



Geometry and
Nature

Illinois
Geometry Lab

Minerals

Tetrahedron

Cube

Octahedron

Dodecahedron

Hexagonal Prism

Molecules

Tetrahedron

Truncated

Icosahedron

Hexagonal Prism

Geometry and Nature

Illinois Geometry Lab

University of Illinois, at Urbana-Champaign

October 9, 2013



Geometric Solids

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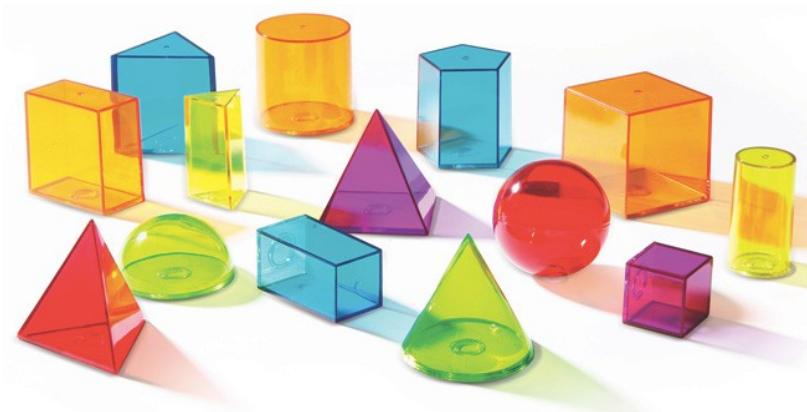
Minerals

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Many geometric solids actually occur in nature.





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Mineral crystals grow into regular, geometric shapes.





Tetrahedron

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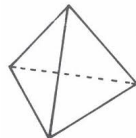
Tetrahedron

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Hexagonal Prism

Tetrahedrite





Cube

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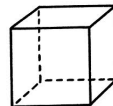
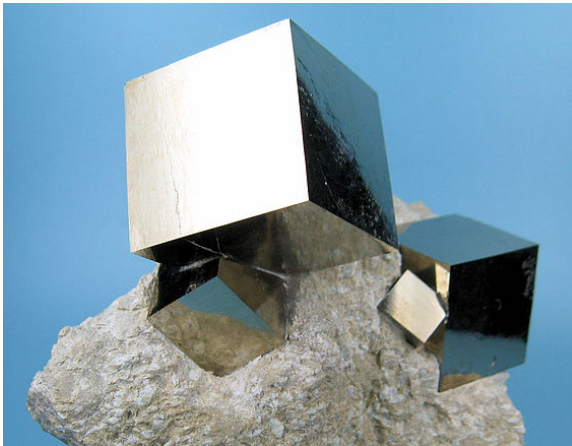
Tetrahedron

Truncated

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Hexagonal Prism

Pyrite





Octahedron

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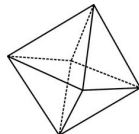
Tetrahedron

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Magnetite





Dodecahedron

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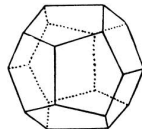
Tetrahedron

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Hexagonal Prism

Pyrite





Hexagonal Prism

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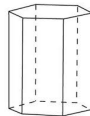
Minerals

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Quartz





Molecules

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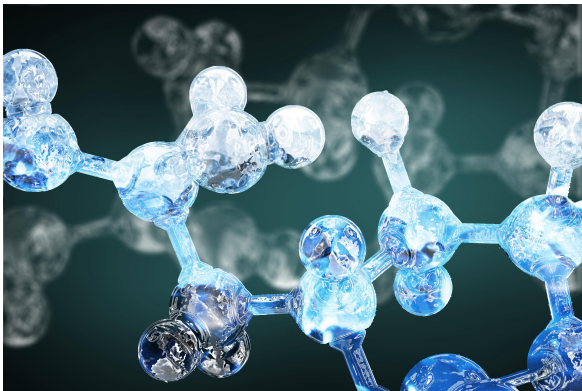
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A number of molecules also have geometric structure.





Tetrahedron

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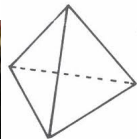
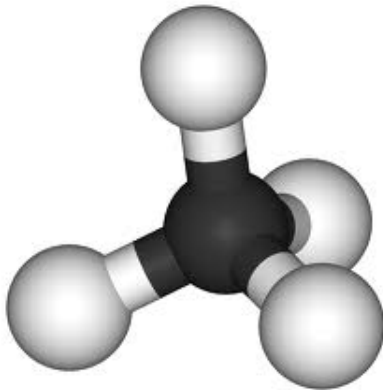
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Methane (CH_4 Molecule, Natural Gas)





Truncated Icosahedron

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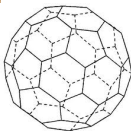
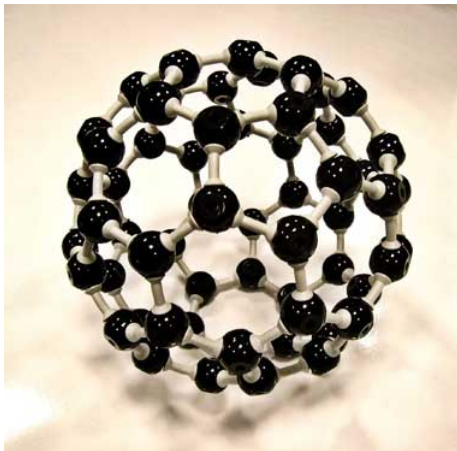
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Buckyball (C_{60} Molecule Found in Soot)





Hexagonal Prism

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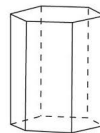
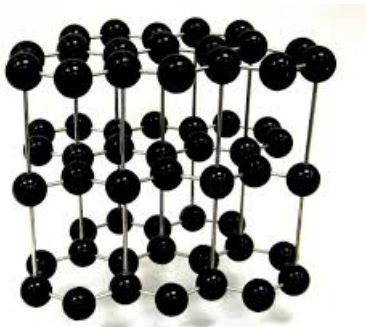
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Graphite (Found in Pencil Lead)





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Thank you for listening!