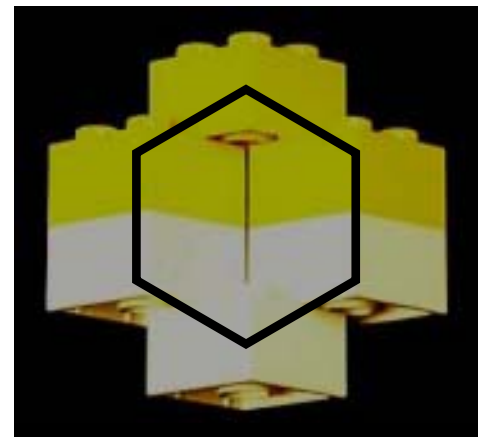


Buckytubes (whole atoms)

Carbon nanotubes, also known as buckytubes, can be thought of as a rolled-up graphite sheet. A simple representation of a flat graphite sheet is shown below. (For more sophisticated models of graphite, see the graphite building instructions.)

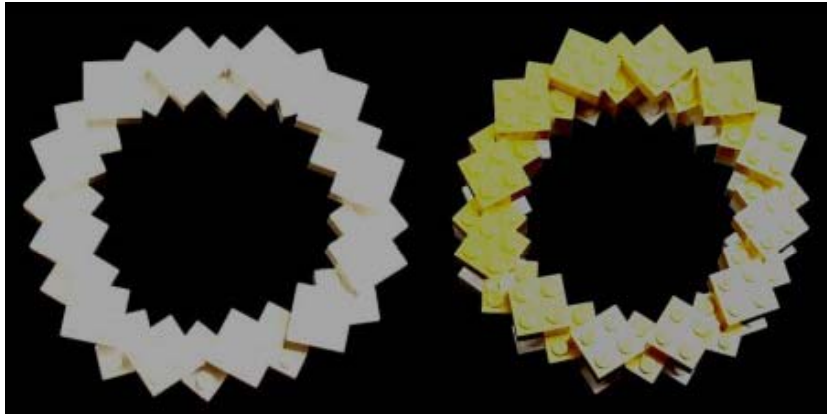
To build a simple graphite structure, build corner-connected chains of 2x2 bricks. Then stack several chains as shown.



These six 2 peg x 2 peg bricks represent a hexagon of carbon atoms, a fundamental part of graphite and buckytube structure. The different colors are used simply to distinguish individual bricks (atoms).

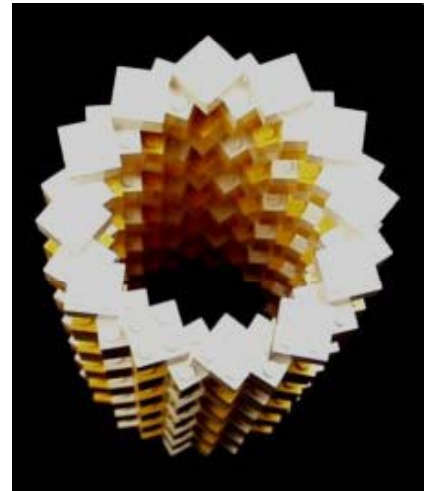
This model requires:
Approximately 264
2x2 bricks

Building the graphite structure above into a tube makes a portion of a buckytube structure.

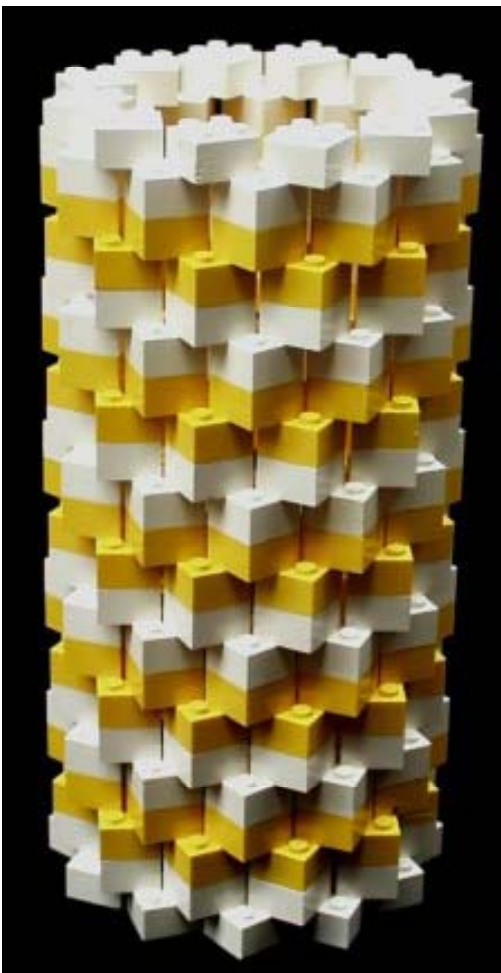


One chain

Two chains



Eleven chains



If each brick represents a carbon atom, then in real life this tube would be about a nanometer in diameter.

Note how different the graphite and buckytube structures are from the diamond structure. (For more sophisticated models of diamond, see the diamond building instructions.)

