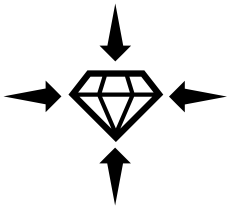
Performance characteristics of materials

Conductivity: The property that lets electrical current flow through a material

Strength: The ability allowing a material to *resist forces* from all directions (compressive, tensile, bending, shear, torsional).



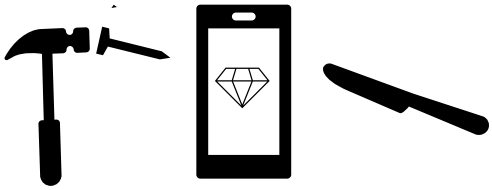
Elasticity: The ability allowing an object or material to *reassume its normal shape* after being *stretched or compressed*.

Plasticity: A material's ability to be *permanently deformed* *and* *retain* its deformed shape

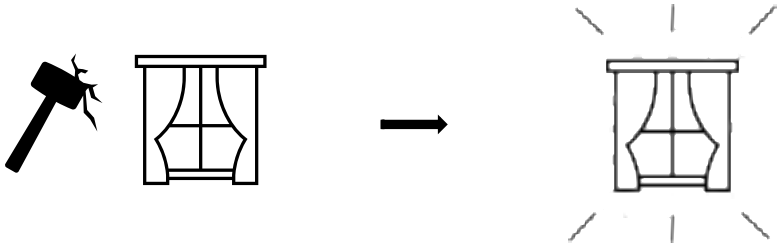
Malleability: A material's ability to be deformed by compression *without being torn / cracked*.

Ductility: The ability of a material to be *drawn/stretched out thin* (usually into wires).

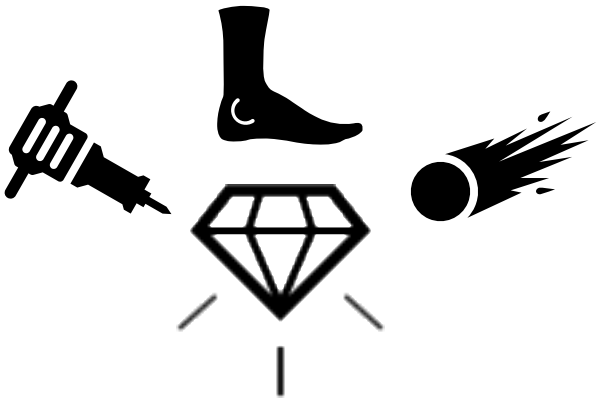
Hardness: A material's ability to *withstand indentation / abrasion / scratching.*



Toughness: A material's ability to *absorb impact force without fracture*.



Durability: A material's ability to *withstand wear, pressure, and damage*.



PTO!

Biodegradability: A material's ability to *break down over time* as a result of *biological activity* (being broken down by *microorganisms*)