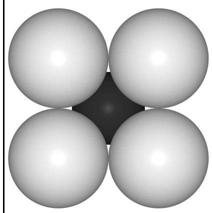
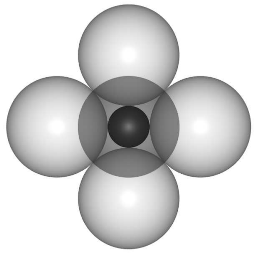
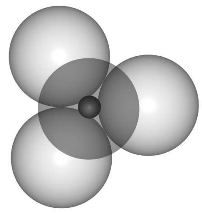
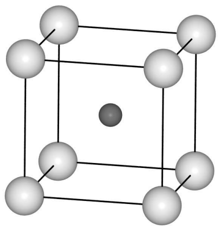
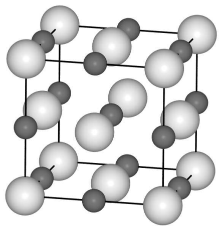
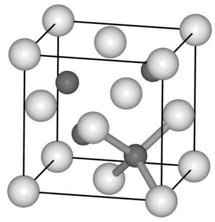
Ionenkristalle I: Idealkristalle

AB-Typen Koordinationszahlen, Strukturen, Verbindungen (Wiederholung)

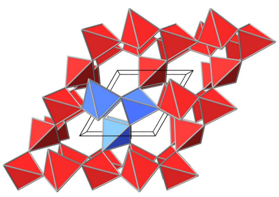
$CN_{Anion/Kation}$ =	8	6	4
$\frac{r_{Kation}}{r_{Anion}}$	> 0.73	0.73 – 0.41	0.41 –0.22
Kationen-koordination			
Elementarzelle			
Strukturtyp	**CsCl**	**NaCl**	**ZnS** (Zinkblende)
M^I-Halogenide	CsCl, CsBr, CsI	LiF, LiCl, NaF, NaCl, KF, KCl, RbF, RbCl, CsF	-
M^{II}-Chalkogenide	-	MgO, CaO, SrO, BaO, CaS, SrS	BeO, MgTe

AB_2-Typen

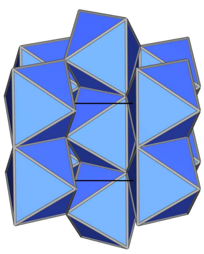
z.B. Erdalkalimetallhalogenide:

	$Be^{[4]}$	$Mg^{[6]}$	$Ca^{[8,6,6,6]}$	$Sr^{[8,6,9,7]}$	$Ba^{[8,9,9,9]}$
F	Quarz	Rutil	CaF_2	CaF_2	CaF_2
Cl	SiS_2	$CdCl_2$	Rutil (verz.)	Rutil (verz.)	$PbCl_2$
Br	SiS_2	CdI_2	Rutil (verz.)	$PbCl_2$	$PbCl_2$
I	-	CdI_2	CdI_2	SrI_2	$PbCl_2$

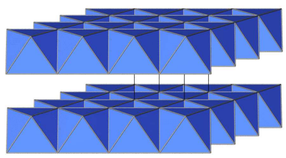
CN_{Kation}=4 CN_{Kation}=6 CN_{Kation}=8



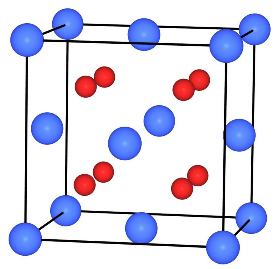
Quarz ⇑



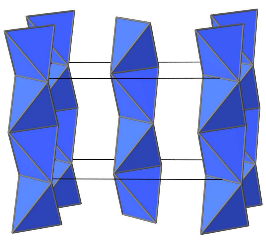
⇑ Rutil (TiO_2) ⇓



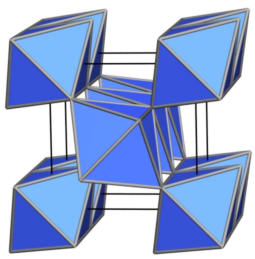
⇑ CdI_2 (CdI_6-Okt.)

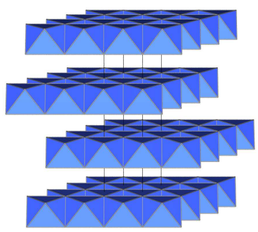


⇑ CaF_2 ⇓

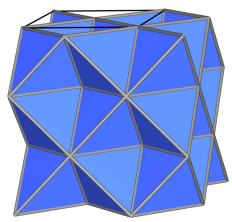


⇑ $BeCl_2$ (SiS_2-Typ)





⇑ $CdCl_2$ ($CdCl_6$-Okt.)



(FCa_4-Tetr.)