

The physical properties of a variety of everyday materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent).       Image: State when their properties in the materials (including those that are the solid objects can be changed by squashing, bending, twisting and stretching.       Image: State when they are heated or cooled and the temperature at which this happens.         Materials that are solids, liquids and gases and their particle structure.       Some materials change state when they are heated or cooled and the temperature at which this happens.       Image: State when they are heated or cooled and the temperature at which this happens.         The roles of metting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.       Some materials change state which form when water vapour or steam touches a cold surface, such as a window         some modes are permeable.       Image: State with a liquid and the substance disappears and in used for heating and lighting, and to provide power for devices         waporation       to turn from liquid into gas; pass away in the form of vapour.       a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.       Image:	by to oup aterials ised on eir operties ing more mplex icabulary. hat are ermal sulators ind inductors? by to magne magne magne Material allow he of thermal that requires that requires that requires thermal through Example woollen thermal through Example woollen thermal through Example woollen thermal through Example woollen thermal through Example thermal through Example thermal through Example thermal through Example thermal through Example thermal through Example thermal through Electrical sulators do not. Electrical	ble soluble insoluble
The physical properties of a variety of everyday materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent) and to compare and group materials (including those that are transparent).       Image: State when their properties in the materials (including those that are the solid objects can be changed by squashing, bending, twisting and stretching.       Image: State when they are heated or cooled and the temperature at which this happens.         Materials that are solids, liquids and gases and their particle structure.       Some materials change state when they are heated or cooled and the temperature at which this happens.       Image: State when they are heated or cooled and the temperature at which this happens.         The roles of metting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.       Some materials change state which form when water vapour or steam touches a cold surface, such as a window         some modes are permeable.       Image: State with a liquid and the substance disappears and in used for heating and lighting, and to provide power for devices         waporation       to turn from liquid into gas; pass away in the form of vapour.       a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.       Image:	oup aterials ised on eir operties ing more mplex icabulary. hat are ermal sulators id inductors? hat are ectrical sulators id hat are	<ul> <li>soluble insoluble</li> <li>soluble insolutors are used to make items used to make items used to make items used to make items used to ravel through them easily.</li> <li>soluble insulators do not let heat travel them easily.</li> <li>so f thermal insulators include clothes and flasks for hot drinks.</li> <li>soluble insulator include conductor</li> <li>I conductors have a high resistance</li> </ul>
Ine physical properties of a variety of everyday materials (including those that are transparent) and to compare and group materials on the basis of these properties           How materials are suitably used based on their properties.           How magnets and electrical circuits work.           Some materials which are magnetic.           How shapes of solid objects can be changed by squashing, bending, twisting and stretching.           Materials that are solids, liquids and gases and their particle structure.           Some materials change state when they are heated or cooled and the temperature at which this happens.           The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.           Some rocks are permeable.           Vocabulary           circuit         a complete route which an electric current can flow around a small drops of water which form when water vapour or steam touches a coil surface, such as a window           conductor         a substance that heat or electricity can pass through or along           disolves         when a substance is mixed with al liquid and the substance disappears a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devices         With this holes in it.           evaporation         to turn from liquid into gas; pass away in the form liquids or gases. A an incluse or endered of paper, charcoal, or other material with tiny holes in it.         ins a device used to remove dirt or other solids from liquids or gases. A an incluse or end	aterials ised on eir operties ing more mplex icabulary. hat are ermal sulators id nductors? hat are ermal sulators id hat are ermal sulators id hat are ermal sulators? ermed • Material allow he • Thermal that requires ithermal through • Example woollen • Electrical sulators id • Electrical sulators · Electrical sulators · Electrical · Material · Thermal · Thermal · Thermal · Thermal · Thermal · Thermal · Electrical · Material · Electrical · Electrical · Electrical · Electrical · Electrical	<ul> <li>soluble insoluble</li> <li>soluble insolutors are used to make items used to make items used to make items used to make items used to ravel through them easily.</li> <li>soluble insulators do not let heat travel them easily.</li> <li>so f thermal insulators include clothes and flasks for hot drinks.</li> <li>soluble insulator include conductor</li> <li>I conductors have a high resistance</li> </ul>
transparent) and to compare and group materials on the basis of these properties       basis         How materials are suitably used based on their properties.       basis         How magnets and electrical circuits work.       basis         Some materials which are magnetic.       usi         How shapes of solid objects can be changed by squashing, bending, twisting and stretching.       wisting and stretching.         Materials that are solids, liquids and gases and their particle structure.       Some materials change state when they are heated or cooled and the temperature at which this happens.         The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.       contemperature has on the rate of evaporation.         Some nacks are permeable.       small drops of water which form when water vapour or steam touches a cold surface, such as a window.       and cold surface, such as a window.         conductor       a substance that heat or electricity can pass through or along disolves       when a substance is mixed with a liquid and the substance disappears a device used to remove dirt or other solids from liquids or gases. A ilitering filter can be made of paper, charcoal, or other material with tiny holes in it.       with a device used to remove dirt or other solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.         and lighting, and to provide power for devices       with an object or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and	ised on magne eir operties ing more mplex cabulary. hat are ermal sulators ind inductors? hat are ectrical sulators id hat are	<ul> <li>soluble insoluble</li> <li>soluble insolutors are used to make items used to make items used to make items used to make items used to ravel through them easily.</li> <li>soluble insulators do not let heat travel them easily.</li> <li>so f thermal insulators include clothes and flasks for hot drinks.</li> <li>soluble insulator include conductor</li> <li>I conductors have a high resistance</li> </ul>
<ul> <li>How materials are suitably used based on their properties.</li> <li>How magnets and electrical circuits work.</li> <li>Some materials which are magnetic.</li> <li>How shapes of solid objects can be changed by squashing, bending, twisting and stretching.</li> <li>Materials that are solids, liquids and gases and their particle structure.</li> <li>Some materials change state when they are heated or cooled and the temperature at which this happens.</li> <li>The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.</li> <li>Some rocks are permeable.</li> </ul>	eir operties ing more mplex cabulary. hat are ermal sulators ind inductors? hat are ermal sulators inductors? hat are ermal sulators inductors? hat are ermal that requires inductors? hat are ermal that requires inductors? hat are ermal that requires inductors? hat are ermal that requires inductors? hat are ermal that requires inductors? hat are ectrical sulators id hat are ectrical id hat are ectrical id id hat are ectrical id id id id id id id id id id	<ul> <li>soluble insoluble</li> <li>soluble insolutors are used to make items used to make items used to make items used to make items used to ravel through them easily.</li> <li>soluble insulators do not let heat travel them easily.</li> <li>so f thermal insulators include clothes and flasks for hot drinks.</li> <li>soluble insulator include conductor</li> <li>I conductors have a high resistance</li> </ul>
<ul> <li>Some materials which are magnetic.</li> <li>How shapes of solid objects can be changed by squashing, bending, twisting and stretching.</li> <li>Materials that are solids, liquids and gases and their particle structure.</li> <li>Some materials change state when they are heated or cooled and the temperature at which this happens.</li> <li>The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.</li> <li>Some rocks are permeable.</li> <li>Vocabulary</li> <li>Some rocks are permeable.</li> <li>Vocabulary</li> <li>a complete route which an electric current can flow around small drops of water which form when water vapour or steam touches a cold surface, such as a window</li> <li>conductor a substance that heat or electricity can pass through or along fissolves</li> <li>when a substance is mixed with a liquid and the substance disappears a filter can be made of paper, charcoal, or other material with tiny holes in it.</li> <li>a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.</li> <li>lexible an object or material can be bent easily without breaking a filter can be made of paper, charcoal, or other material with tiny holes in it.</li> <li>a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.</li> <li>nsoluble impossible to dissolve, esp. in a given liquid.</li> <li>nsulator a non-conductor of electricity or heat</li> <li>reversible impossible to reverse, turn back, or change.</li> <li>reversible impossible to reverse, turn back, or change.</li> <li>reversible in a form that flows easily and is neither a solid nor a gas.</li> <li>nagnetic having to do with magnets and the way they work melting to change from a solid to a liquid state through heat or pressure anticles a tiny amount or sma</li></ul>	ing more mplex cabulary. hat are ermal sulators id inductors? hat are ectrical sulators id hat are	s which are good thermal conductors at to move through them easily. conductors are used to make items uire heat to travel through them easi- as a saucepan which requires heat to rough to cook food. insulators do not let heat travel them easily. s of thermal insulators include clothes and flasks for hot drinks. so thermal flasks for hot drinks. nsulator thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
How shapes of solid objects can be changed by squashing, bending, twisting and stretching.       Coll you stretching.         Materials that are solids, liquids and gases and their particle structure.       Some materials change state when they are heated or cooled and the temperature at which this happens.       Will the structure.         Some materials change state when they are heated or cooled and the temperature at which this happens.       The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.         Some rocks are permeable.       Yocabulary         tircuit       a complete route which an electric current can flow around small drops of water which form when water vapour or steam touches a cold surface, such as a window         conductor       a substance that heat or electricity can pass through or along         tissolves       when a substance is mixed with a liquid and the substance disappears a filter can be made of paper, charcoal, or other mole of vapour.         a device used to remove dirt or other solids from fliquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.         lexible       an object or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.         nsoluble       impossible to dissolve, esp. in a given liquid.         nsoluble       impossible to reverse, turn back, or change.         iguid       in a form that flows easily and is neit	mplex icabulary. hat are ermal sulators id inductors? hat are ermal sulators id inductors? hat are ectrical sulators id hat are ectrical id hat are ectrical id id id id id id id id id id	s which are good thermal conductors at to move through them easily. conductors are used to make items uire heat to travel through them easi- as a saucepan which requires heat to rough to cook food. insulators do not let heat travel them easily. s of thermal insulators include clothes and flasks for hot drinks. so thermal insulators include clothes and flasks for hot drinks. so thermal insulators include clothes and flasks for hot drinks. so thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
<ul> <li>How shapes of solid objects can be changed by squashing, bending, twisting and stretching.</li> <li>Materials that are solids, liquids and gases and their particle structure.</li> <li>Some materials change state when they are heated or cooled and the temperature at which this happens.</li> <li>The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.</li> <li>Some rocks are permeable.</li> <li>Vocabulary</li> <li>Some rocks are permeable.</li> <li>Vocabulary</li> <li>condensation a condensation in the water cycle and the role temperature has on the rate of evaporation.</li> <li>Some rocks are permeable.</li> <li>Vocabulary</li> <li>condensation a substance that heat or electricity can pass through or along dissolves when a substance is mixed with a liquid and the substance disappears and lighting, and to provide power for devices</li> <li>evaporation to turn from liquid into gas; pass away in the form of vapour.</li> <li>evaporation to turn from liquid into gas; pass away in the form of vapour.</li> <li>a device used to remove dirt or other solids from liquids or gases. A fifter can be made of paper, charcoal, or other material with thy holes in it.</li> <li>lexible an object or material can be bent easily without breaking af form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.</li> <li>nsoluble impossible to dissolve, esp. in a given liquid.</li> <li>nsulator a non-conductor of electricity or heat rreversible impossible to reverse, turn back, or change.</li> <li>quid in a form that flows easily and is neither a solid nor a gas.</li> <li>magnetic having to do with magnets and the way they work meeting a tiny amount or small piece or exempeation of a substance, being such that gas or liquid can pass through it</li> </ul>	acabulary.     permet       hat are     • Material       ermal     allow he       sulators     • Thermal       id     • Thermal       through     • Example       woollen     • thermal in       hat are     • Electrical       sulators     • Electrical       sulators     • Electrical       sulators     • Electrical	s which are good thermal conductors at to move through them easily. conductors are used to make items uire heat to travel through them easi- as a saucepan which requires heat to rough to cook food. insulators do not let heat travel them easily. s of thermal insulators include clothes and flasks for hot drinks. so thermal insulators include clothes and flasks for hot drinks. so thermal insulators include clothes and flasks for hot drinks. so thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
stretching.       Will         Materials that are solids, liquids and gases and their particle structure.       Will         Some materials change state when they are heated or cooled and the temperature at which this happens.       Instance         The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.       Some rocks are permeable.         Some rocks are permeable.       Vocabulary         ircuit       a complete route which an electric current can flow around small drops of water which form when water vapour or steam touches a cold surface, such as a window         conductor       a substance that heat or electricity can pass through or along         tissolves       when a substance is mixed with a liquid and the substance disappears         electricity       a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devices         vaporation       to turn from liquid into gas; pass away in the form of vapour.         a device used to remove dirt or other solids from liquids or gases. A iltering in it.       a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.         nsoluble       impossible to dissolve, esp. in a given liquid.       manu cool         nsoluble       impossible to dissolve, esp. in a given liquid.       manu cool         nsoluble       impossible to dissolve, esp. in a given liquid.	hat are ermal sulators id inductors? Hat are ectrical sulators id inductors? Hat are ectrical sulators id hat are ectrical sulators	is which are good thermal conductors at to move through them easily. conductors are used to make items uire heat to travel through them easi- as a saucepan which requires heat to rough to cook food. insulators do not let heat travel them easily. s of thermal insulators include clothes and flasks for hot drinks. so thermal insulators include clothes and flasks for hot drinks. so thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
<ul> <li>Some materials change state when they are heated or cooled and the temperature at which this happens.</li> <li>The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.</li> <li>Some rocks are permeable.</li> <li>Vocabulary</li> <li>Some rocks are permeable.</li> <li>Some rock are per</li></ul>	ermal sulators id inductors?	at to move through them easily. <b>conductors</b> are used to make items Jire heat to travel through them easi- as a saucepan which requires heat to rough to cook food. <b>insulators</b> do not let heat travel them easily. s of <b>thermal insulators</b> include clothes and flasks for hot drinks. <b>thermal conductor</b> <b>I conductors</b> allow electricity to pass them easily while <b>electrical insulators</b> <b>I insulators</b> have a high <b>resistance</b>
which this happens.       and         The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.       cold         Some rocks are permeable.       Vocabulary         irrcuit       a complete route which an electric current can flow around         condensation       small drops of water which form when water vapour or steam touches a cold surface, such as a window         conductor       a substance that heat or electricity can pass through or along         dissolves       when a substance is mixed with a liquid and the substance disappears         electricity       a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devices         evaporation       to turn from liquid into gas; pass away in the form of vapour.         a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.         lexible       an object or material can be bent easily without breaking at filter can be made of paper, charcoal, or other material with tiny holes in it.         sas       out when it is warmed and contracts when it is cooled.         nsoluble       impossible to dissolve, esp. in a given liquid         nsoluble       in a form that flows easily and is neither a solid nor a gas.         nsoluble       in a form that flows easily and is neither a solid nor a gas.         magnetic </td <td><ul> <li>sulators id inductors?</li> <li>Thermal that requires the travel the Thermal through</li> <li>Example woollen</li> <li>Example woollen</li> <li>Example inductors</li> <li>Electricat through do not.</li> <li>Electricat</li> </ul></td> <td>conductors are used to make items Jire heat to travel through them easi- as a saucepan which requires heat to rough to cook food. insulators do not let heat travel them easily. s of thermal insulators include clothes and flasks for hot drinks. moulator thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance</td>	<ul> <li>sulators id inductors?</li> <li>Thermal that requires the travel the Thermal through</li> <li>Example woollen</li> <li>Example woollen</li> <li>Example inductors</li> <li>Electricat through do not.</li> <li>Electricat</li> </ul>	conductors are used to make items Jire heat to travel through them easi- as a saucepan which requires heat to rough to cook food. insulators do not let heat travel them easily. s of thermal insulators include clothes and flasks for hot drinks. moulator thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
<ul> <li>The roles of melting, evaporation and condensation in the water cycle and the role temperature has on the rate of evaporation.</li> <li>Some rocks are permeable.</li> <li>Contraction a complete route which an electric current can flow around small drops of water which form when water vapour or steam touches a cold surface, such as a window conductor a substance that heat or electricity can pass through or along tissolves when a substance is mixed with a liquid and the substance disappears and lighting, and to provide power for devices</li> <li>evaporation to turn from liquid into gas; pass away in the form of vapour.</li> <li>a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.</li> <li>a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.</li> <li>a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.</li> <li>nsoluble impossible to reverse, turn back, or change.</li> <li>iquid in a form that flows easily and is neither a solid nor a gas.</li> <li>magnetic having to do with magnets and the way they work</li> <li>melting to change from a solid to a liquid state through heat or pressure a tiny amount or small piece</li> </ul>	hat are ectrical sulators? hat are ectrical hat are ectrical hat are ectrical balter hat are balter hat are hat are balter hat are balter hat are balter hat are balter hat are hat are ha	A solution of the solution of
Interfores of interformation in the value of year and the fore temperature has on the rate of evaporation.         Some rocks are permeable.         Vocabulary         sincuit       a complete route which an electric current can flow around         sondensation       small drops of water which form when water vapour or steam touches a cold surface, such as a window         conductor       a substance that heat or electricity can pass through or along         dissolves       when a substance is mixed with a liquid and the substance disappears         a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devices       Wi         evaporation       to turn from liquid into gas; pass away in the form of vapour.       a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.       and         lexible       an object or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.       will be an object or feverse, turn back, or change.         inguid       in a form that flows easily and is neither a solid nor a gas.       will be an on-conductor of electricity or heat         reversible       impossible to dwith magnets and the way they work       will be a finguid can pass through heat or pressure         a tiny amount or small piece       ot change from a solid to a liquid state through heat	hat are ectrical sulators id mductors?	rough to cook food. insulators do not let heat travel them easily. s of thermal insulators include clothes and flasks for hot drinks. sulator thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
Some rocks are permeable.           Vocabulary           circuit         a complete route which an electric current can flow around           condensation         small drops of water which form when water vapour or steam touches a cold surface, such as a window           conductor         a substance that heat or electricity can pass through or along           dissolves         when a substance is mixed with a liquid and the substance disappears           electricity         a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devices           evaporation         to turn from liquid into gas; pass away in the form of vapour.           a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.           lexible         an object or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.           nsoluble         impossible to dissolve, esp. in a given liquid.           nsulator         a non-conductor of electricity or heat           rreversible         impossible to reverse, turn back, or change.           iquid         in a form that flows easily and is neither a solid nor a gas.           magnetic         having to do with magnets and the way they work           melting         to change from a solid to a liquid state through h	<ul> <li>Thermal through</li> <li>Example woollen</li> <li>Example in through</li> <li>Example woollen</li> <li>Electrical through do not.</li> <li>Electrical electrical through do not.</li> </ul>	insulators do not let heat travel them easily. s of thermal insulators include clothes and flasks for hot drinks. sulator thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
Vocabularycircuita complete route which an electric current can flow aroundcondensationsmall drops of water which form when water vapour or steam touches a cold surface, such as a windowcondensationa substance that heat or electricity can pass through or alongdissolveswhen a substance is mixed with a liquid and the substance disappears a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for deviceselectricitya form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devicesevaporationto turn from liquid into gas; pass away in the form of vapour.a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.lexiblean object or material can be bent easily without breaking at form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.nsolubleimpossible to dissolve, esp. in a given liquid. in a non-conductor of electricity or heatrreversibleimpossible to reverse, turn back, or change.iquidin a form that flows easily and is neither a solid nor a gas.nagnetichaving to do with magnets and the way they work neltingneltingto change from a solid to a liquid state through heat or pressure a tiny amount or small pieceour devicesa tiny amount or small pieceour devicesa tiny amount or small piece	hat are ectrical sulators id mductors?	them easily. s of <b>thermal insulators</b> include clothes and flasks for hot drinks. sulator thermal conductor <b>I conductors</b> allow electricity to pass them easily while <b>electrical insulators</b> <b>I insulators</b> have a high <b>resistance</b>
ircuita complete route which an electric current can flow aroundcondensationsmall drops of water which form when water vapour or steam touches a cold surface, such as a windowconductora substance that heat or electricity can pass through or alongdissolveswhen a substance is mixed with a liquid and the substance disappears a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for deviceselectricitya form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devicesevaporationto turn from liquid into gas; pass away in the form of vapour. a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.lexiblean object or material can be bent easily without breaking agasgasa form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.insolubleimpossible to dissolve, esp. in a given liquid. a non-conductor of electricity or heatreversibleimpossible to reverse, turn back, or change.iquidin a form that flows easily and is neither a solid nor a gas.magnetichaving to do with magnets and the way they work meltingneltingto change from a solid to a liquid state through heat or pressure a tiny amount or small pieceour when it is up to a substance, being such that gas or liquid can pass through it	<ul> <li>Example woollen</li> <li>Example woollen</li> <li>thermal in</li> <li>thermal in</li> <li>Electrical through do not.</li> <li>Electrica electrical</li> </ul>	s of thermal insulators include clothes and flasks for hot drinks.
ircuita complete route which an electric current can flow aroundcondensationsmall drops of water which form when water vapour or steam touches a cold surface, such as a windowconductora substance that heat or electricity can pass through or alongdissolveswhen a substance is mixed with a liquid and the substance disappears a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for deviceselectricitya form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devicesevaporationto turn from liquid into gas; pass away in the form of vapour. a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.lexiblean object or material can be bent easily without breaking agasgasa form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.insolubleimpossible to dissolve, esp. in a given liquid. a non-conductor of electricity or heatreversibleimpossible to reverse, turn back, or change.iquidin a form that flows easily and is neither a solid nor a gas.magnetichaving to do with magnets and the way they work meltingneltingto change from a solid to a liquid state through heat or pressure a tiny amount or small pieceour when it is up to a substance, being such that gas or liquid can pass through it	hat are ectrical sulators id mductors?	clothes and flasks for hot drinks.
condensationa cold surface, such as a windowconductora substance that heat or electricity can pass through or alongdissolveswhen a substance is mixed with a liquid and the substance disappearsalectricitya form of energy that can be carried by wires and in used for heating and lighting, and to provide power for deviceselectricitya form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devicesevaporationto turn from liquid into gas; pass away in the form of vapour.a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.lexiblean object or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.insolubleimpossible to dissolve, esp. in a given liquid. impossible to reverse, turn back, or change.iquidin a form that flows easily and is neither a solid nor a gas. having to do with magnets and the way they workmeltingto change from a solid to a liquid state through heat or pressure barticlesa tiny amount or small pieceof a substance, being such that gas or liquid can pass through it	hat are ectrical sulators id mductors?	A thermal conductor I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
a cold surface, such as a windowconductora substance that heat or electricity can pass through or alongdissolveswhen a substance is mixed with a liquid and the substance disappearsalectricitya form of energy that can be carried by wires and in used for heating and lighting, and to provide power for deviceselectricitya device used to power for devicesa device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.lexiblean object or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.msulatora non-conductor of electricity or heatrreversibleimpossible to reverse, turn back, or change.iquidin a form that flows easily and is neither a solid nor a gas.magnetichaving to do with magnets and the way they workmeltingto change from a solid to a liquid state through heat or pressure a tiny amount or small pieceoermeableof a substance, being such that gas or liquid can pass through it	hat are ectrical sulators id mductors? • Electrica through do not. • Electrica	I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
dissolves       when a substance is mixed with a liquid and the substance disappears         a form of energy that can be carried by wires and in used for heating       and lighting, and to provide power for devices         electricity       a form of energy that can be carried by wires and in used for heating       wile         evaporation       to turn from liquid into gas; pass away in the form of vapour.       wile         a device used to remove dirt or other solids from liquids or gases. A       filter can be made of paper, charcoal, or other material with tiny holes       ins         in it.       a form of matter that is neither liquid nor solid. A gas rapidly spreads       out when it is warmed and contracts when it is cooled.       wile         issoluble       impossible to dissolve, esp. in a given liquid.       wile       wile         iquid       in a form that flows easily and is neither a solid nor a gas.       wile         iquid       in a form that flows easily and is neither a solid nor a gas.       wile         magnetic       having to do with magnets and the way they work       dis         melting       to change from a solid to a liquid state through heat or pressure       wile         oarticles       a tiny amount or small piece       of a substance, being such that gas or liquid can pass through it	hat are ectrical sulators id mductors? • Electrica through do not. • Electrica	I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devices       Wites and in used for heating and lighting, and to provide power for devices         evaporation       to turn from liquid into gas; pass away in the form of vapour.       a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.       wite         lexible       an object or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.       wite         insoluble       impossible to dissolve, esp. in a given liquid.       wite         iquid       in a form that flows easily and is neither a solid nor a gas.       wite         inguid       in a form that flows easily and is neither a solid nor a gas.       wite         inguid       to change from a solid to a liquid state through heat or pressure barticles       a tiny amount or small piece         out ricles       of a substance, being such that gas or liquid can pass through it       tor pass through it	hat are ectrical sulators id mductors? • Electrica through do not. • Electrica	I conductors allow electricity to pass them easily while electrical insulators I insulators have a high resistance
Prectricityand lighting, and to provide power for devicesWievaporationto turn from liquid into gas; pass away in the form of vapour.eleisteringa device used to remove dirt or other solids from liquids or gases. Ainsilteringfilter can be made of paper, charcoal, or other material with tiny holesannin it.a object or material can be bent easily without breakinganngasa form of matter that is neither liquid nor solid. A gas rapidly spreadsout when it is warmed and contracts when it is cooled.insolubleimpossible to dissolve, esp. in a given liquid.magneticnsulatora non-conductor of electricity or heatwiiquidin a form that flows easily and is neither a solid nor a gas.wiingenetichaving to do with magnets and the way they workwimeltingto change from a solid to a liquid state through heat or pressurea tiny amount or small pieceoermeableof a substance, being such that gas or liquid can pass through itit	ectrical sulators id inductors?	them easily while <b>electrical insulators</b> I insulators have a high resistance
evaporationto turn from liquid into gas; pass away in the form of vapour.elea device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.elea nobject or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.outinsulatora non-conductor of electricity or heat impossible to reverse, turn back, or change.wildiquidin a form that flows easily and is neither a solid nor a gas.wildnagnetichaving to do with magnets and the way they work meltingto change from a solid to a liquid state through heat or pressure a tiny amount or small piecewild	ectrical sulators id inductors?	them easily while <b>electrical insulators</b> I insulators have a high resistance
a device used to remove dirt or other solids from liquids or gases. A         filter can be made of paper, charcoal, or other material with tiny holes         in it.         lexible         a nobject or material can be bent easily without breaking         a form of matter that is neither liquid nor solid. A gas rapidly spreads         out when it is warmed and contracts when it is cooled.         insoluble         impossible to dissolve, esp. in a given liquid.         nsulator         a non-conductor of electricity or heat         rreversible         impossible to reverse, turn back, or change.         iquid         in a form that flows easily and is neither a solid nor a gas.         magnetic         having to do with magnets and the way they work         melting       to change from a solid to a liquid state through heat or pressure         particles       a tiny amount or small piece         of a substance, being such that gas or liquid can pass through it	do not. do not.	l insulators have a high resistance
a filter can be made of paper, charcoal, or other material with tiny holes in it.       an         lexible       an object or material can be bent easily without breaking a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.       an         nsoluble       impossible to dissolve, esp. in a given liquid.       with timy holes         nsulator       a non-conductor of electricity or heat       with timy holes         iquid       in a form that flows easily and is neither a solid nor a gas.       with the way they work         negetic       having to do with magnets and the way they work       dis         nelting       to change from a solid to a liquid state through heat or pressure       a tiny amount or small piece         oermeable       of a substance, being such that gas or liquid can pass through it	enductors?	Ū.
in it.collexiblean object or material can be bent easily without breakinga form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.nsolubleimpossible to dissolve, esp. in a given liquid.nsulatora non-conductor of electricity or heatimpossible to reverse, turn back, or change.williquidin a form that flows easily and is neither a solid nor a gas.magnetichaving to do with magnets and the way they workmeltingto change from a solid to a liquid state through heat or pressureparticlesa tiny amount or small pieceoermeableof a substance, being such that gas or liquid can pass through it	nductors?	Ū.
a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.         nsoluble       impossible to dissolve, esp. in a given liquid.         nsulator       a non-conductor of electricity or heat         irreversible       impossible to reverse, turn back, or change.         iquid       in a form that flows easily and is neither a solid nor a gas.         magnetic       having to do with magnets and the way they work         melting       to change from a solid to a liquid state through heat or pressure         particles       a tiny amount or small piece         of a substance, being such that gas or liquid can pass through it	which m	early that it is hard for electricity to
335       out when it is warmed and contracts when it is cooled.         insoluble       impossible to dissolve, esp. in a given liquid.         insulator       a non-conductor of electricity or heat         irreversible       impossible to reverse, turn back, or change.         iquid       in a form that flows easily and is neither a solid nor a gas.         magnetic       having to do with magnets and the way they work         melting       to change from a solid to a liquid state through heat or pressure         particles       a tiny amount or small piece         bermeable       of a substance, being such that gas or liquid can pass through it	pass three	ough these objects.
Out when it is warmed and contracts when it is cooled.         insoluble       impossible to dissolve, esp. in a given liquid.         insulator       a non-conductor of electricity or heat         irreversible       impossible to reverse, turn back, or change.         iquid       in a form that flows easily and is neither a solid nor a gas.         inagnetic       having to do with magnets and the way they work         inelting       to change from a solid to a liquid state through heat or pressure         iatricles       a tiny amount or small piece         bermeable       of a substance, being such that gas or liquid can pass through it		
nsulator       a non-conductor of electricity or heat         rreversible       impossible to reverse, turn back, or change.         iquid       in a form that flows easily and is neither a solid nor a gas.         magnetic       having to do with magnets and the way they work         melting       to change from a solid to a liquid state through heat or pressure         particles       a tiny amount or small piece         bermeable       of a substance, being such that gas or liquid can pass through it	o+)	••
impossible to reverse, turn back, or change.       Will         iquid       in a form that flows easily and is neither a solid nor a gas.       dis         nagnetic       having to do with magnets and the way they work       to change from a solid to a liquid state through heat or pressure         particles       a tiny amount or small piece         permeable       of a substance, being such that gas or liquid can pass through it		
impossible to reverse, turn back, or change.       dis         iquid       in a form that flows easily and is neither a solid nor a gas.         magnetic       having to do with magnets and the way they work         melting       to change from a solid to a liquid state through heat or pressure         particles       a tiny amount or small piece         permeable       of a substance, being such that gas or liquid can pass through it	1	insulator electrical conductor
in a form that flows easily and is neither a solid nor a gas.         magnetic       having to do with magnets and the way they work         melting       to change from a solid to a liquid state through heat or pressure         particles       a tiny amount or small piece         permeable       of a substance, being such that gas or liquid can pass through it	• when u	e <b>particles</b> of a <b>solid</b> mix with the
melting       to change from a solid to a liquid state through heat or pressure         particles       a tiny amount or small piece         permeable       of a substance, being such that gas or liquid can pass through it	o particies	of a <b>liquid</b> , this is called <b>dissolving</b> .
barticles a tiny amount or small piece bermeable of a substance, being such that <b>gas</b> or <b>liquid</b> can pass through it		It is a <b>solution.</b>
permeable of a substance, being such that gas or liquid can pass through it		s that dissolve are soluble.
	Materia	<b>s</b> that do not <b>dissolve</b> are <b>insoluble</b> .
irocess I a series of actions lised to produce comething or reach a goal		d- d- d-
process     a series of actions used to produce something or reach a goal.       properties     the ways in which an object behaves		
ate the speed with which something happens	dias obvis -	solution soluble insolution
esistance the onnosing nower of one force against another	dissolving	solution soluble insoluble
calculate the second seco	• 301110 1110	terials can be separated after they
		n mixed based on their <b>properties</b> -
iolid	tor thou	ed a <b>reversible</b> change.
	•Some me	thods of separation include the use of
	a magnet	, a <b>filter</b> (for insoluble materials), a sed on the size of the solids) and
tate the structure or condition of something	evaporat	-
emperature a measure of how hot or cold something is	•	nixture cannot be separated back into
hermal relating to or caused by heat or by changes in <b>temperature</b>		al components, this is called an
ransparent If an object is transparent, you can see through it	the origin	le change. Examples of this include
variable something that can change or that has no fixed value		
vater cycle the process by which water on the earth evaporates, then condenses in	irreversib when ma	terials burn or mixing bicarbonate of
the atmosphere, and then returns to earth in the form of precipitation.	irreversib	_

Find the best material to stop an ice cube from melting. Remember to keep it a fair test by using the same number of ice cubes, or same size and thickness material. •

• Place the same amount of a hot liquid in a thermal insulator and conductor. Measure the temperature over time and plot these on the same line graph. Use the line graph to ask and answer questions.

- Find out if thermal conductors also make good electrical conductors.
- Explain the difference between **dissolving** and **melting**.
- Investigate which materials are soluble and insoluble.
- Design an experiment that investigates dissolving - consider which variables you could change including: size of beaker, amount of liquid, number of stirs, size of solid, temperature of solid (remember that for a fair test all other variables must remain the same).
- Create a variety of mixtures using materials such as salt, sand, water, paper clips and rice and use a variety of methods to separate them.
- Observe and compare the changes that take place when cakes are baked or bicarbonate of soda mixes with vinegar.



<b>Topic: Properties and change</b>	es of materials		Year: 5	Strand: Chemistry		
Question 1: Thermal insulators(tick two)	Start of unit:	End of unit:	Question 7: Describe separating paper clip	Start of unit:		
do not allow heat to pass through easily			why you chose this n	nethod.		
allow heat to pass through easily						
keep heat contained and keep things						
warm						
do not keep heat contained and allow things to cool						
Q2: Examples of electrical	Start of	End of				
conductors are(tick all that apply)	unit:	unit:				
copper			Question 8: You cond	duct an experiment to		
plastic			investigate if some s	olids dissolve quicker	Start of	End of
wood				ne thing you will do to	unit:	unit:
iron			make the test fair.			
rubber						
Question 3: Materials that dissolve	Start of	End of				
are: insoluble	unit:	unit:				
soluble						
a solution						1
			Question 9: Match t	hese mixtures to the	Start	End
Question 4: When solid particles mix with the particles of a liquid, this is	Start of unit:	End of unit:	most efficient methods of separation.		of unit:	of unit:
called	unit.	unit.	salt and	filtoning		
evaporation			water	filtering		
filtering					-	
dissolving			rice and			
sieving			water	sieving		
Question 5: A synonym for the word	Start of	End of	cand and		- -	
'permeable' is waterproof	unit:	unit:	sand and water	evaporating		
absorbent					J	
magnetic						
transparent					•	<u> </u>
			Question 10: Write a		Start of	End of
estion 6: Match these changes to e scientific name for the process.	Start of unit:	End of unit:	indicate if these are examples of reversible or irreversible changes.		unit:	unit:
			frying an egg			
ice turns to condensation water			mixing paper clips a			
			mixing sugar and wa	iter		
ater turns to						
vater turns to vater vapour evaporation			baking a cake	ter		
vater vapour evaporation			mixing flour and wat			
overetion			mixing flour and wat	ur		