

**Salting** – packing in layers of salt

**Scale** – the size of the model compared to the real thing

**Seam** – used to join fabrics together

**Seasoning** – reducing the moisture content of timber

**Secondary research** – research collected and published by others

**Semiconductor** – a silicon based material or electronic component

**Sensors** – devices that can sense temperature, heat, light and moisture

**Shear** – a force which acts across a material

**Shell structure** – a structure made of sheet materials

**Simulate** – use the computer to try out something before actually making it

**Single acting** – in a pneumatic circuit air pressure pushes piston out, a spring returns it

**Sketching** – drawing freehand

**SMA** – shape metal alloy

**Smart or buffer box** – a box connected to a computer, which enables you to plug in inputs and output devices easily

**Smart materials** – new materials with unusual characteristics

**Snail cam** – a snail shaped cam

**Soft jaws** – soft plastic jaws to fit in a vice to prevent marking the surfaces being held

**Softwood** – wood from a tree which keeps its leaves in winter

**Solvents** – chemical which dissolves others

**Sources** – where you find information

**SPDT** – single pole double throw

**Specification** – what the product has to do and look like, a list of design requirements

**Split die** – a tool used to cut an external screw thread

**Splitting** – when the end of a wooden plank splits as it dries out

**Spreadsheet program** – a computer program such as *Excel* which stores data and allows it to be manipulated

**Sprue** – a channel through which metal or plastic can be poured or injected

**SPST** – Single pole single throw

**Stability** – the resistance to change in a system

**Stain resistant** – fabric that is chemically protected against stains affecting fibres

**Star profile** – a diagram to show a food's characteristics

**Static** – a constant load

**Stencil cutter** – a plotter which can cut card or thin plastic sheet

**Sterile** – with no micro-organisms present

**Stiffness** – the ability to resist bending

**Stock sizes** – the standard sizes of material that suppliers have in stock

**Stroke** – the movement of the piston in a pneumatic cylinder

**Structure** – a body which recognises forces without changing shape too much

**Struts** – rigid members used in compression

**Sugars** – used as sweeteners

**Summative evaluation** – the final evaluation

**Sustainable** – capable of being maintained at a certain level

**Swarf** – small bits of waste material produced while cutting screw threads or when cutting on a centre lathe

**Sweated** – when two pieces of tinned metal are joined together

**Switch** – breaks an electrical circuit when a button, lever or toggle is operated

**Symbols** – drawing which represent things

**Synthetic** – a material that does not come from a natural source

**System** – a collection of linked things