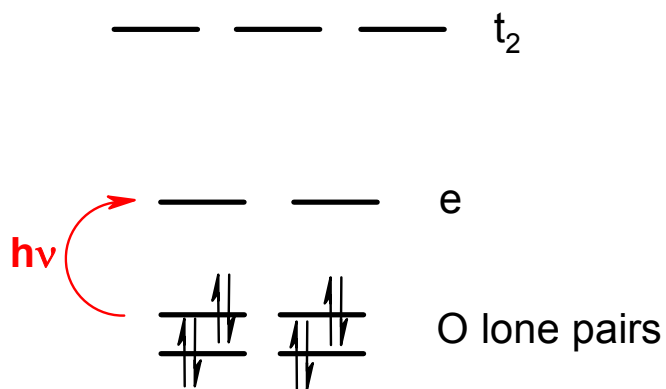


Charge Transfer Absorptions: worked examples

(done on the board)

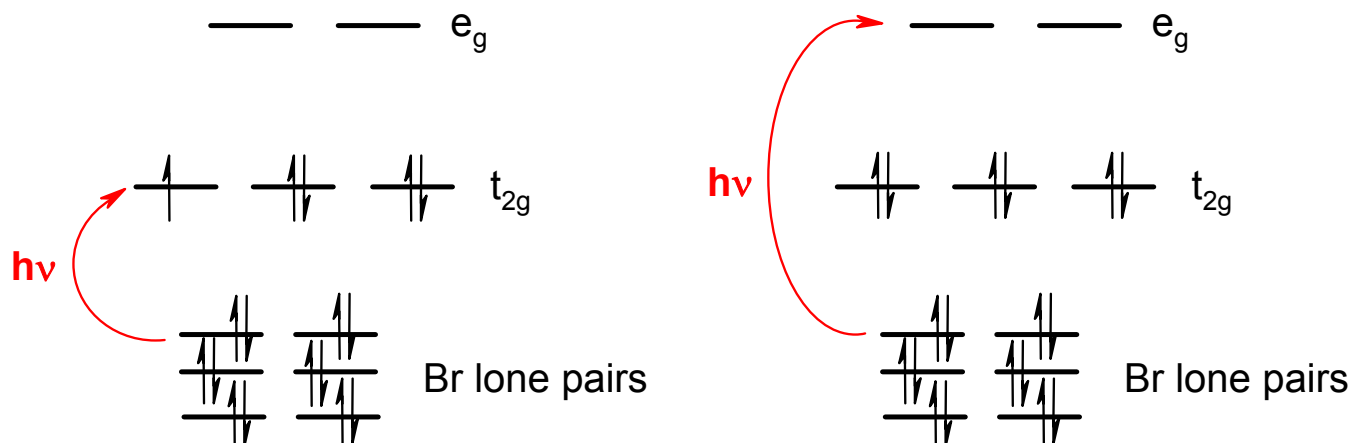
LMCT Bands

MnO_4^- d^0 Mn^{7+} deep purple



$[\text{IrBr}_6]^{2-}$
 deep blue
 $d^5 \text{ Ir}^{4+}$

$[\text{IrBr}_6]^{3-}$
 orange
 $d^6 \text{ Ir}^{3+}$



- λ for the Br lone pair to t_{2g} transition falls in the red for Ir^{4+}
- λ for the Br lone pair to e_g transition falls in the UV with a tail into the blue for Ir^{3+}

MLCT

