

Definition

In engineering when we talk about materials we are really talking about Properties. Material properties are the reason that engineers choose to use a material

Word family

- ❖ Property
- ❖ Properties



Properties (Noun) 1 2 3 4

Examples

The engineer chose to use copper because of its excellent electrical conductivity property.

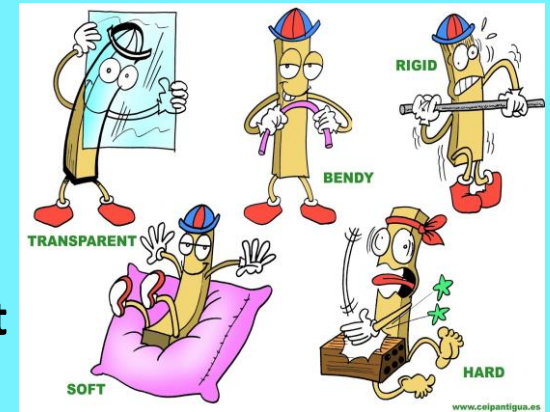
The racing bicycle was made out of Carbon Fibre because of its excellent properties of strength and weight.

The engineer needed a material that had properties that made it suitable for a very wet environment.

Synonyms:

- Materials
- Describe
- Perform
- Reacts
- Environment
- Function

Visual / digging deeper



Research TASK

These are the main material properties

Can you find sentences that describe each of the properties?

Can you find out the name of materials that would be chosen by an engineer for that property?

“Engineers choose materials that have the desired properties to suit the environment that the product will be used in”

- ❖ Elasticity
- ❖ Electrical Conductivity
- ❖ Thermal Conductivity
- ❖ Strength
- ❖ Plasticity
- ❖ Ductility
- ❖ Tensile Strength
- ❖ Malleability
- ❖ Toughness

EXTENSION TASK : Write sentences that include the family of words below

Property

Properties