

## Southam St James CofE Academy Progression in skills- Build

Year groups						
Skill area	One	Two	Three	Four	Five	Six
<b>Research and investigate</b>	Different types of vehicles, different parts of a vehicle, explore wheels and axles in toy cars.	Levers and sliders, examples of what products which used these: see saw, scissors, hammer, wheelbarrow, shaduf, research examples of moving pictures	Linkages, examples of what products which used these: clothes horse, lifts, tool box, engines	Gears; examples of products which used these: tin openers, bicycles, how gears on a bicycle work, history of gears, ancient Greek Antikythera mechanism (used to predict astronomical positions)	Cams mechanisms, examples of what products use cams and followers (mechanical toys, sewing machines, engines, clocks), history of cams and mechanisms, structure of a cams toy	Investigate water wall and pulleys
<b>Design</b>	Understand criteria (user, purpose, function, appeal), generate/innovate/develop ideas, talking, drawing, labelling	Understand criteria (user, purpose, function, appeal), generate/innovate/develop ideas, talking, drawing, labelling, creating a mock up.	Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings and prototypes.	Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings and exploded diagrams.	Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings, cross-sectional diagrams	Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings and prototypes
<b>Make</b>	Select tools/materials for making a toy vehicle with wheels and axles, cutting, different ways of joining, decorating, finishing	Select tools/materials for making a moving picture with levers and sliders, cutting, different ways of joining, decorating, finishing.	Select tools/materials for making pop-up book with linkages, cutting, different ways of joining, decorating, finishing.	Select tools/materials for making a moving toy with gears and an electrical circuit, cutting, different ways of joining, decorating, finishing	Select tools/materials for making a cam toy, cutting, different ways of joining, decorating, finishing	Select tools/materials for making a water wall for Reception with recycled objects, cutting, tying knots, sticking, making holes
<b>Use and evaluate</b>	Car racing in the playground exploring speed, film/photograph children doing this, evaluation against criteria and existing products.	Photograph pictures, evaluation against criteria and existing products.	Photograph books, written evaluation against criteria and existing products.	Written evaluation against criteria and existing products	Videod peer evaluation— against criteria and existing products	Evaluation with user against criteria and existing products

