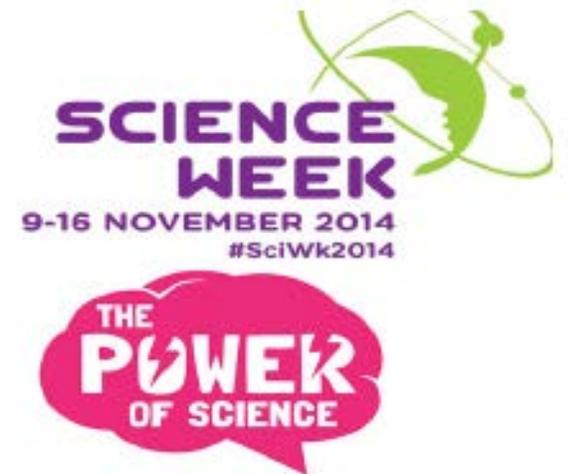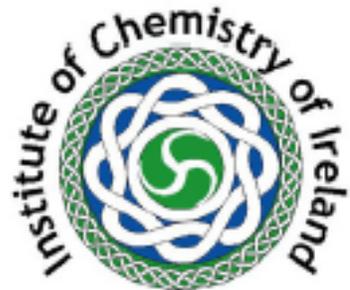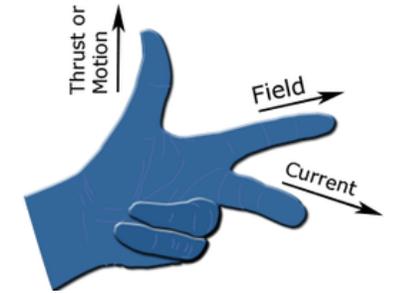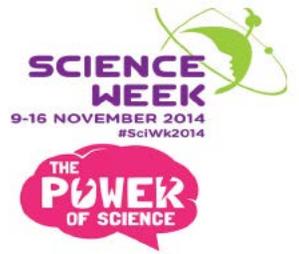# Science Table Quiz 2014

Electricity: *The* Power of Science

1. What is *Electrophorus Electricus*?

2. Whose Left Hand Rule indicates the directions of current, field and motion in a motor?

3. Certain solid materials generate a voltage across themselves when deformed. What is this effect called?

4. And what is the effect called when voltages or currents are generated on exposure to light?

5. What is the oldest type of rechargeable battery in commercial use?

6. If lightning strikes a tree or a building which way do the electrons travel?

7. What is the colour of the earth lead under EU wiring rules?

8. *Shewanella* and *Geobacter* were the first of which type of bacteria found?

9. What type of capacitor was developed in Holland in 1745?

10. What is the structure at the end of a nerve cell that allows it to pass an electrical signal to another cell?
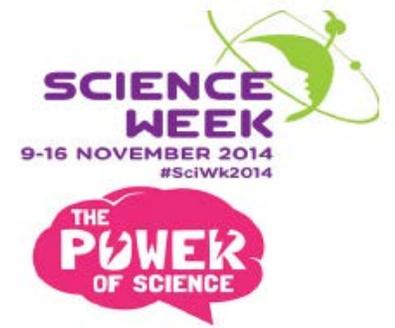
Science in 2014

1. In January Google announced the development of a contact lens which could monitor which substance?

2. Maryam Mirzakhani won a Fields Medal for mathematics. This was a first for 2 reasons. Name one.

3. Which country's first probe to Mars went into orbit in August?

4. In May the largest dinosaur fossil yet discovered was found in which country?

5. Which month was the driest such month on record in the UK?

6. Which spacecraft approached a comet in January (and put down a lander this week)?

7. In March astronomers found for the first time a ring system around which type of object?

8. The Nobel Prize for physics was awarded for the development of which type of device?

9. In June it was shown that sedentary behaviour increases the risk of getting which type of ailment?

10. In April the genome of which disease bearing insect was sequenced?

Mathematics: Killer Sudoku

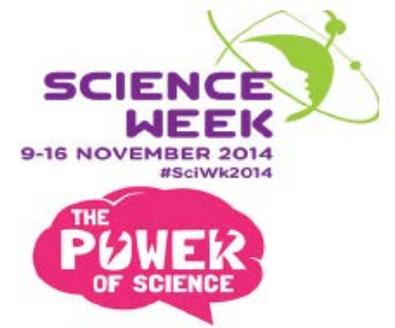Clue: What is the sum of 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9?

Metals and ores

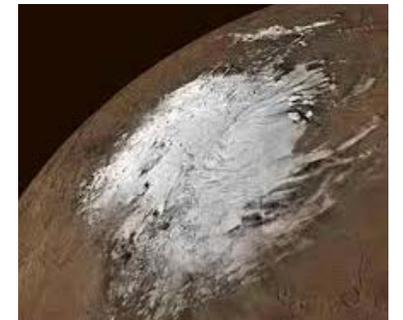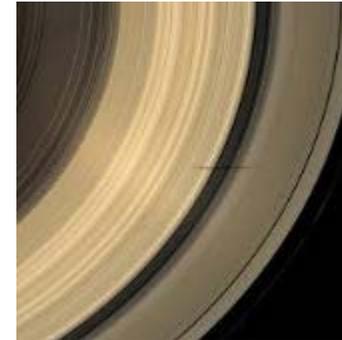Which metals are obtained from the following ores?

1. Bauxite
2. Pitchblende
3. Galena
4. Cinnabar
5. Cassiterrite
6. Wolframite
7. Malachite
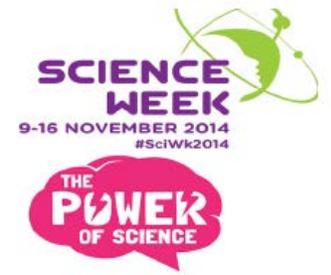8. Rutile
9. Sphalerite
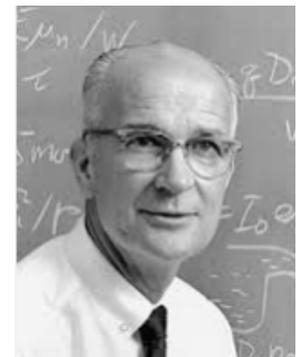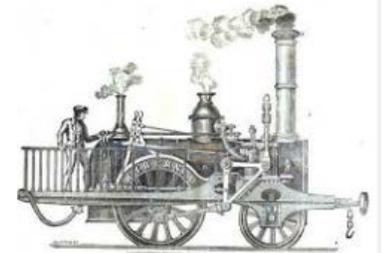10. Monazite

The Solar System & Space Exploration

1. Who made the first spacewalk: Gherman Titov, Alexei Leonov or Ed White?

2. Discrepancies in the orbit of which planet were resolved by General Relativity in 1915?

3. What is the main constituent of the clouds on Venus?

4. What is the name of Jupiter's largest moon?

5. How many men have walked on the moon?

6. What is the name of the largest gap in Saturn's rings?

7. What are Mars' polar ice caps mostly made of?

8. On which planet is "The Great Dark Spot"?

9. Which planet was discovered by Herschel in 1781?

10. Who so far has been the oldest person in space?
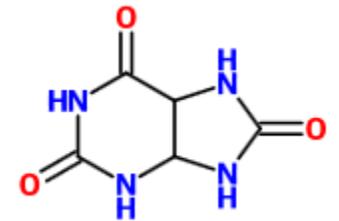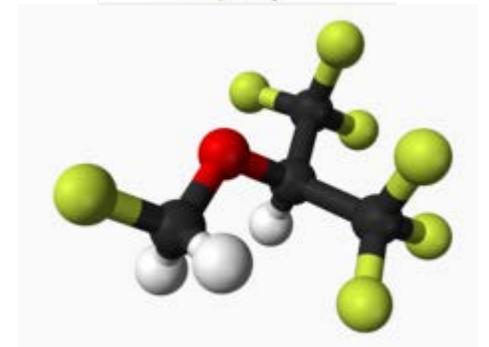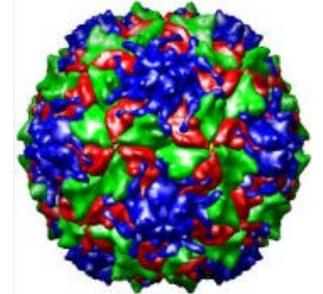
History of Engineering and Materials

1. What breakthrough did Johann Böttger make in Dresden in 1708, and refine in Meissen?

2. The Hawker Siddeley P 1127 was the forerunner of which military aircraft?

3. What was Ireland's first railway?

4. Which is the oldest surviving railway station in the world? (half a mark for the town or city).

5. What is the tallest man-made stone structure in the world?

6. Which chemical element is the principal component of a "Neo" magnet?

7. For what development did William Shockley receive the Nobel Prize for Physics in 1956?

8. Christopher Cockrell was instrumental in the development of which form of transport?

9. Which transportation "first" took place on 21st November 1783 in Paris?

10. Which is the world's largest power station in terms of installed capacity?
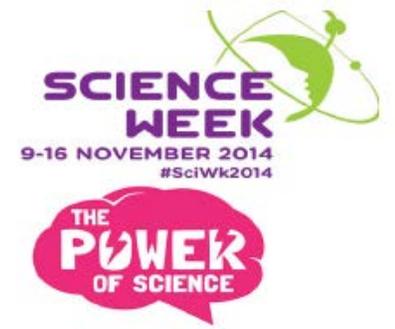
Medicine and Physiology

1. A vaccine for which disease was developed by Jonas Salk in 1952?

2. The Ebola virus is named after a river in which country?

3. Where in the body is the Pinna?

4. And where in the body is the Macula?

5. How is the drug Fluoxetine better known as?

6. What are the two bones that form the upper jaw and palate known as?

7. What is Sevoflurane used for?

8. What complaint is caused by a Sarcoptes mite?

9. Which neuropathologist, born on Bavaria in 1864, discovered amyloid plaques in the brain of a former patient?

10. What common complaint is caused by crystals of Dihydropurinetrione?

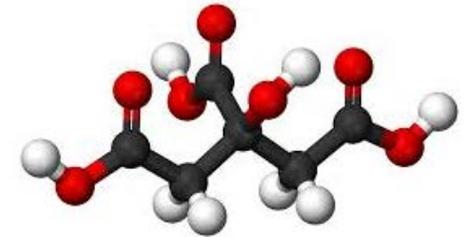# Marine or Aquatic Mammals

1
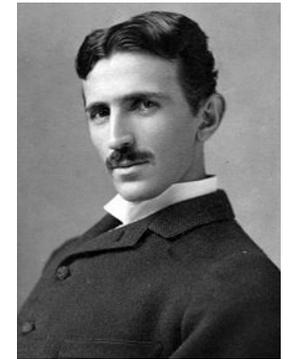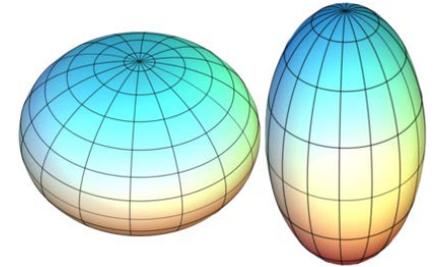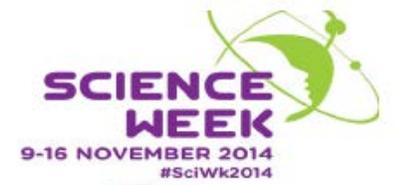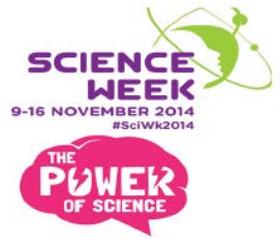

2

3

4

5

6

7

8

9

10

Miscellaneous

1. Which Theory is connected with the names Cooper, Hofstadler, Wolowitz & Koothrappali?

2. If a flattened spheroid is called "oblate" what word would be used for an elongated spheroid?

3. In which country did Nikola Tesla do most of his work?

4. Which two letters do not appear on the Periodic Table (for all discovered elements)?

5. What is the world's largest carnivore?

6. Where was the first detonation of a nuclear weapon?

7. If $y = e^x$ what is dy/dx?

8. How many moons does Pluto have (at the latest count)?

9. "Exocet" is the French name for which type of animal?

10. 3-carboxy-3-hydroxypentanedioic acid is found in certain fruits. How is it better known?

Science Fiction

1. Who was the voice of Marvin the Paranoid Android in the 2005 film of "The Hitchhikers Guide to the Galaxy"?

2. What, according to Ray Bradbury, is the autoignition temperature of paper?

3. Who wrote the novel "The Land that Time forgot"

4. What was the subtitle of the 2014 "Captain America" film?

5. In which recent film did Andy Serkis play Caesar?

6. Which TV series shown on E4 this year involved post-apocalyptic returnees to Earth?

7. Who created "Fireball XL5", "Thunderbirds" and "Captain Scarlett"?

8. In the 1966 novel by Keith Roberts, what sort of animals were "The Furies"?

9. What is the name of the Victorian, man-eating, lesbian lizard who occasionally appears in Dr Who?

10. Of what race was Worf in "Star Trek: The Next Generation"?