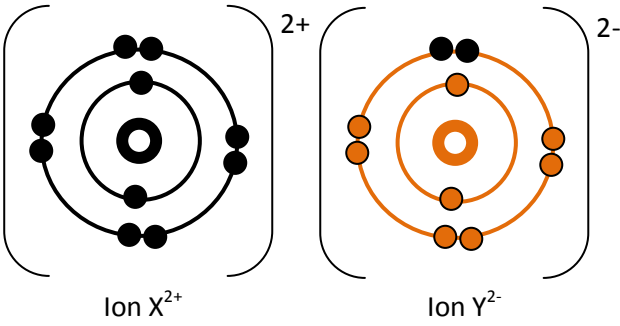
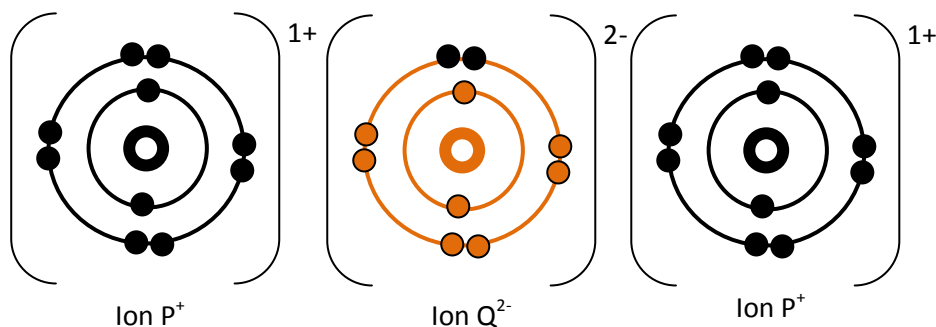


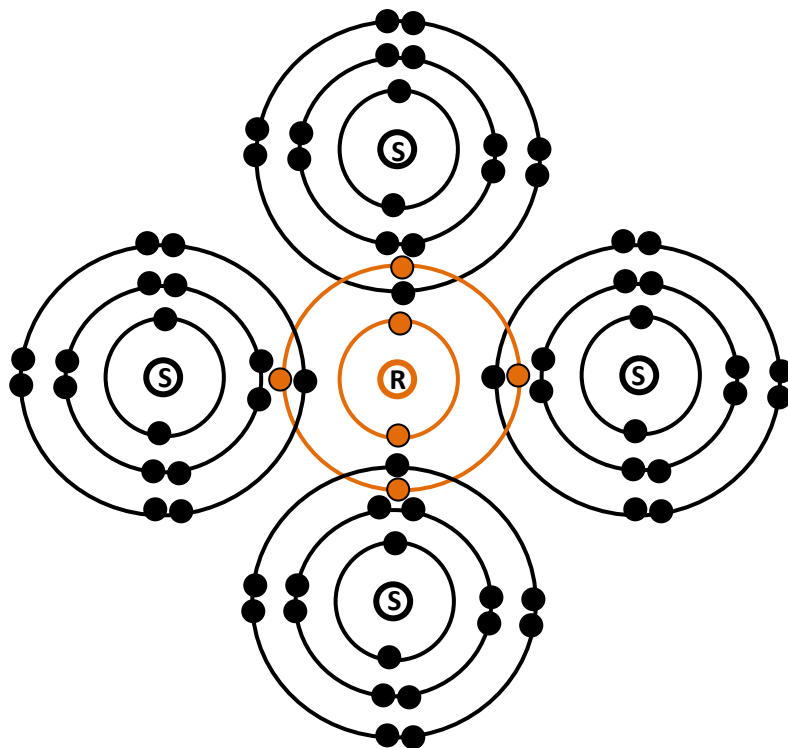
Q No	Answer	Mark
7.	<p>a. Metal : P / Q / R / S / T Non Metal : U / W / X</p> <p>b. 2.8.5</p> <p>c. R</p> <p>d. i. Electronegativity increase from Q, T, V and U ii. The size of atom decrease from Q to U, increase the attraction force from nuclei to valance electron therefore the attraction force is strong to attract other electron.</p> <p>e. Q^+</p> <p>f. i. X ii. Because X has 8 valence electron (octet arrangement) and do not have to share or transfer the electron to achieve stable electron arrangement</p>	
8.	<p>a. 2.8.2</p> <p>b. i. ionic bond ii. Atom X become ion X^{2+}. Atom X will release two valence electron to atom Y to achieve octet electron arrangement. iii.</p> <div style="text-align: center;">  <p style="margin-left: 100px;">Ion X^{2+}</p> <p style="margin-left: 200px;">Ion Y^{2-}</p> </div> <p>iv. Soluble in water / High melting and boiling point / Can conduct electricity in molten and aqueous state</p> <p>c. i. ZY_2 // CO_2 ii. Relative molecular mass = $12 + (16 \times 2) = 44$ iii. Nitrogen dioxide (any covalent compound can be accepted as an answer)</p>	

9. a. i. 2.6
ii. Period 2, Group 16

b. i. Ionic bond
ii.



c. Covalent Bond with formula RS₄



d. Compound in b has higher melting point and boiling point than compound in c.
Compound in b is attracted with strong electrostatic force, so need more energy to overcome the force, thus melting point is higher compare to compound in c has a weak intermolecular forces, so need a little energy to overcome the forces.