

Table 1: Crystal systems of the 14 Bravais lattice types. The inequality symbol, \neq , means that equality is not required by symmetry, but may occur by chance.

System	Axial lengths and angles	Bravais lattice	Symbol
Cubic	$a = b = c, \alpha = \beta = \gamma = 90^\circ$	Simple	P
		Body-centered	I
		Face-centered	F
Tetragonal	$a = b \neq c, \alpha = \beta = \gamma = 90^\circ$	Simple	P
		Body-centered	I
Orthorhombic	$a \neq b \neq c, \alpha = \beta = \gamma = 90^\circ$	Simple	P
		Body-centered	I
		Base-centered	C
		Face-centered	F
Rhombohedral [†]	$a = b = c, \alpha = \beta = \gamma \neq 90^\circ$	Simple	R
Hexagonal	$a = b \neq c, \alpha = \beta = 90^\circ, \gamma = 120^\circ$	Simple	P
Monoclinic	$a \neq b \neq c, \alpha = \gamma = 90^\circ \neq \beta$	Simple	P
		Base-centered	C
Triclinic	$a \neq b \neq c, \alpha \neq \beta \neq \gamma \neq 90^\circ$	Simple	P

[†]Also referred to as trigonal.

Table 2: Common crystal structures of the metallic elements near room temperature.

Semimetals		Metals					
B	Tetr.	Al	FCC				
Si	DC	Sc	HCP	Y	HCP	La	Hex.
As	Rhomb.	Ti	HCP	Zr	HCP	Hf	HCP
Te	Hex.	V	BCC	Nb	BCC	Ta	BCC
		Cr	BCC	Mo	BCC	W	BCC
		Mn	Cubic, Tetr.	Tc	HCP	Re	HCP
		Fe	BCC	Ru	HCP	Os	HCP
		Co	HCP, FCC	Rh	FCC	Ir	FCC
		Ni	FCC	Pd	FCC	Pt	FCC
		Cu	FCC	Ag	FCC	Au	FCC
		Zn	HCP	Cd	HCP	Hg	—
		Ga	Orth.	In	Cubic, Tetr.	Tl	HCP
		Ge	DC	Sn	Cubic, Tetr.	Pb	FCC
				Sb	Rhomb.	Bi	Rhomb.
						Po	Cubic

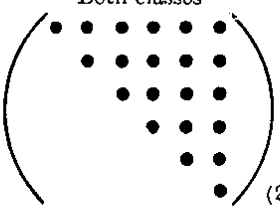
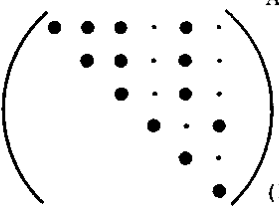
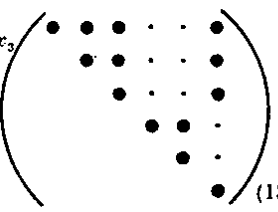
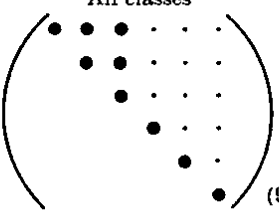
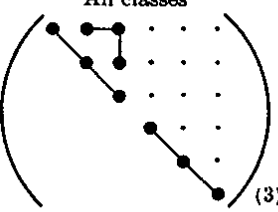
J. F. Nye. "Physical Properties of Crystals." (Oxford University Press: Oxford) 1985, pp. 140-141.

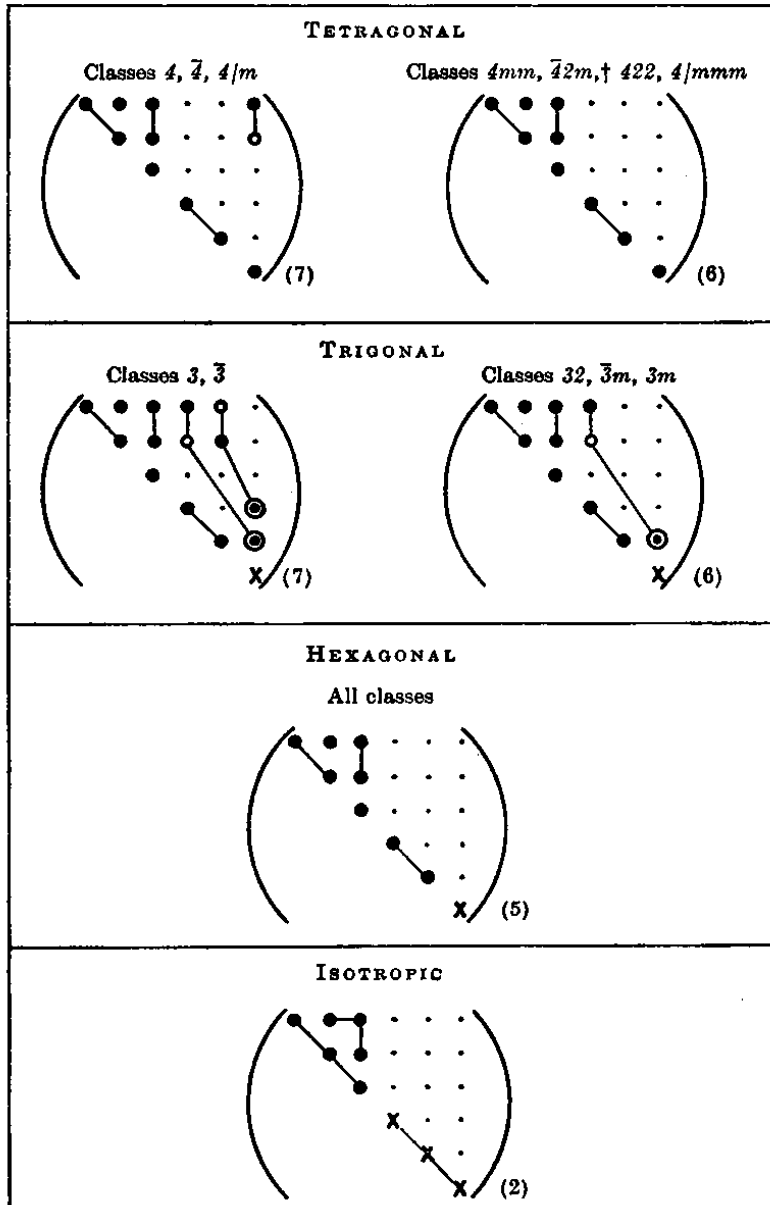
TABLE 9

Form of the (s_{ij}) and (c_{ij}) matrices

KEY TO NOTATION	
.	zero component
•	non-zero component
●—●	equal components
●—○	components numerically equal, but opposite in sign
For s	⊙ twice the numerical equal of the heavy dot component to which it is joined
For c	⊙ the numerical equal of the heavy dot component to which it is joined
For s	X $2(s_{11} - s_{12})$
For c	X $\frac{1}{2}(c_{11} - c_{12})$

All the matrices are symmetrical about the leading diagonal.

<p>TRICLINIC</p> <p>Both classes</p> 		
<p>Diad $\parallel x_2$ (standard orientation)</p>	<p>MONOCLINIC</p> <p>All classes</p> 	<p>Diad $\parallel x_3$</p> 
<p>ORTHORHOMBIC</p> <p>All classes</p> 	<p>CUBIC</p> <p>All classes</p> 	



† The same matrix holds for both possible orientations of class $\bar{2}2m$ ($2 \parallel x_1$ and $m \perp x_1$) since the addition of a centre of symmetry makes the two orientations indistinguishable