Science

Properties of Materials

Veal	r 5

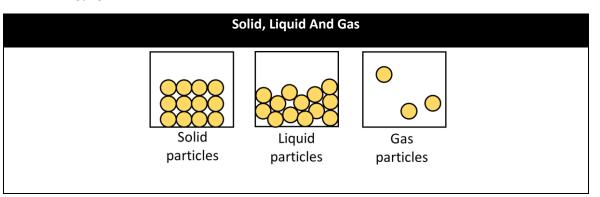
Particle spacing

Solid particles

State

Solids

Key Vocabulary	
Man-made	Something that was created by humans as opposed to
materials	nature.
Natural	Any product or physical matter that comes from plants,
materials	animals or the ground.
Elastic	A material that can return to its original shape when a
material	force is removed. For example, an elastic band is elastic.
Magnetic	A material that is attracted to magnetics . For example,
material	iron is magnetic.
Absorbent	A material that has the ability to soak up a liquid , to
material	absorb and retain the moisture within its structure. For
	example, a sponge is absorbent.
Flammable	A material that will easily catch fire and burn quickly. For
material	example, petrol is flammable.
Reflective	Light will bounce of the material's surface. For example, a
material	mirror is reflective.
Translucent	A material that will let light but not detailed shapes pass
material	through it. For example, a shopping bag is translucent.
Transparent	A material that will let light pass through easily. Objects
material	are seen clearly through a transparent material. For
	example, glass is transparent.
State of matter	Materials are usually either a solid, a liquid or a gas.
	The state of matter of materials can change, through
	processes such as freezing or melting.
Freezing	When a liquid turns into a solid.
Melting	When a solid turns into a liquid.
Boiling	When a liquid turns into a gas.
Condensing	When a gas turns into a liquid.
Particles	What all the matter (solids, liquids and gases) are made
	from.
Permeable	A material that will allow liquids and gases to pass
	through it.



Movement

Solid particles

Volume

Solid particles have a definite

Liquid particles are close together. Gas Gas particles are far apart. Thermal Conductor and Insulators Thermal Conductor and Insulators Thermal Do not let heat thravel through them easily. Some wood, frabic and plastics are good thermal insulators. Thermal insulators and louding them as a good thermal insulators. Thermal on the easily through them easily. Some wood, frabic and plastics are good thermal insulators. Thermal insulators can keep heat out or in. Electrical Conductors and Insulators Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to pass through easily. They allow electricity to pass through easily. Flectrical Deport let electricity pass through them easily.		are	close together.	are in a fixed shape.	volume.	
Thermal Conductor and Insulators Thermal Heat can travel easily through thermal conductors. Metals are good themeral conductors, as they allow heat to pass through them. Thermal Do not let heat thravel through them easily. Some wood, frabic and plastics are good thermal insulators. Thermal insulators can keep heat out or in. Electrical Conductors and Insulators Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. They have a low electrical ressistance	Liquid					
Thermal Conductor Metals are good themeral conductors, as they allow heat to pass through them. Thermal Insulators Some wood, frabic and plastics are good thermal insulators. Thermal insulators can keep heat out or in. Electrical Conductors and Insulators Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. They have a low electrical ressistance	Gas			•	-	
Conductor Metals are good themeral conductors, as they allow heat to pass through them. Thermal Do not let heat thravel through them easily. Some wood, frabic and plastics are good thermal insulators. Thermal insulators can keep heat out or in. Electrical Conductors and Insulators Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. Conductors They have a low electrical ressistance	Thermal Conductor and Insulators					
Thermal insulators Some wood, frabic and plastics are good thermal insulators. Thermal insulators can keep heat out or in. Electrical Conductors and Insulators Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. Conductors They have a low electrical ressistance	Thermal	nal Heat can travel ea		sily through thermal conductors.		
insulators Some wood, frabic and plastics are good thermal insulators. Thermal insulators can keep heat out or in. Electrical Conductors and Insulators Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. Conductors They have a low electrical ressistance	Conductor Metals are good themeral conductors, as they allow heat		allow heat to pass through them.			
Thermal insulators can keep heat out or in. Electrical Conductors and Insulators Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. Conductors They have a low electrical ressistance	Thermal	Thermal Do not let heat thr		ravel through them easily.		
Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. Conductors They have a low electrical ressistance	insulator	ators Some wood, frabi		c and plastics are good thermal insulators.		
Different conductors have different levels of resistance. So even though they can all conduct electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. Conductors They have a low electrical ressistance			Thermal insulators can keep heat out or in.			
electricity, some allow electricity to flow through easier than others. Electrical They allow electricity to pass through easily. Conductors They have a low electrical ressistance	Electrical Conductors and Insulators					
Electrical They allow electricity to pass through easily. Conductors They have a low electrical ressistance	Different conductors have different levels of resistance. So even though they can all conduct					
Conductors They have a low electrical ressistance	electricity, some allow electricity to flow through easier than others.					
	Electrica	I	They allow electricity to pass through easily.			
Flortrical Do not let electricity pass through them easily	Conduct	ors	They have a low electrical ressistance			
Do not let electricity pass through them easily.	Electrica		Do not let electricity pass through them easily.			
Insulators They have a high electrical resistance.	Insulator	rs	They have a high electrical resistance.			

