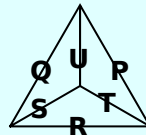

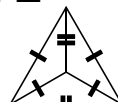






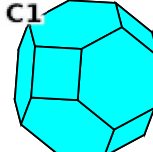
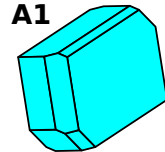
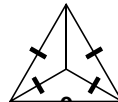
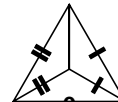
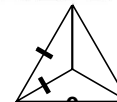
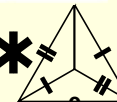
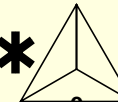
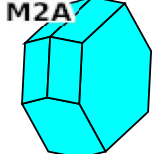
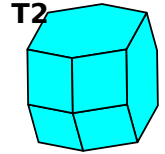
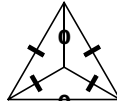
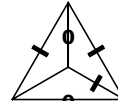
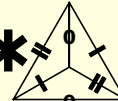
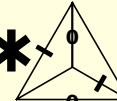
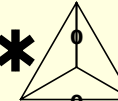
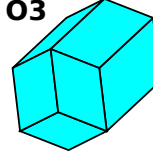
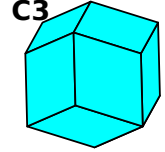
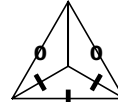
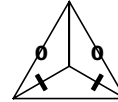
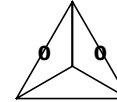
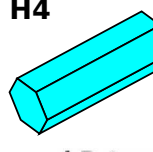
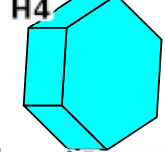
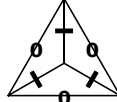
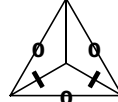
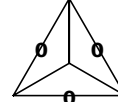
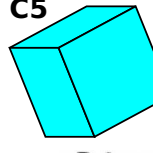
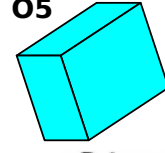


# The Bravais Lattice Types

## Lattice System

Federov Polyhedron Type

		Lattice System									Dirichlet cells also known as Dirichlet domains Voronoi domains Federov parallelohedra Wigner-Seitz cell	
	<b>C</b> cubic	<b>T</b> tetragonal	<b>H</b> hexagonal (rhombohedral)	<b>O<sub>A</sub></b> orthorhombic	<b>O<sub>B</sub></b> orthorhombic	<b>M<sub>A</sub></b> monoclinic	<b>M<sub>B</sub></b> monoclinic	<b>A</b> anorthic				
<b>1</b> truncated octahedron	<b>C1</b> <b>cl</b>  (rrr rrr)	<b>T1</b> <b>tl</b>  (rrr rrs)	<b>H1</b> <b>hR</b>  (rrr sss)	<b>O1A</b> <b>oF</b>  (rrs rrt)	<b>O1B</b> <b>ol</b>  (rst rst)	<b>M1A</b> <b>mC</b>  (rrs ttu)	<b>M1B</b> <b>mC</b>  (rst rsu)	<b>A1</b> <b>aP</b>  (rst uvw)	<b>C1</b>  cl, type 1	<b>A1</b>  aP, type 1		
<b>2</b> elongated dodecahedron		<b>T2</b> <b>tl</b>  (rr0 rrs)		<b>O2</b> <b>ol</b>  (rs0 srt)		<b>M2A</b> <b>mC</b>  (rs0 stu)	<b>M2B</b> <b>mC</b>  (rs0 rst)	<b>A2</b> <b>aP</b>  (rs0 tuv)	<b>M2A</b>  mC, type 2	<b>T2</b>  tl, type 2		
<b>3</b> truncated octahedron	<b>C3</b> <b>cF</b>  (rr0 rr0)		<b>H3</b> <b>hR</b>  (rr0 sr0)	<b>O3</b> <b>ol</b>  (rs0 rs0)		<b>M3</b> <b>mC</b>  (rs0 ts0)		<b>A3</b> <b>aP</b>  (rs0 tu0)	<b>O3</b>  ol, type 3	<b>C3</b>  cF, type 3		
<b>4</b> hexagonal prism			<b>H4</b> <b>hP</b>  (00r rrs)	<b>O4</b> <b>oS</b>  (00r sst)		<b>M4</b> <b>mP</b>  (00r stu)			<b>H4</b>  hP, type 4	<b>H4</b>  hP, type 4		
<b>5</b> cuboid	<b>C5</b> <b>cP</b>  (000 rrr)	<b>T5</b> <b>tP</b>  (000 rrs)		<b>O5</b> <b>oP</b>  (000 rst)					<b>C5</b>  cP, type 5	<b>O5</b>  oP, type 5		

**\*Not a full-dimensional Bravais type**

O3 is a 2-D manifold between O2 and O1B

M3 is a 3-D manifold between M2A and M1B

M2B is a 3-D manifold between M1A and M1B

**S6 Character**

Each Bravais type has an associated S6 "character"

Each Character symbolically displays the pattern of  
unique, equal, or zero values for the type.

[modified after Delone, Galiulin, and Shtogrin, 1975]