

amorphous

like crystalline solids, materials that are usually characterised by certain areas of short-range order; a long-range order, as in crystals does not exist in such substances

atomic bonding

an electrostatic attractive force within and between atoms that allows the formation of materials containing two or more atoms

austenite

the face centred cubic (FCC) phase of iron containing some dissolved carbon

brass

an alloy of copper and up to 43% zinc

bronze

a term generally applied to an alloy of copper and up to 10% tin

cementite	the name given to iron carbide with the general formula Fe_3C
ceramic	a multi-phase material containing phase composed of compounds of metals and non-metals; they are typically hard and good insulators
composites	represents a class of material whose properties derive from the combination of two or more materials that are bonded together such that each of the constituent materials contributes to an improvement in mechanical, physical, chemical or electrical properties
concrete	a mixture of aggregate embedded in a cement binding matrix composed of sand, water and cement
crystal	a material whose atoms or molecules are arranged in a predictable or ordered pattern based around all three-dimensional axes

density

a measure of the
quantity of mass per
unit volume

ductility

the ability of a material to
undergo plastic deformation
by extrusion or the
application of tensile forces

ferrous

metals based on the metallic
element iron (Fe); the two most
common of these are steel and
cast iron, distinguished primarily by
the percentage of carbon present

fulcrum

a point of support and
turning about which
lever arms pivot

hardness

the resistance of a material to
scratching or abrasion; this may
also refer to resistance to
indentation, penetration or
cutting