**Science and Arithmetic Questions**

1. What connects these three Physics Nobel Laureates and a chemistry winner other than that they are all American ?

Leon Cooper 1972; Steven Weinberg 1979; Mel Schwartz 1988, and chemist Robert Lefkowitz 2012

Same school - Bronx High

1. These 16 elements can be grouped into four sets of four. Can you define the groups and allocate the elements to them ?

*Beryllium(Be) ; Frankium(Fr); Gallium(Ga); Germanium(Ge); Gold(Au); Helium(He) ; iron(Fe); Lead(Pb)\_; Mercury(Hg); Neon(Ne); Potassium(K) ; Plutonium(Pu); Scandium(Sc); Silver(Ag); Uranium(Ag); Xenon*(Xe).

Fr Ga Ge Sc named after a country

He. Hg. Pu U. named after celestial bodies

Be. Fe. Ne. Xe. ‘e’ is the second letter

Au K. Ag Pb Symbol not the first letter

1. Here are four British Nobel prize winners.

Paul Dirac, Neville Mott, John Kendrew, Peter Higgs.

*They all grew up in the same city and went to two high schools, two to each.*

*Can you name the city, the schools and who went to which one.l*

Bristol. Mott and `Kendrew. Clifton College

Dirav and Higgs Cotham School, or Merchant Venturers

1. Using the number 4 four times and standard arithmetic symbols + - \* and / we can form integers e.g 1 = 4/4, 2 = 4/4 + 4/4, etc

Can you find solutions for the following integers?

3. (4+4+4)/4

4. (4-4)x4 + 4

5. (4x4 +4)/4

7. ((4+4) – 4/4

15. 44/4 + 4

43 44 - 4/4