Name		Class	
Group		Teacher	

Properties of materials

Property	***What it means***	***Examples***
Strength-Tensile	Strong-hard to stretch Weak – easy to stretch	Metals Elastic
Strength -Compressive	Strong – hard to crush Weak – easy to crush	Metals Plasticine
Flexibility – (Bendiness)	Flexible – easy to bend Stiff – hard to bend	Metals, plastics Ceramics, glass
Thermal conductivity	Conductor – lets heat pass Insulator – does not let heat pass	Metals Ceramics, glass, plastics
Electrical conductivity	Conductor – lets electricity flow Insulator – does not let electricity pass	Metals Ceramics, glass, plastics
Hardness	Hard – difficult to cut or scratch Soft – easy to cut or scratch	Metals, glass, ceramics some plastics
Toughness	Tough – difficult to break when hit Brittle – easy to break when hit	Metals ceramics + glass
Appearance	Colour, brightness, shiny, dull, rough, smooth etc	Metals – shiny Glass - transparent
Chemical reactivity	How easy or difficult it is to react with different chemicals	Metals – some react very easily with acids and oxygen Ceramics and glass are unreactive
Flammability	Burns easily if flammable	Petrol
Density	Mass(g) per mL(cm^3)	Lead – high density Foam – low density
Boiling point Melting point	Temperature: liquid to gas Temperature: solid to liquid	High - ceramics Low - plastics
Elasticity	Elastic- returns to its original shape when forces removed. Inelastic – does not return to its original shape when forces are removed	Elastic – rubber Inelastic - plastics