# Materials Science Vocabulary

## Academic Vocabulary

- alter
- analogy
- analyze
- approximate
- balanced
- calculate
- characteristic
- cite
- classify
- coefficient
- compare
- comprised
- consistent
- control
- correlate
- criteria
- directly proportional
- distinguish
- evaluate
- evidence
- exhibit
- expand
- explain
- hypothesize
- incorporate
- infer
- interact
- interpret
- inversely proportional
- label
- manipulate
- mean
- measure
- objective
- observe
- opaque
- pattern
- perspective
- predict
- procedure
- produce
- propose
- qualitative
- quantitative
- rank
- revise
- significance
- subscript
- transition
- translucent
- transparent
- trend
- yields

## Content Vocabulary

- activity series
- addition polymerization
- allotrope
- alloy
- amorphous
- anneal
- annealing
- anode
- BCC
- branched polymer
- brittle
- cathode
- cathodic protection
- cellulose
- ceramic
- ceramics
- chemical property
- cold working
- component
- composite
- composites
- compression
- concrete
- condensation polymer
- conductivity
- copolymer
- corrosion
- covalent bond
- crack
- cross linking
- crystal
- crystal structure
- crystalline
- cure
- dendrites
- dilatant
- dimer
- dislocation
- dislocations
- ductile
- ductility
- elasticity
- elastomer
- eutectic
- failure
- fatigue
- FCC
- fiber
- fiber optic
- firing
- fracture
- free radical
- fuel
- glass
- grain
- grain boundary
- hardening
- hardness
- HCP
- HDPE high density polyethylene
- heat capacity
- heat treating
- homopolymer
- imperfection
- index of refraction
Materials Science Vocabulary

- initiation
- insulator
- interstitial defect
- ionic bond
- kevlar
- lattice
- LDPE low density polyethylene
- line defect
- linear
- macromolecule
- malleable
- material
- metal
- metallic bonding
- metalloid
- monoclinic
- monomer
- non crystalline
- nonmetal
- non-newtonian
- nucleation
- nylon
- opaque
- oxidation
- oxide
- oxidizer
- PET polyethylene terephthalate
- physical property
- plasticity
- point defect
- polyethylene
- polymer
- polymerization
- polymers
- polystyrene
- PP polypropylene
- propagation
- PS polystyrene
- PVA polyvinyl alcohol
- PVC poly vinyl chloride
- quench
- reduction
- reflection
- refraction
- resin
- resistance
- rhombic
- saturated
- semi-conductor
- semi-conductors
- shear
- slip
- slip plane
- solid state phase change
- solidus line
- solute
- solvent
- steel
- strain
- strength
- stress
- substitutional
- super conductor
- super cooled
- supersaturated
- temper
- tensile strength
- tension
- thermal expansion
- thermal expansion coefficient
- thermoplastic
- thermoset
- thixotropic
- torsion
- toughness
- translucent
- transparent
- unit cell
- unsaturated
- vacancy
- viscosity
- vulcanization