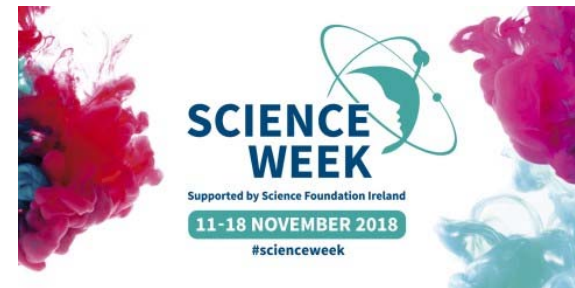
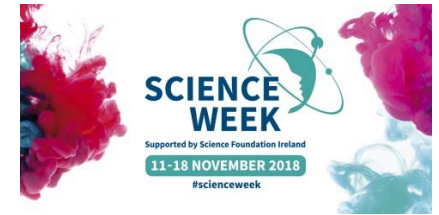


Science Table Quiz 2018



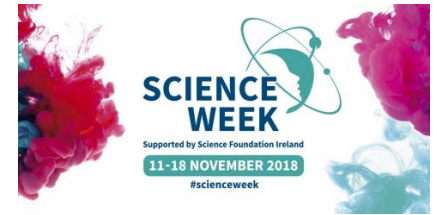
Science in the last year



1. December 2017. The Pentagon admitted they had run a secret programme from 2007 to 2012 to research into what?
2. March: Google released “Bristlecone” – what sort of computer chip is it?
3. Which tropical storm caused havoc when it came into contact with “The Beast from the East”?
4. Which famous scientist died on 14th March?
5. On the 19th March a woman in Arizona was killed by which type of vehicle (the first such accident)?
6. April: Which Science Fiction film was released (the 4th most expensive film ever made)?
7. 30th May: Researchers in Newcastle announced they had made an artificial cornea by which technique?
8. June 19th: A US Patent was granted to Raytheon Company. What number was it?
9. 27th June: An unusually shaped interstellar object was discovered crossing the Solar System. What name was given to it (Hawaiian for “scout”)?
10. October: Who became only the 3rd woman to receive the Nobel prize for Physics?



Astronomy & Space

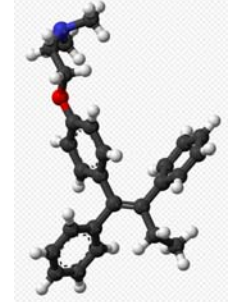
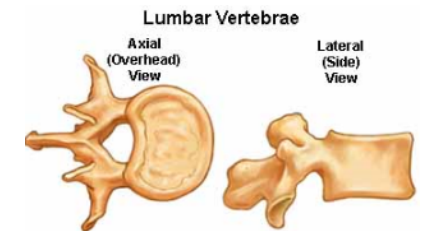
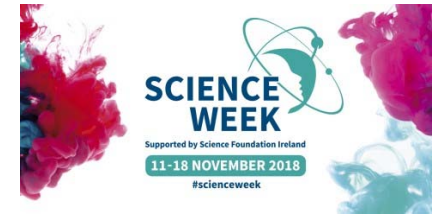


1. Neil Armstrong was the first man to walk on the moon. Who was the second?
2. In which year was Sputnik launched?
3. And which radio observatory near Manchester was the only one to track its booster rocket?
4. Which communications satellite inspired a 1962 UK No. 1 hit for the Tornados?
5. In which city in Germany is the European Space Operations Centre?
6. What does VLBI stand for in astronomy?
7. What is the brightest star in the night sky?
8. Which famous nebula is found in the constellation of Taurus?
9. In April of this year astronomers showed that asteroids were primarily responsible for bringing what to Earth?
10. And in July this year a sub-glacial water lake was discovered on which planet?

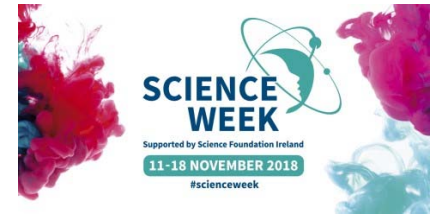


Medicine & Physiology

1. How many vertebrae are there in the lumbar region of the human spine?
2. Where would you find Synovial fluid?
3. Which heavy metal (atomic number 83) is useful in the treatment of peptic ulcers?
4. And which element (atomic number 33) did Paul Ehrlich use to treat syphilis in 1910?
5. What can you see on yourself if you have Leukonychia?
6. What landmark operation was carried out in the Groote Schuur hospital, Cape Town in 1967?
7. What was Stephen Hawking's (eventually fatal) condition?
8. The Clavicle is better known as which bone?
9. How many carpal bones are there in the wrist?
10. Which condition is Tamoxifen mostly used to treat?



Sea Creatures



1



2



3



4



5



6



7



8



9



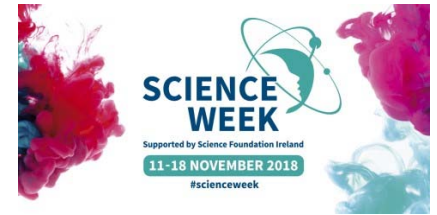
10

1-5: No marks for simply putting "jelly fish", "prawn" or "shrimp", "crab", "starfish" or "turtle"

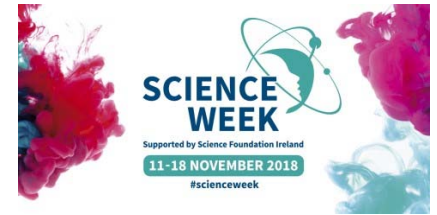


Physics, Engineering and Thermodynamics

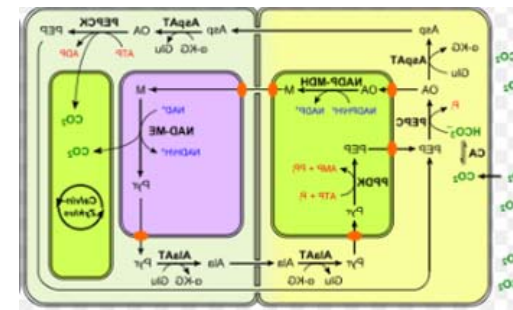
1. Who was the French revolutionary engineer whose work laid the basics for thermodynamics?
2. Who invented the phonograph in 1877?
3. Whose experiment (2 names) in 1887 showed that the speed of light was the same in perpendicular directions?
4. Ulsterman William Thomson worked on thermodynamics. He was raised to the peerage under what title?
5. Which Italian engineer received a Nobel prize in 1909 for wireless telegraphy?
6. Whose 1909 oil-drop experiment determined the charge of an electron?
7. What was the title of Stephen Hawking's popular book, published in 1988?
8. Which South African physicist and entrepreneur joined Tesla Motors in 2004?
9. Which rock guitarist and PhD physicist was chancellor of Liverpool John Moores University 2008-2013?
10. Which Soviet nuclear physicist and dissident won the Nobel peace Prize in 1975?



Botany, Agriculture and Soil Science

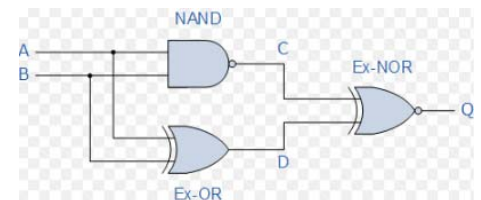
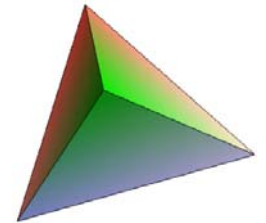
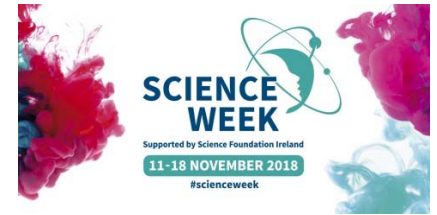


1. What is the French term for the complete natural environment in which a wine is produced, including factors such as the soil, topography, and climate?
2. What is the scientific name for the organic component of soil, formed by the decomposition of leaves and other plant material by soil microorganisms?
3. Name one of the main countries where Chernozem, a rich black soil, is found?
4. A case of which serious animal disease was confirmed in Aberdeenshire last month?
5. The genome of which major food crop was sequenced recently and published in August?
6. What are the two main photosynthetic pathways in plants (named after the number of carbon atoms in the first molecule produced)?
7. Which of these is expected to respond better to raised CO₂ levels?
8. How are the fruits of the plant *Malus pumila* better known?
9. And how is the economically strategic plant *Hevea brasiliensis* better known?
10. *Mycosphaerella* fungus is being investigated as a way of controlling which invasive plant?

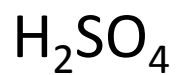
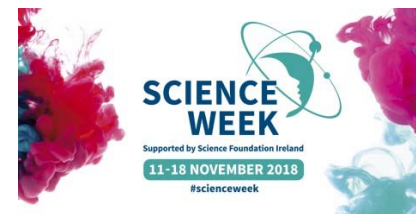


Maths and IT

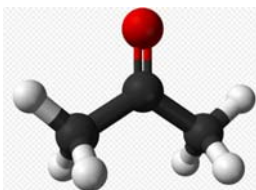
1. What is the surface area of a tetrahedron with edge length x ?
2. For the series of numbers 1, 2, 3, 4, 5, 10 which is bigger – the mean or the median?
3. Solve $x^2 - 9x + 8 = 0$ (two solutions)
4. How many Bytes are there in a bit (or *vice versa*)?
5. What is $\lg 2$ ($\log_{10} 2$) to one decimal place?
6. Which British mathematician found non-periodic ways of tiling a flat surface largely with pentagons in the 1970's
7. If $y = \sin x$ what is dy/dx ?
8. The most powerful supercomputer in the world is currently the "Summit" in the US Oak Ridge National Lab. Its speed is 200 "something" flops. What is "something"?
9. Which mathematician, made professor of maths in Cork in 1849, developed a form of algebra important for information theory?
10. What is the value of $10!$ (10 factorial)



Chemistry – famous molecules/substances



1



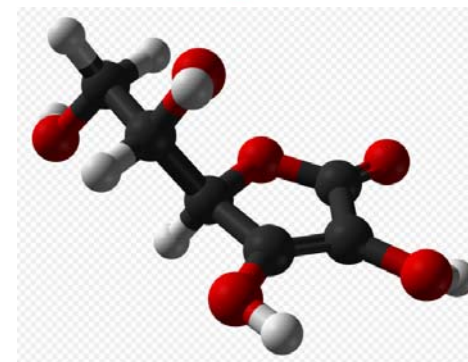
2



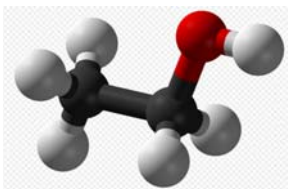
3



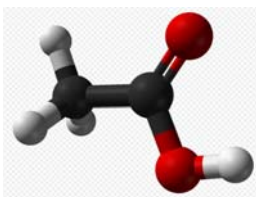
4



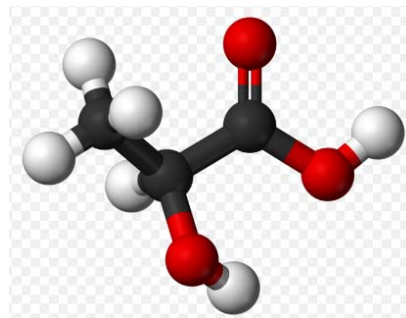
5



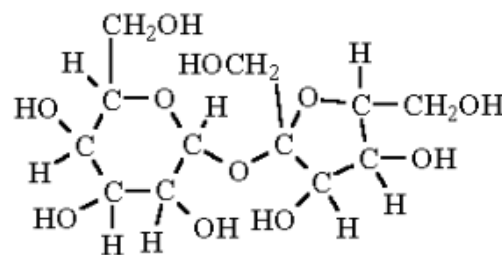
6



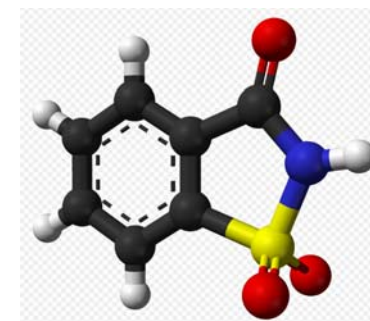
7



8



9



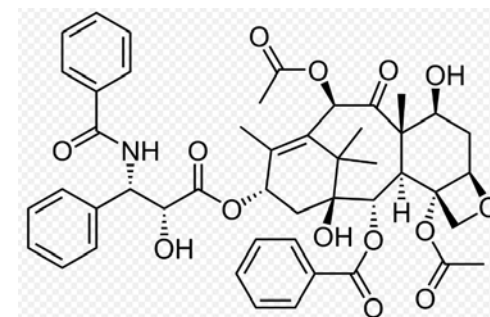
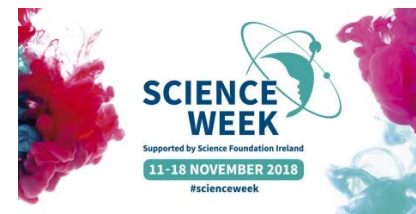
10

Ball models: black = C, white = H, red = O, blue = N, green = Cl, yellow = F or S



Miscellaneous

1. What metal ion sits in the middle of a chlorophyll molecule?
2. Which clouds have a flat base and are typically described as “fluffy” or “cotton-like”?
3. Which commercially important fish of the *Clupea* genus congregate in large shoals, often in coastal waters?
4. How is the plant *Atropus belladonna* better known? It has toxic black berries.
5. What is the SI unit of capacitance?
6. What is the major monomer in natural rubber?
7. Christopher Cockerell is best known as the inventor of which type of vehicle?
8. Which company owns the trade name Taxol for the anti-cancer drug paclitaxel?
9. In geology, what is the layer between the Earth’s crust and the outer core?
10. “The Imitation Game” was a film about the life of which mathematician?



Science Fiction

1. Which 1989 Rick Moranis film featured an “electromagnetic shrinking machine”?
2. Which actress, who formerly played a Dr Who companion has played the character Nebula in three recent Marvel Universe films?
3. The time machine in the “Back to the Future” films was built into what make of car?
4. Who wrote the *book* “2001, a Space Odyssey”?
5. Which TV series is finishing after the current 12th series, because its star Jim Parsons is leaving?
6. What is the name of Batman’s butler?
7. In “A Hitch-hiker’s guide to the galaxy” who was Arthur Dent’s friend who “came from Betelgeuse and not Guildford after all”?
8. Which 1965-8 TV series was made into a feature film starring Matt Le Blanc in 1998, and is now being remade for TV?
9. Which series of Isaac Asimov novels feature the planet Trantor, psychohistory and the Seldon plan?
10. Who played Sculder and Mully in “The X Files”?

