

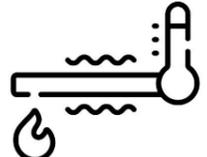
MATERIAL PROPERTIES RESOURCE

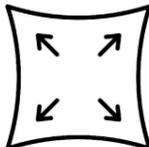
There are a **3** ways you can use this resource in class.

- 1). **POSTERS:** Print out the Materials Properties Mind Map as a informative display Poster to hang on the wall in your classroom.
- 2). **MATCHING GAME:** Print out both parts, the Mind Map Poster and the definitions. Cut out the definitions into single sentences. Students have to match the correct definition with the headings on the Mind Map.
- 3). **FILL IN THE BLANK:** The Mind Map Poster with the definitions on it can be printed out or placed on the Projector. Students need to fill in the blank (the headings) of the correct definition.

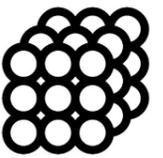
**MATERIAL
PROPERTIES**


Toughness


Conductivity


Malleability


Elasticity


Density


Hardness

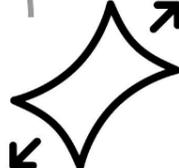

Fatigue


Ductility


Magnetic


Strength


Creep


Plasticity


Corrosion


Brittleness

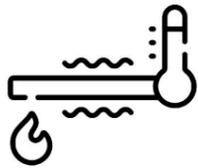

Insulator

MATERIAL PROPERTIES



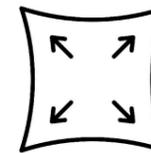
Toughness

The ability of a material to absorb energy and plastically deform without fracturing



Conductivity

The ability of a material to conduct electricity or heat



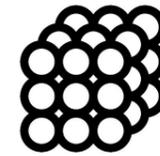
Malleability

The ability of a material to be hammered or rolled into thin sheets



Elasticity

The ability of a material to return to its original shape after being stretched or compressed



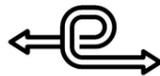
Density

The mass per unit volume of a material



Hardness

The resistance of a material to scratching or indentation



Ductility

The ability of a material to be stretched into a wire.



Fatigue

The weakening of a material caused by repeatedly applied loads



Magnetic

Having the property of attracting iron and certain other materials



Strength

The ability of a material to withstand an applied load without failure



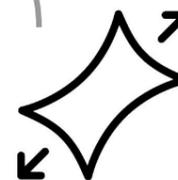
Creep

The slow, permanent deformation of a material under constant stress



Corrosion

The gradual destruction of materials by chemical reactions with environmental elements



Plasticity

The ability of a material to undergo permanent deformation without breaking



Insulator

A material that does not easily transmit electricity or heat



Brittleness

The tendency of a material to fracture or fail upon sudden impact or stress

Material Properties Definitions:

*Cut out the definitions and they can be used for the Material Properties **Matching Game**.*

The ability of a material to be stretched into a wire.

The resistance of a material to scratching or indentation

The ability of a material to absorb energy and plastically deform without fracturing

The ability of a material to conduct electricity or heat

The ability of a material to return to its original shape after being stretched or compressed

The ability of a material to be hammered or rolled into thin sheets

The mass per unit volume of a material

The weakening of a material caused by repeatedly applied loads

The ability of a material to withstand an applied load without failure

The tendency of a material to fracture or fail upon sudden impact or stress

The ability of a material to undergo permanent deformation without breaking

The gradual destruction of materials by chemical reactions with environmental elements

A material that does not easily transmit electricity or heat

The slow, permanent deformation of a material under constant stress

Having the property of attracting iron and certain other materials

The ability of a material to conduct electricity or heat

The ability of a material to be hammered or rolled into thin sheets

The ability of a material to return to its original shape after being stretched or compressed

The mass per unit volume of a material

The ability of a material to absorb energy and plastically deform without fracturing

The resistance of a material to scratching or indentation

The ability of a material to be stretched into a wire.

The weakening of a material caused by repeatedly applied loads

MATERIAL PROPERTIES

Having the property of attracting iron and certain other materials

The ability of a material to withstand an applied load without failure

The slow, permanent deformation of a material under constant stress

The ability of a material to undergo permanent deformation without breaking

A material that does not easily transmit electricity or heat

The gradual destruction of materials by chemical reactions with environmental elements

The tendency of a material to fracture or fail upon sudden impact or stress

Material Properties Definitions:

*Cut out the definitions and they can be used for a Material Properties **Fill in The Blank Game**.*

The ability of a material to be stretched into a wire.

The resistance of a material to scratching or indentation

The ability of a material to absorb energy and plastically deform without fracturing

The ability of a material to conduct electricity or heat

The ability of a material to return to its original shape after being stretched or compressed

The ability of a material to be hammered or rolled into thin sheets

The mass per unit volume of a material

The weakening of a material caused by repeatedly applied loads

The ability of a material to withstand an applied load without failure

The tendency of a material to fracture or fail upon sudden impact or stress

The ability of a material to undergo permanent deformation without breaking

The gradual destruction of materials by chemical reactions with environmental elements

A material that does not easily transmit electricity or heat

The slow, permanent deformation of a material under constant stress

Having the property of attracting iron and certain other materials