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- Compounds of *d*-block elements are frequently paramagnetic. Using the box notation to represent atomic orbitals, account for this property in compounds of Cu^{2+} .

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- Complete the following table.

Formula	Oxidation state of transition metal	Coordination number of transition metal	Number of <i>d</i> -electrons in the transition metal	Species formed upon dissolving in water
$\text{Na}_2[\text{CoCl}_4]$				
$[\text{Ni}(\text{NH}_3)_5(\text{H}_2\text{O})]\text{SO}_4$				
$[\text{Cr}(\text{en})_3]\text{Br}_3$				

en = ethylenediamine = $\text{NH}_2\text{CH}_2\text{CH}_2\text{NH}_2$