Question 4:

Electronic configuration for elements **O**,**P** and Q are as follows:

: 1s²2s²2p⁶3s²3p¹

 $P : 1s^22s^22p^63s^23p^5$

 $Q : 1s^22s^22p^63s^2$

a) State the period and group for \boldsymbol{O} and \boldsymbol{P} in the periodic table.

O: period = Group =

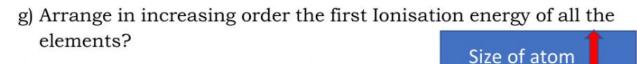
P: period = Group =

Q: period = Group = Example of hydride compound:

Boron hydride @ BH₃

Size of atom

- b) What is the molecular formula for chloride compound of *O*?
- c) What is the molecular formula hydride compound of **P**?
- d) Write the molecular formula of the compound formed when **O** reacts with P.
- e) Write the molecular formula of the compound formed when **Q** reacts with P.
- f) Which element is the biggest in term of size? Which element has the highest IE1?



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Electronegativity

h) Which element has the strongest electronegativity?