Table 1 Possible properties and descriptions of each category

Metal	Ceramic/Glass	Polymer	Composite
Shiny (luster)	Brittle	Flexible	Combination of two or more materials
Malleable	Dull (not	Lightweight	Often lightweight
(bendable)	lustrous)	(low density)	and strong
Ductile	Hard	Low melt temperatures	
Good	Poor conductors	Poor	
conductors	(insulators)	conductors	
(feel cold)		(insulators)	
Heavy	High melt	Some are	
(dense)	temperatures	stretchable	
		(rubbery)	
Can't see	Can see through	Some are	
through them	glass	hard	
(opaque)	(transparent)		
Strong	Can't see	Can be	
	through	transparent,	
	ceramics	translucent	
	(opaque)	or opaque.	
Corrode	Don't corrode		
Easily (rust)			
Many have			
high melt			
temperatures			