

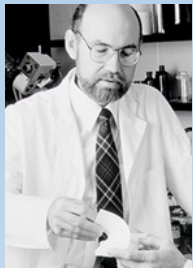
# Year 5, Summer 2: Super Scientists - Changing States of Matter



Vocabulary	Definition
reversible change	a change which can be undone without creating any new materials
irreversible change	a change which creates new materials and cannot be undone
physical change	a change where only the size, shape or form of an of a substance is effected
chemical reaction	a change that creates a completely new substance by rearranging the particles of multiple substances
evaporation	the process when a liquid changes to a gas or a steam from the energy created by heating it
condensation	the process when a gas changes into a liquid after touching a cooler surface
sublimation	the process when a solid changes into a gas, without first becoming a liquid
dissolve	where substances are broken up or absorbed by something, and they seem to 'disappear' into something else

Understanding the properties of materials and how they can be changed is important for helping us to create new

<p><b>solid</b></p> <ul style="list-style-type: none"> <li>● rigid</li> <li>● fixed shape</li> <li>● fixed volume</li> </ul>	<p><b>liquid</b></p> <ul style="list-style-type: none"> <li>● not rigid</li> <li>● no fixed shape</li> <li>● fixed volume</li> </ul>	<p><b>gas</b></p> <ul style="list-style-type: none"> <li>● not rigid</li> <li>● no fixed shape</li> <li>● no fixed volume</li> </ul>
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Spencer Silver was a chemical scientist in America. He is famous for inventing the low adhesive (not very sticky), insoluble glue that is used to make Post it Notes. He did this by using microspheres (tiny bubbles), which stopped the glue from bonding

## Separating Materials

**Sieving**—a way to separate two solids of different sizes (e.g. flour and raisins).

**Filtration**—a mixture of liquids and solids which haven't dissolved can be filtered using paper with tiny hole (e.g. sand and water).

**Evaporation**—a solid dissolved in a liquid (solution) can be heated. The liquid evaporates and leaves behind a solid (e.g. salt and water solution).

**Magnetism**—metal attracts to the magnet, leaving behind the other solid (e.g. paper clips and matchsticks).