

Approaches to Learning and Teaching – Design, Creativity and Technology

Guidelines for the development of production skills

Year	Suitable materials	Suitable systems and components	Processes and production skills	Safety	Suggested products
Years 1–4	<ul style="list-style-type: none"> • paper and cardboard • food • fabrics • found materials • soils/growing media • construction materials and kits (for systems) 	Mechanical systems including: <ul style="list-style-type: none"> • levers • pulleys • cams • linkages • gears. 	<ul style="list-style-type: none"> • use of different glues and tapes • mixing • cutting with approved knives, safety scissors • digging • planting 	Safe use of: <ul style="list-style-type: none"> • knives • scissors • utensils and basic cooking appliances. 	Products could include: <ul style="list-style-type: none"> • puppets • model buildings • hats • bags • drinks • sandwiches • breakfast bars • salads • smoothies.
Years 5–8	As above and: <ul style="list-style-type: none"> • woods • metals • ceramics • plastics. 	As above and: <ul style="list-style-type: none"> • basic electrical and electronic components • pneumatics • hydraulics. 	As above and use of a range of: <ul style="list-style-type: none"> • cutting techniques, including using saws, scissors, knives, secateurs, hand drills • joining and constructing / fabricating techniques, including mixing (hand and electrical appliances), soldering, hammering, nailing, gluing, including glue guns, sewing machines, overlockers, needles and thread • finishing techniques, including sanding, buffing, seam neatening • decoration techniques, including garnishing, printing, varnishing, painting. 	As above and safe use of: <ul style="list-style-type: none"> • a range of scissors • a range of knives • a variety of hand tools such as saws, drills, chisels • a range of power tools such as jigsaws, sanders, drills • sewing machine, overlocker, iron • some very basic maintenance of tools (under teacher supervision) • introduction to the risk assessment process (identification of hazard, level of risk, control of risk). 	Products could include: <ul style="list-style-type: none"> • vehicles • toys • biscuits and cakes/packaging • pasta dishes • lifting devices • boxer shorts • nerve tester • herb garden.
Years 9–10	As above and glass.	As above and more sophisticated electrical and electronic and basic control components.	As above and: <ul style="list-style-type: none"> • welding • forming objects on lathe and pottery wheel • glass cutting and leadlighting. 	As above and safe use of: <ul style="list-style-type: none"> • a range of portable power tools such as a biscuit jointer • fixed machinery, such as pedestal drill, sander, lathe • welding equipment • basic maintenance (under teacher supervision) of tools, equipment and machinery • use of risk assessment process. 	Products could include: <ul style="list-style-type: none"> • electronic security devices and games • clocks • shelving units • basic chairs and tables • model bridges • costume pieces • shirts • hampers • international dishes such as risotto, nasi goreng • community garden • raising poultry • model energy efficient house.