Tutorial #:_____ Name:_____

A. Which element is described by each of the following? (Place each part letter (a, b, c, etc.) in the correct element box in the blank periodic table below).

(a) smallest atomic radius in group 15 (Nitrogen)

(b) largest atomic radius in period 3 (Sodium)

(c) highest first ionization energy in group 14 (Carbon)

(d) group 13 element that forms the most basic oxide (Thallium)

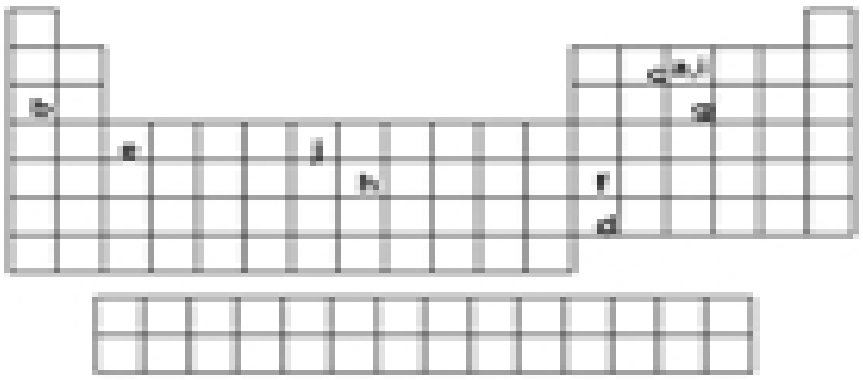
(e) period 4 transition element that forms a 3+ diamagnetic ion (Scandium)

(f) period 5 element that forms 3+ ions with a "pseudo noble gas" configuration (Indium)

(g) whose ground state electron configuration is $[Kr]5s^2 5p^3$ (Antimony)

(h) ground state electron configuration is $[Kr]5s^1 4d^5$ (Molybdenum)

(i) least metallic in Group 17 (Nitrogen)

(j) a period 4 transition metal element that forms a 2+ ion with a half filled d sublevel (Manganese)

(k) name any two of the above elements that I forgot (Hint!)