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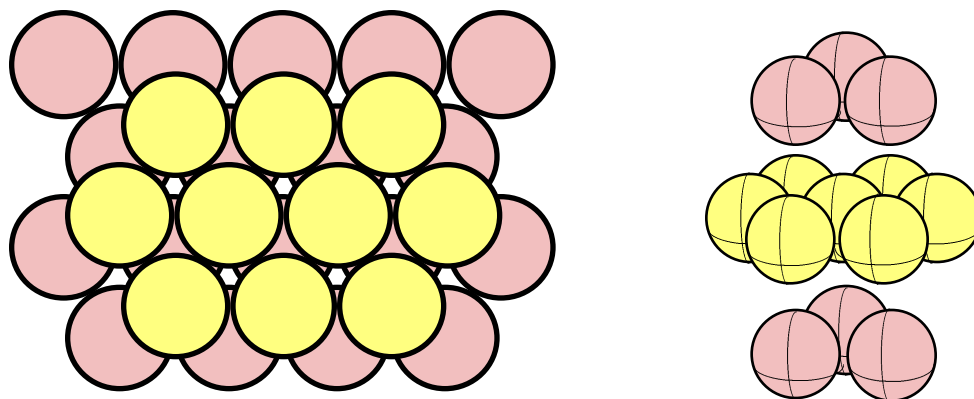
Laboratory Safety

DISCLAIMER

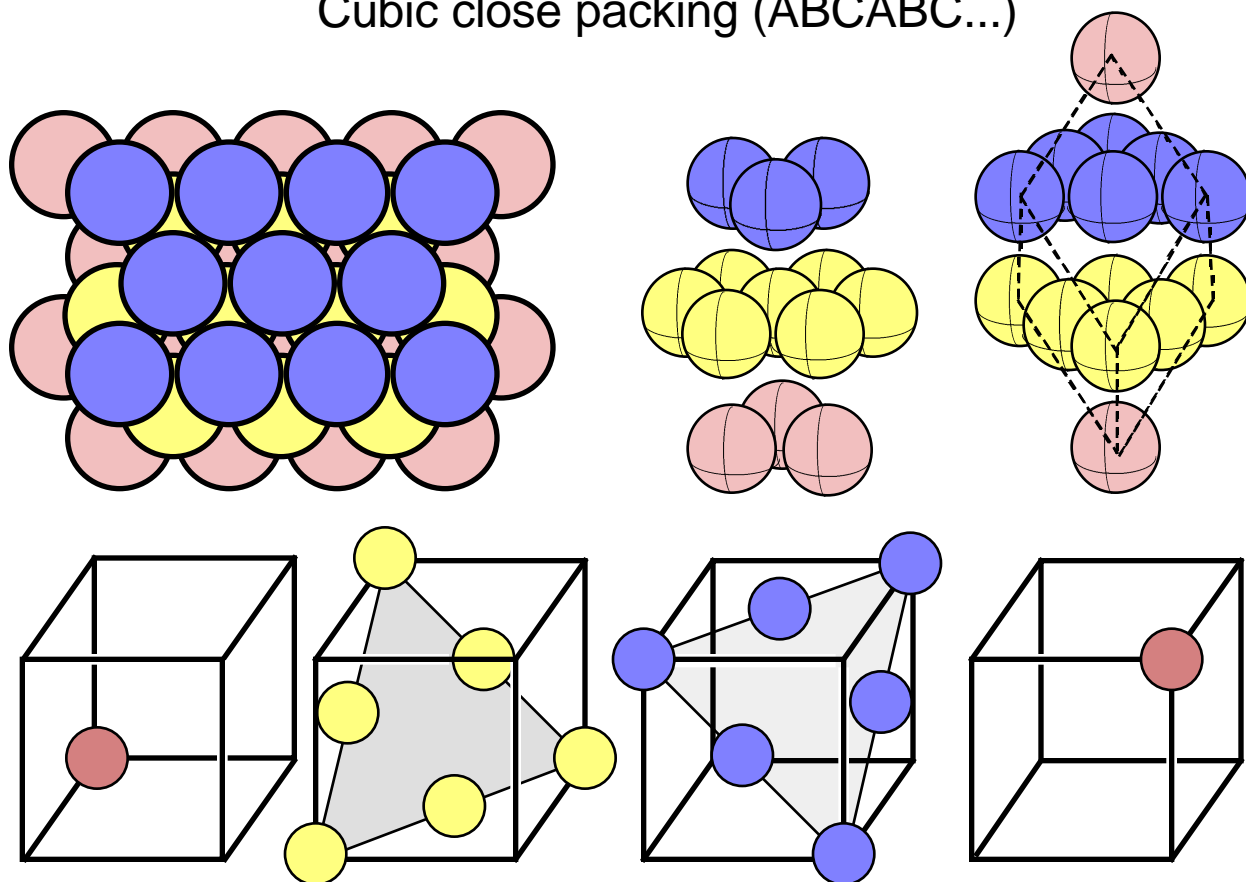
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Close Packing

Hexagonal close packing (ABABAB...)

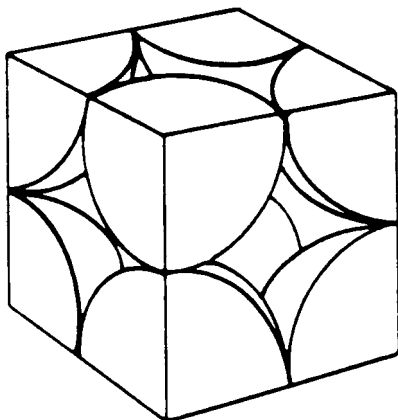


Cubic close packing (ABCABC...)



Type of Packing	Packing Efficiency	Coordination Number
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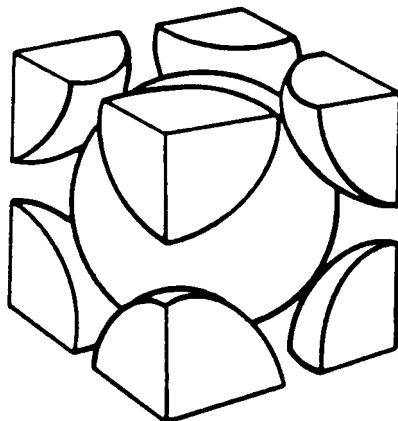
Simple cubic (sc)



52%

6

Body-centered cubic (bcc)



68%

8

Hexagonal close-packed (hcp)

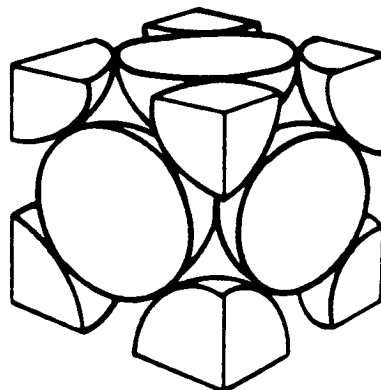
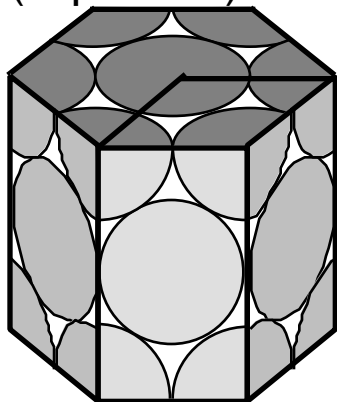
74%

12

Cubic close-packed (ccp or fcc)

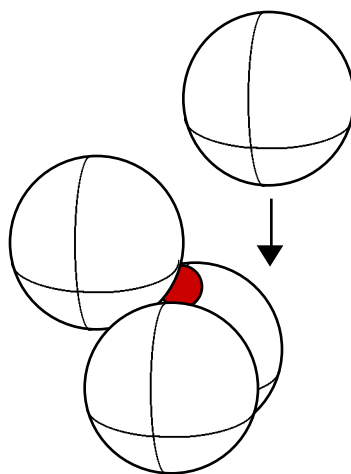
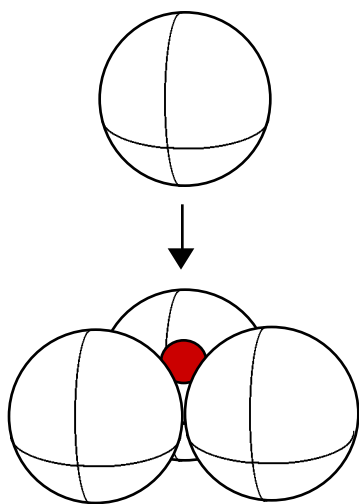
74%

12

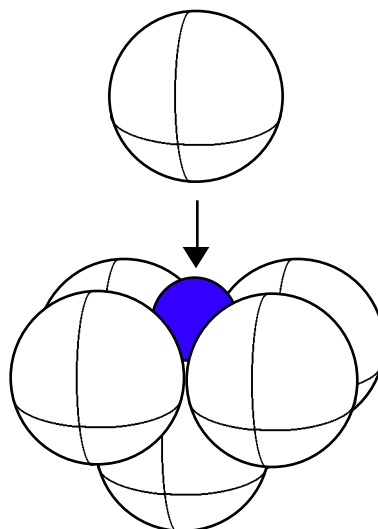
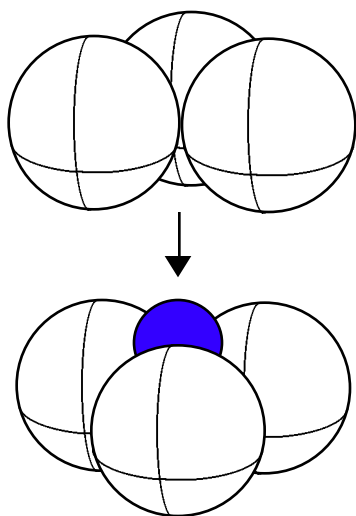


Tetrahedral, Octahedral, and Cubic Holes

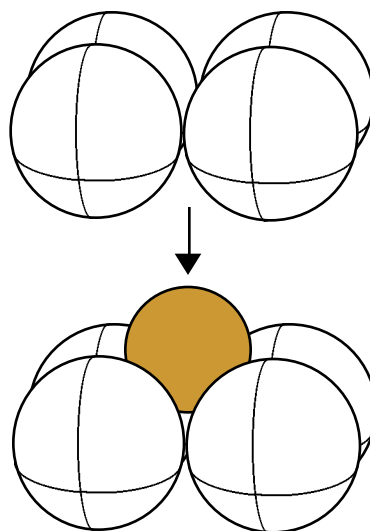
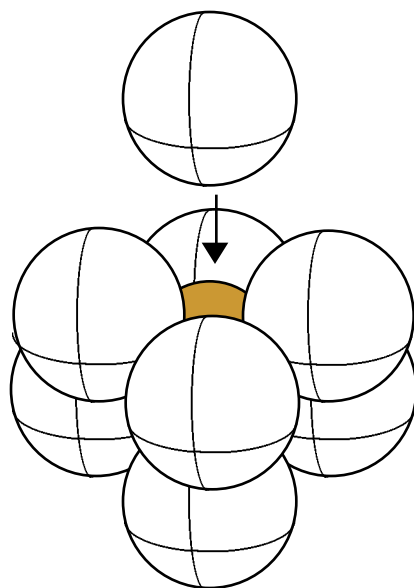
CN 4



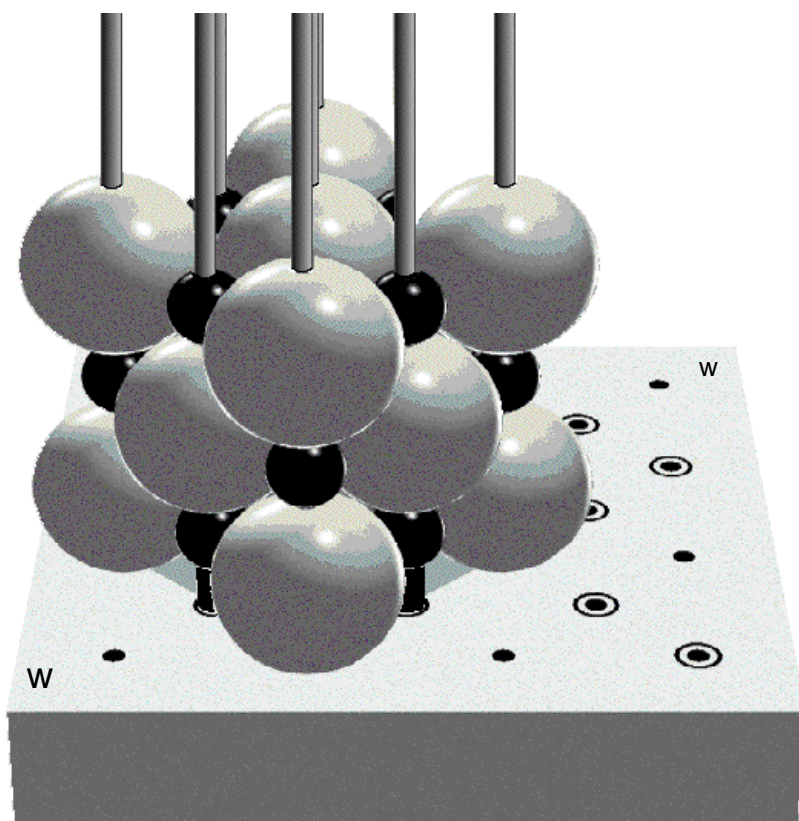
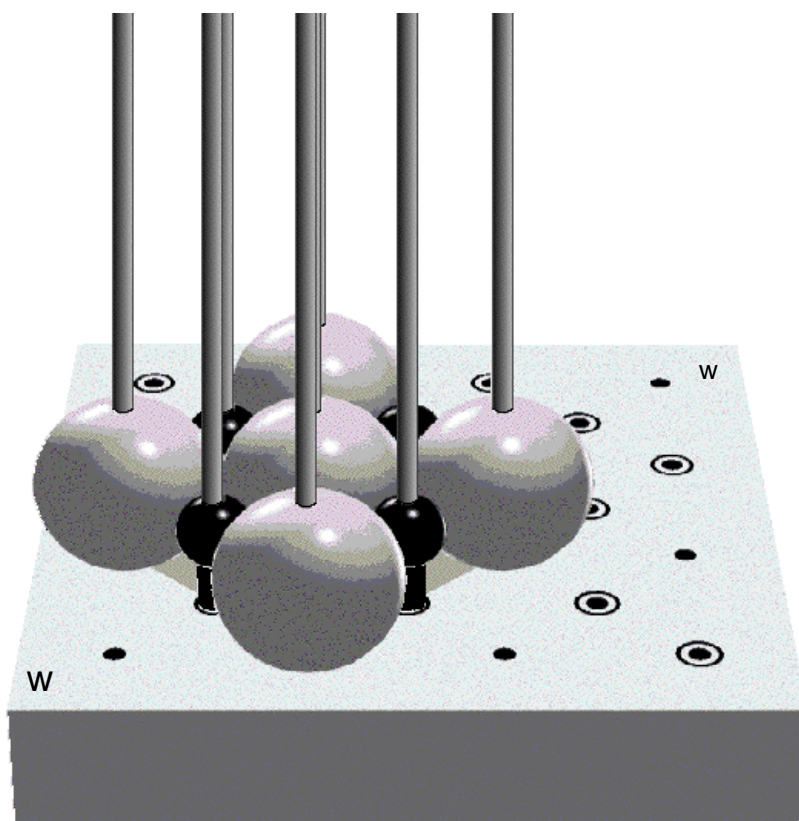
CN 6



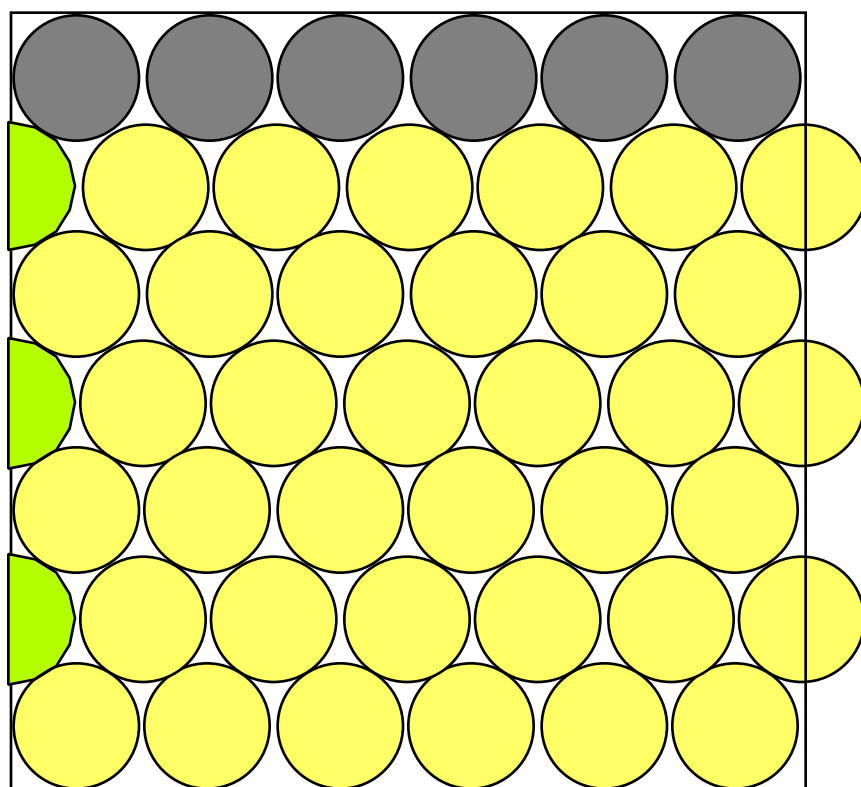
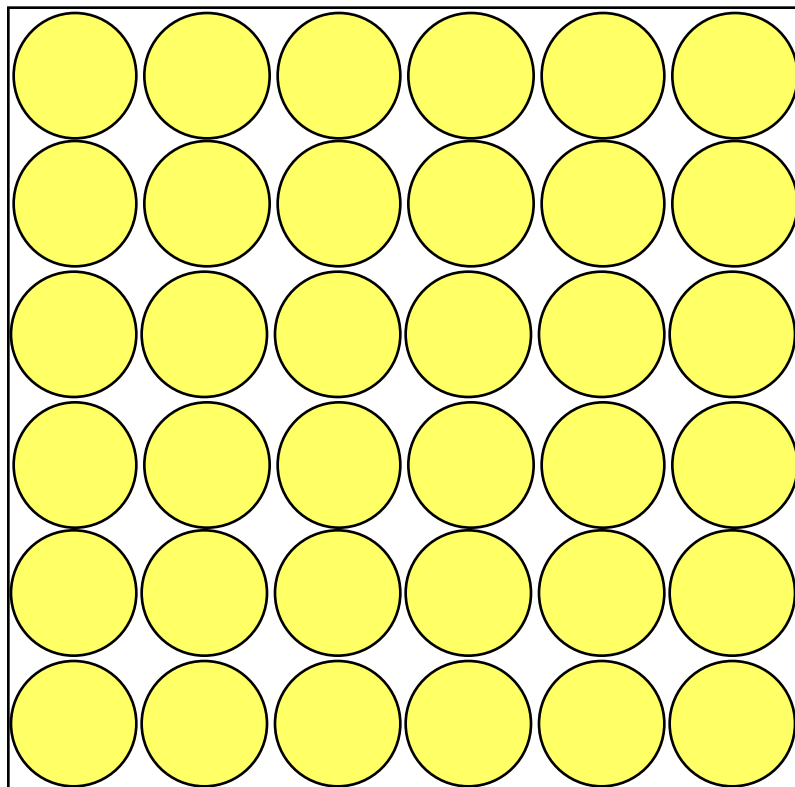
CN 8



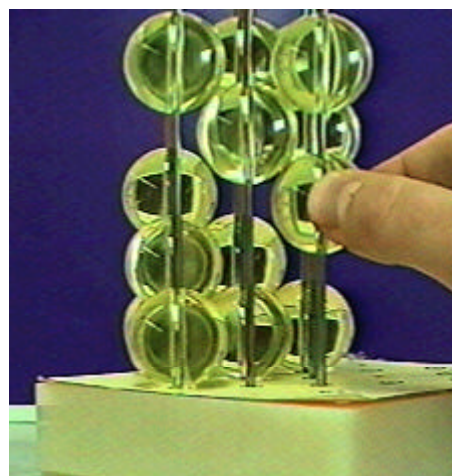
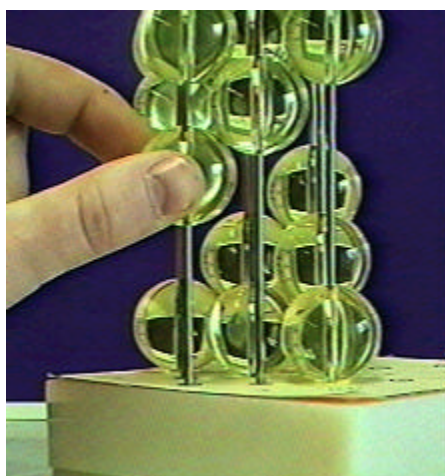
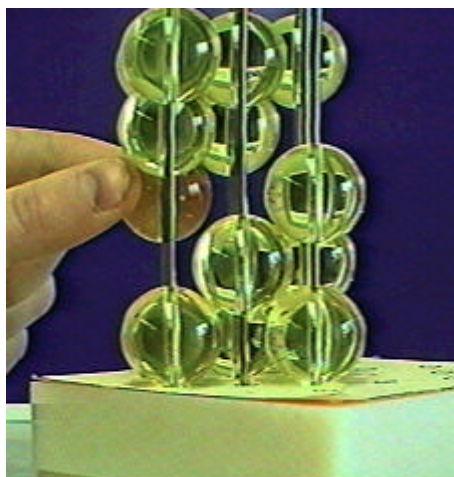
NaCl Structure



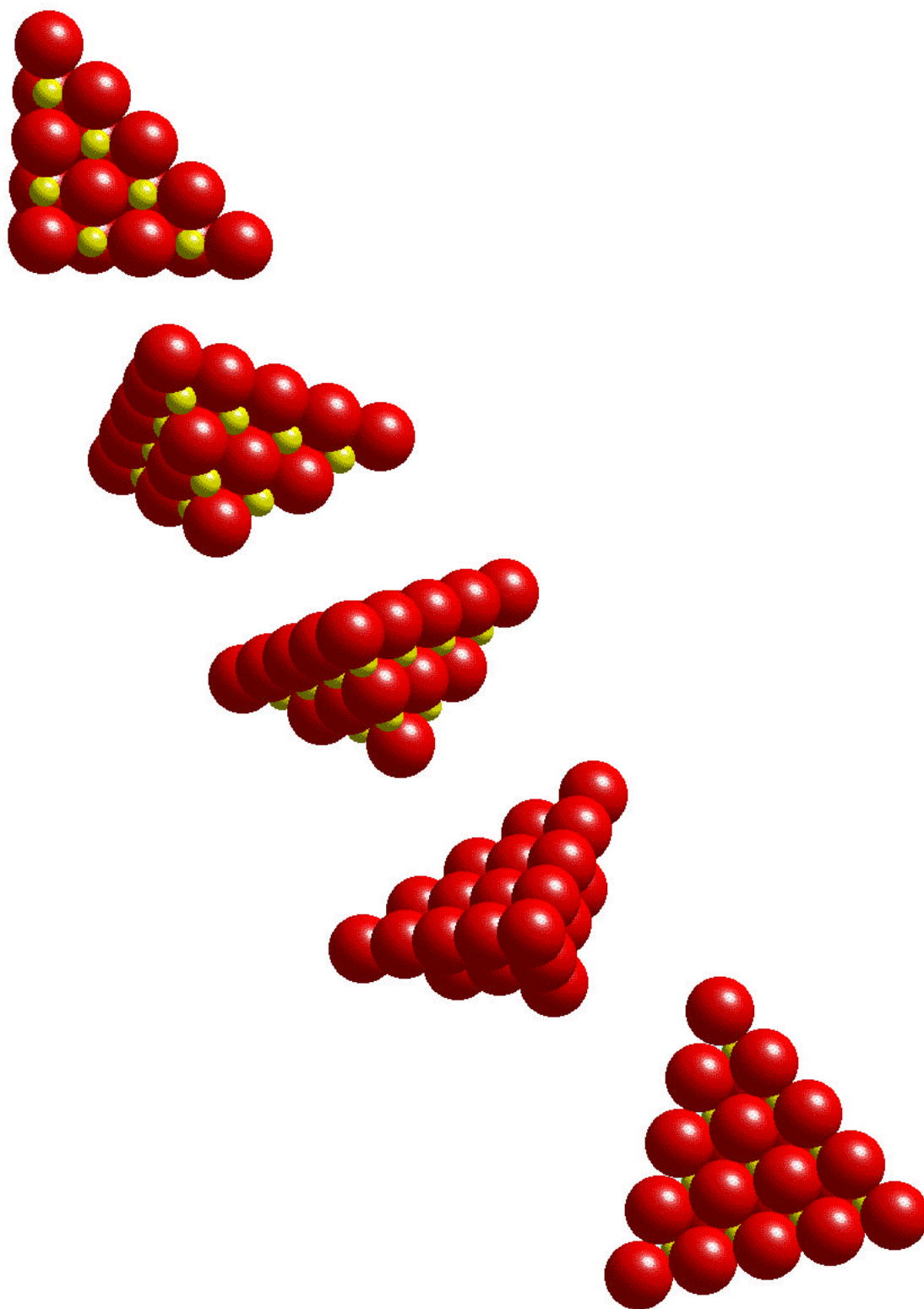
Square-Packing vs Close Packing



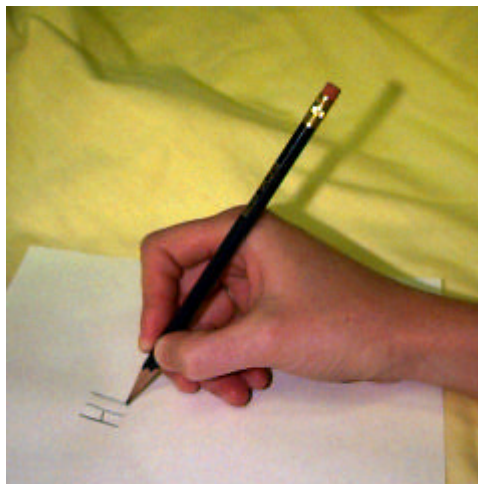
FCC Slip Planes



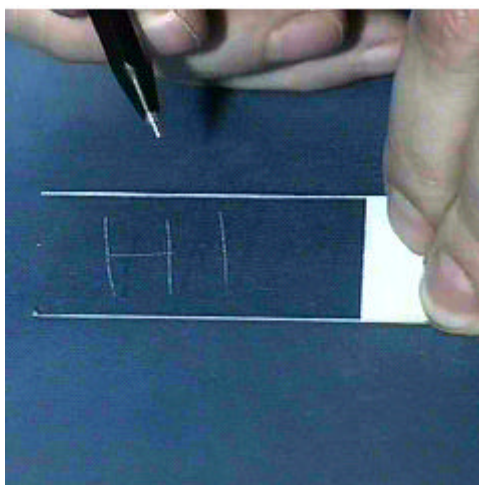
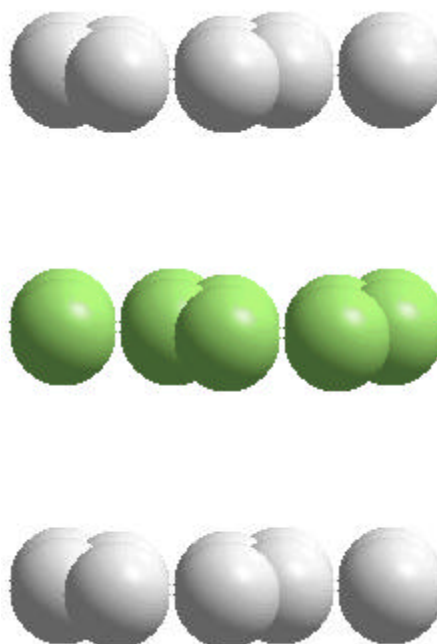
FCC and CCP



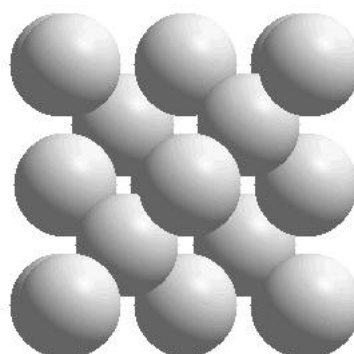
Carbon Pencils



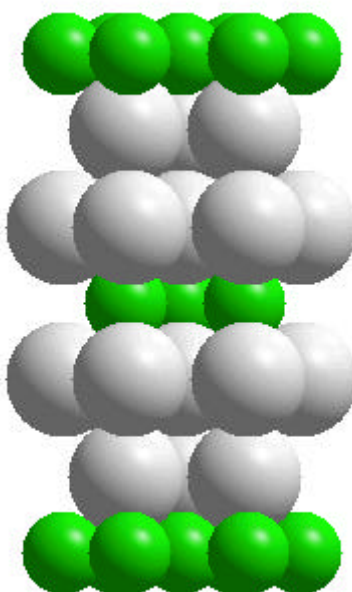
Graphite



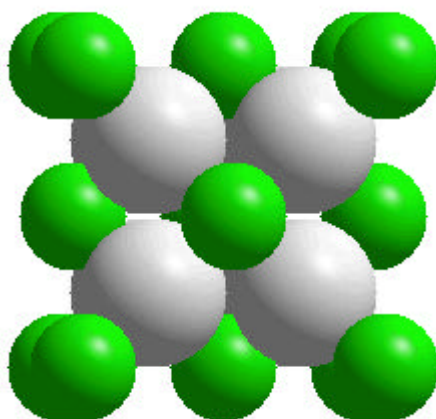
Diamond



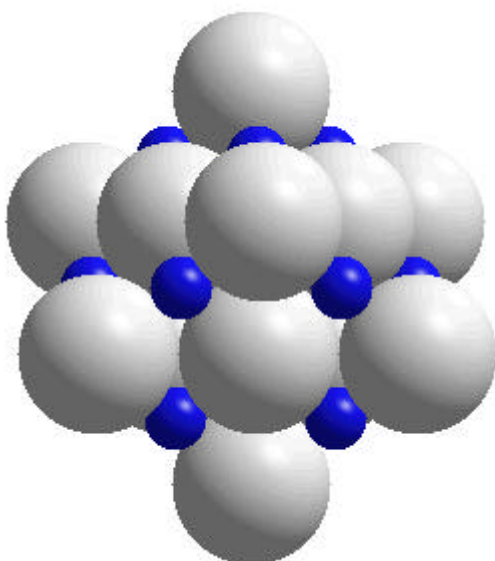
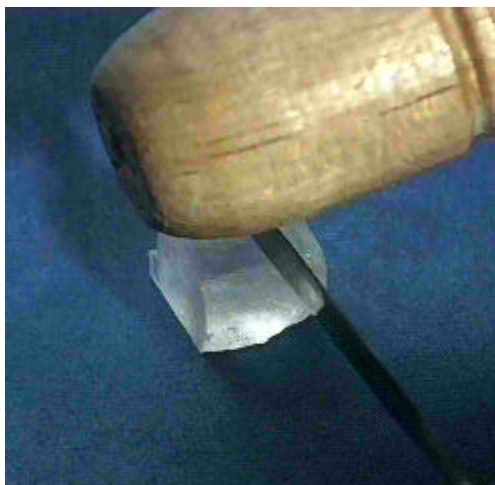
Molybdenum Sulfide



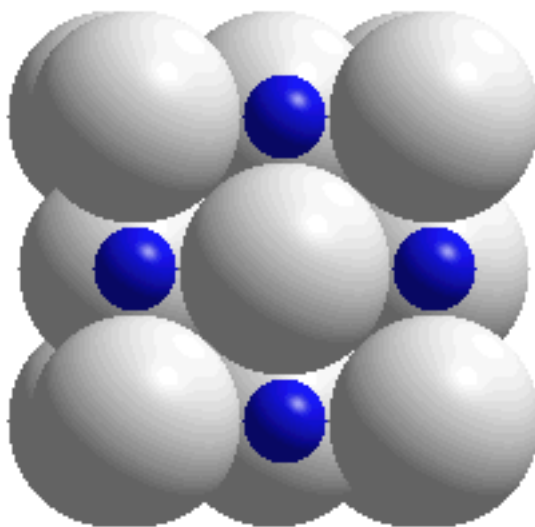
Calcium Fluoride



Rock Salt



Lead Sulfide



Silicon Wafer

