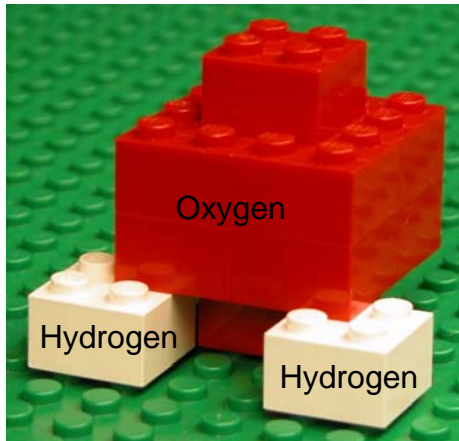


Ice Ic (a low-temperature phase) (whole atoms)

LEGO® unit representing
H₂O in this structure:



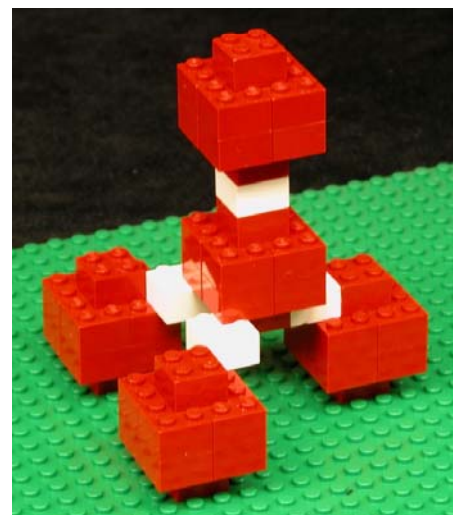
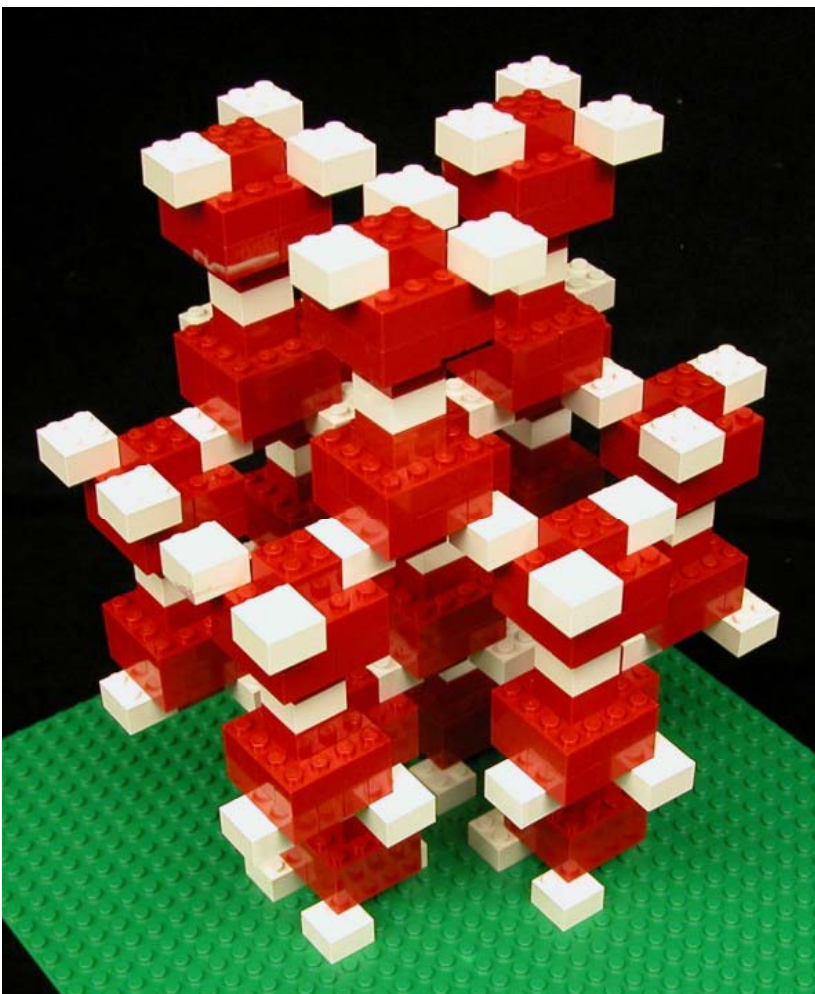
The oxygen atoms are connected to the other oxygen atoms in a tetrahedral geometry via covalent and hydrogen bonds to hydrogen atoms. Note in this representation the hydrogen atoms are shown as equally distant from the oxygen atoms that they bridge. In reality, the hydrogen atoms are closer to the oxygen atoms to which they are covalently bonded and further from the oxygen atoms to which they are hydrogen bonded.

This model requires:

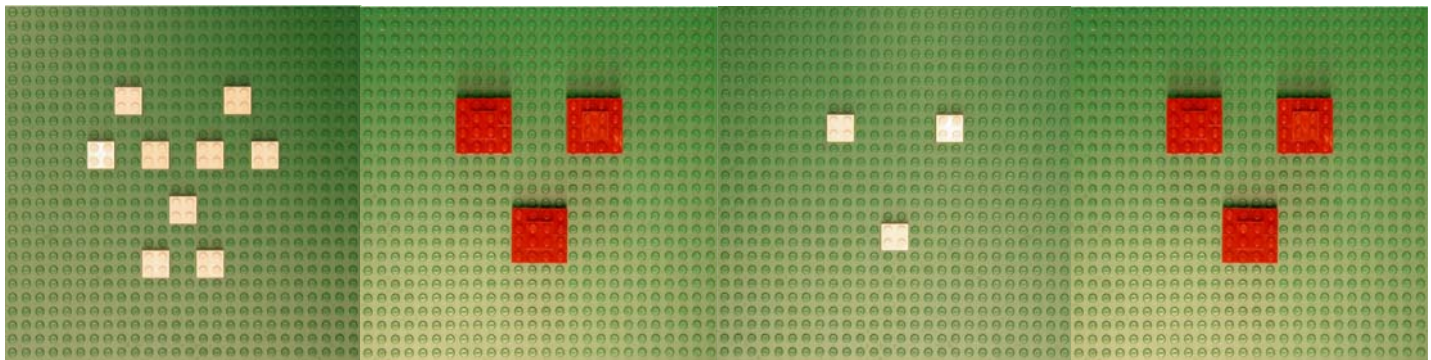
73 white 2x2 bricks

104 red 2x4 bricks

52 red 2x2 bricks



Angle view of the Ice Ic structure
(The relative oxygen atom positions
are similar to the diamond structure.)

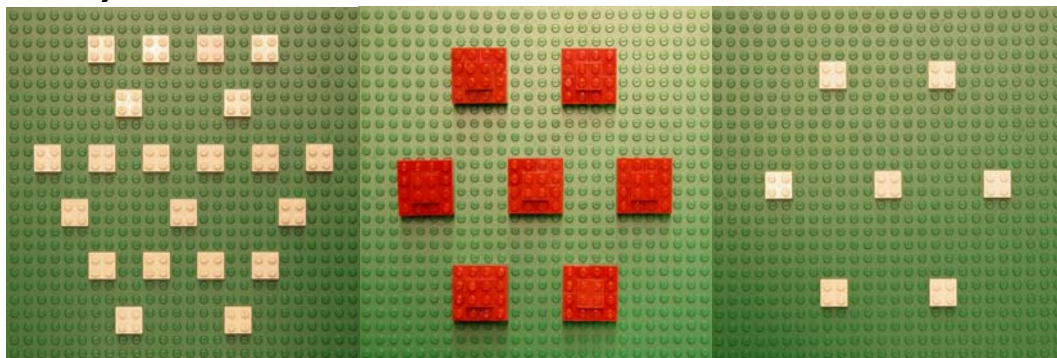


**Layer 1
(bottom)**

Layer 2

Layer 3

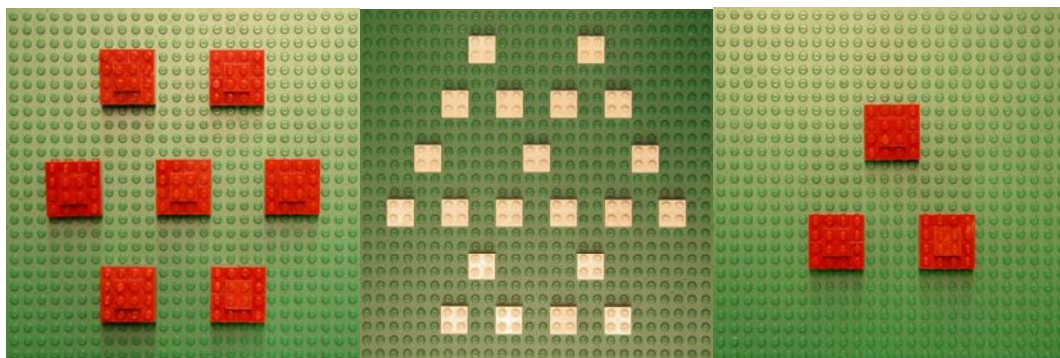
Layer 4



Layer 5

Layer 6

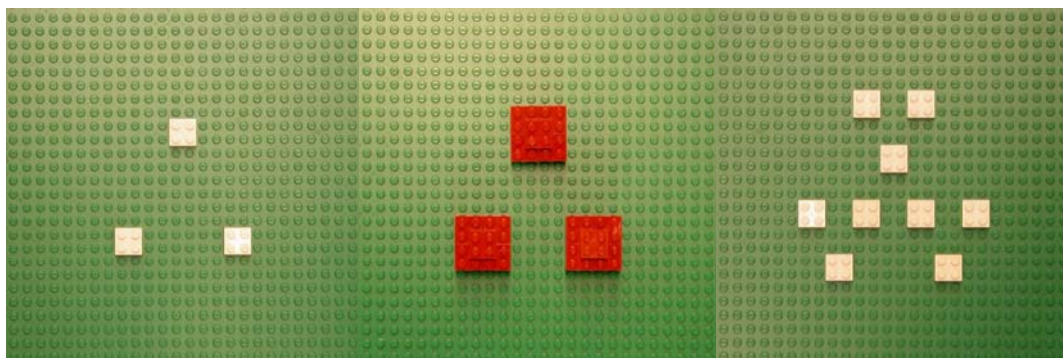
Layer 7



Layer 8

Layer 9

Layer 10



Layer 11

Layer 12

**Layer 13
(top)**