Chemistry Toss-up Short Answer

What halogen has a strong enough electronegativity to bond with noble gases?

Fluorine

Chemistry Toss-up Short Answer

What bond is formed when a metal bonds with itself?

Metallic

Chemistry Toss-up Short Answer

What is the reason that there are many chemicals that are used in the production of fireworks?

The colors are created by certain elements atomic spectrums.

Chemistry Toss-up Short Answer

In a smoke detector there is americium, but after many years the element neptunium appears. Why is that?

Decays into neptunium

Chemistry Multiple Choice

What type of bond forms when a non-metal bonds with another non-metal?

W Ionic

X Covalent

Y Hydrogen

Z Metallic

Physics Toss-up Short Answer

When a ball is thrown upward what is its velocity when it reaches the topmost point of its curve?

V=0

Physics Toss-up Short Answer

Who was the Italian scientist that was able to demonstrate a self-sustaining nuclear chain reaction?

Enrico Fermi

Physics Toss-up Short Answer

What is the slope of a graph of linear motion?

Slope= delta x/ delta t

Physics Toss-up Short Answer

What are the three main points of Newton’s Third Law of Motion?

Equal and opposite reactions

Different objects for the actions

Different effects on different objects

Physics Toss-up Multiple Choice

Blue light waves have a lower frequency, while yellow light waves have a higher frequency, so when blue light enters the atmospheres they…

W Are reflected

X Scatter and refract

Y Disappear

Z Nothing happens

Biology Short Answer

What is the polysaccharide that insects use to create their exoskeletons?

Critin

Biology Short Answer

What type of configuration is found in all starches?

Alpha configuration

Biology Short Answer

What type of configuration is found in all cellulose?

Beta configuration

Biology Short Answer

What are the two groups that are present in amino acids?

An Animo group and Carboxyl group

Biology Short Answer

How many fatty acids does a phospholipid contain?

2

Math Short Answer

What is the equation for a north-south opening hyperbola?

y²/a²-x²/b²

Math Short Answer

What is the sum of the first five factorials?

156

Math Short Answer

What is the value of ₉C₅?

126

Math Short Answer

x²/a²-y²/b² is the equation for what type of conic section?

East-West opening hyperbola

Math Short Answer

What is the sum of the first hundred numbers?

5050

Astro/Earth Short Answer

What is the classification of our Sun?

Yellow dwarf

Astro/Earth Multiple Choice

What is the luminosity of the sun?

W 2.87 x 10^26

X 3.827 x 10^26

Y 4.827 x 10^26

Z 5.827 x 10^26

Astro/Earth Multiple Choice

What is the range for the surface temperatures for a blue supergiant?

W 1000-5000 K

X 5000-10000 K

Y 10000-50000K

Z 50000-100000K

Astro/Earth Short Answer

What is the definition of the fault?

Planar fracture or discontinuity in a volume of rock

Astro/Earth Short Answer

What are the two spiral galaxies that are in the constellation Ursa Major?

Messier 108 and Messier 109