run-on sentence in half is finding where one idea blends into the next. Once you have found this place, simply split the two ideas. This will make two considerably more manageable sentences that convey the same meaning.

6. No double-statements

Just like run-on sentences, double-statements are often the mark of an inexperienced writer. Statements like “I went to Joe’s house personally” state the same thing twice but in different ways. In the above example, when you go to Joe’s house, you can assume that you

were there personally. A better way to state this sentence would be “I went to Joe’s house”. Just cut out the unnecessary words.

7. Keep the reader interested

Keeping the reader interested might be the most important tip on this list. As long as the reader is interested in your writing, you can get points across to them. If your use of language is boring, or monotonous, then the reader will quickly become disengaged. Use colorful language and plenty of rhetorical devices to keep the reader’s interest.

8. Anecdotes are key

However absurd they may be, anecdotes help the reader to relate to the message that you are communicating. Whether it be a childhood memory or a story that happened just last week, they will help your writing be more interesting and help the reader stay engaged. Anecdotes help to ‘spice up’ an otherwise mundane article and get the reader interested in what you have to say.

9. Reference back to earlier sentence structures

The best introductions have a sentence structure that keeps on coming back throughout the article. By referencing earlier sentence structures later in the passage, you make the reader think about the last time that you used that format. This can serve as a sort of refresher for the next idea. This can also be used to review the general meaning of the passage so far before moving on to the next paragraph. However, don’t overuse this. Too much of the same sentence structure just becomes monotonous and repetitive.

10. Take breaks

This may sound counterproductive, but take frequent breaks whenever you have writer’s block. This helps your mind to refresh and find a new way to express what you are trying to say. When your brain is thinking of something else, it provides a clean slate to work on the problem you were having. With a clean slate, you can think about the problem in multiple different ways and find a solution quicker. Don’t just doggedly keep trying for hours, take a small break. This small break can reduce your overall time by a lot.

The New Macbook Pro

By: Harvik

Apple replaced the 15-inch MacBook Pro with a new 16-inch model, just a few months after reintroducing the MacBook Pro in May and July of 2019. The new MacBook Pro features a larger 16-inch Retina display, slimmer bezels, an updated keyboard with a scissor mechanism instead of a butterfly mechanism, and AMD Radeon Pro 5000M Series graphics cards. The Magic Keyboard uses a refined scissor

mechanism that is expected to be more reliable than the butterfly keyboard that was prone to failure. The keyboard offers up 1mm of key travel and features a "more responsive key press." The machines use Intel's 8th and 9th-generation processors and are Apple's fastest MacBook Pro models to date. There's a new fan design with a larger impeller, extended blades, and bigger vents, which increases airflow by 28 percent. The heat sink is also 35 percent larger, allowing for more heat dissipation. This allows for this new Mac to sustain up to 12 watts more than the previous computer.



Pricing on the 13-inch MacBook Pro starts at \$1,299 for a 1.4GHz quad-core Core i5 processor, 8GB RAM, and a 128GB SSD, while the middle tier 13-inch MacBook Pro model features a 2.4GHz Core i5 processor, 8GB RAM, and a 256GB SSD for \$1,799. Pricing on the 16-inch MacBook Pro starts at \$2,399 for a 2.6GHz Core i7 processor, Radeon Pro 5300M, 16GB RAM, 512GB SSD. All in all, Apple is coming out with new and better improvements each month and this is greatly satisfying Apple Customers. In my opinion, this new MacBook is not worth the price, but if you are an avid Apple supporter and can afford to spend this money, the new 16-inch Macbook Pro is a great choice.

New Findings For Parkinson's Disease

By: Pavitra

Scientists have recently found that Parkinson's disease has many subtypes, after digging deeper into the disease. Scientists from Denmark now argue that studies show that Parkinson's disease can be split into two conditions: "PNS-first" and "CNS-first." Parkinson's involves the accumulation and spread of toxic clumps of alpha-synuclein protein called Lewy bodies. Some scientists are saying that the toxic alpha-synuclein forms in the PNS (peripheral nervous system) of the gut and spreads to the brain, which is part of the CNS (central nervous system), via the vagus nerve. To distinguish between the two subtypes, scientists focus on a symptom called REM sleep behavior disorder (RBD), which is when people act out of their dreams when they sleep. Scientists believe that the PNS-first subtype is strongly associated with the presence of RBD during the initial stages of Parkinson's, and the CNS-first subtype is associated with RBD-negative during initial stages. The distinction between the two types, which affects the timing of the presence of RBD, has to do with which part of

the nervous system first shows signs of toxic alpha-synuclein damage. This research is helping researchers obtain more information about Parkinson's disease in terms of origin and progression.