

**This set of answers to QUIZ # 1 are answered with the best of my knowledge, at the time of writing ..**

**I cannot guarantee that the answers are totally correct, also, nothing remains static. Wikipedia is always available for further references to these problems.**

#### **Answer to question 1 /**

**Red is nearly always at the top of a set of traffic lights, even in other countries, so it can be seen more easily from a greater distance to prevent accidents, and it has a more important/prominent position for your attention.**

**It is easier for a colour blind person to know which light is being displayed if the position of the colours remains consistent throughout the country.**

**Helpful link/s - <http://www.perl.com/pub/a/2001/05/22/trafficlights.html>  
<http://www.inspirationline.com/Brainteaser/traffic.htm>**

#### **Answer to question 2 /**

**Adelaide in South Australia has a tremendous termite problem.**

**It is so severe in some places that just placing a plank of wood on open ground can be an invitation to dinner for these little beasts.**

**It will only take a week in some instances for the termites to “take a hold” on the plank.**

**Buildings are just as vulnerable.**

**Strong and clever measures have to be taken to prevent them from finding or accessing any wood in these structures.**

**Poisoning the wood (and hence every other organism including the human occupants) is another option.**

**It also seems most of Australia is very troubled by termites.**

**Helpful link/s - <http://www.samuseum.sa.gov.au/orig/pdf/termites.pdf>**

#### **Answer to question 3 /**

**The basic answer is NO ..**

**As toilet paper is broken down almost as soon as it reaches the septic systems or before it reaches the treatment plants, there is really nothing left to recycle as paper again.**

**Maybe recycled toilet paper should be renamed recycled paper for the toilet.**

**Helpful link/s - <http://www.wwf.org.au/news/n256/>**

#### **Answer to question 4 /**

**Resin in solder is used mainly to flow over the heated metal surface to be soldered to, to prevent oxidation of that surface, so the melted solder can make a good electrical “bond” with the metal/s in question.**

**Helpful link/s - <http://www.electronics-tutorials.com/basics/soldering.htm>**

**See this site for a description of solder resin –**

**[http://books.google.com.au/books?id=1N6-cBaeJcsC&pg=PA50&lpg=PA50&dq=solder+resin+composition&source=web&ots=LY3n7ezuE7&sig=fRGI65MFRgH\\_pxT2saGXYz8Y6kY&hl=en&sa=X&oi=book\\_result&resnum=10&ct=result#PPA50,M1](http://books.google.com.au/books?id=1N6-cBaeJcsC&pg=PA50&lpg=PA50&dq=solder+resin+composition&source=web&ots=LY3n7ezuE7&sig=fRGI65MFRgH_pxT2saGXYz8Y6kY&hl=en&sa=X&oi=book_result&resnum=10&ct=result#PPA50,M1)**

### **Answer to question 5 /**

To build up compressed air you need a compressor of some type.

All compressors run at a low efficiency.

Because of this, it is uneconomical (money wise and environment wise) to think of this form of “fuel” as a better way to go for transport.

It is really only a good idea in confined work areas where pollution from combustion engine fumes, or where electrical sparking (if combustible fumes may be present), will be a problem.

Helpful link/s - <http://www.p2pays.org/ref/32/31312.pdf>  
<http://www.mntap.umn.edu/energy/82-CompAir.htm>

### **Answer to question 6 /**

Mammalian blood is predominately composed of oxygenating blood cells.

These blood cells use haemoglobin to transfer oxygen around the body and haemoglobin just happens to be red (mainly due to the iron content).

Helpful link/s - <http://www.iscid.org/encyclopedia/Haemoglobin>

### **Answer to question 7 /**

Lobster blood is usually a clear to light blue colour.

The crustacean family use haemocyanins in their oxygenating blood cells to transport oxygen around their bodies.

Haemocyanins are copper based instead of iron based and it is this copper that gives the blood its light blue appearance.

Helpful link/s - [http://www.brookscole.com/chemistry\\_d/templates/student\\_resources/0030244269\\_campbell/HotTopics/NonHbOxygenCarriers.html](http://www.brookscole.com/chemistry_d/templates/student_resources/0030244269_campbell/HotTopics/NonHbOxygenCarriers.html)

### **Answer to question 8 /**

As most modern computer “tower” cases evolved from lay down “desktop” cases, and that most desktop motherboards had their power connectors at what is now the “top” of the motherboard (when viewed inside most tower computer cases), I can only assume that it was considered appropriate to keep the power supply close to that end of the motherboard and away from the base of the computer where, as it contains a fan for cooling, it was less likely to gather up dust and debris.

This is only a pure guess on my part as some tower cases have the boards facing the other way inside the case.

But this rare.

### **Answer to question 9 /**

Turpentine was originally a tree resin derivative.

It can still be obtained this way, though now it is more commonly derived from crude oil and is more commonly known as “mineral turps”.

Helpful link/s - <http://www.nzic.org.nz/ChemProcesses/forestry/4F.pdf>

**Answer to question 10 /**

**LPG and LNG are both fossil fuels that have locked up vast quantities of the Earth's carbon. If this carbon is allowed to escape into the Earth's atmosphere by being used as fuel, then our green house problems are going to grow with it.**

**Because there is no way this carbon is going to be removed from our biosphere afterwards by being placed into carbon sinks, it cannot be regarded as being good for our ecology, or in other words, it cannot be classified as a green fuel.**

**Helpful link/s - <http://www.lpg-solutions.co.uk/facts.html>  
<http://napplp.com/subpage1.html>**

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