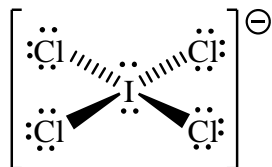


- Draw a Lewis structure and thus determine the geometry of the  $\text{ICl}_4^-$  ion. (The I is the central atom.)

Marks  
2



**There are two lone pairs and 4 bonds around the iodine: the geometry is based on an octahedron with the lone pairs located opposite to one another to minimise repulsion between them. The geometry of the actual molecule is therefore square planar.**