

John E. Batty Primary		Year Group Top Level Plan		Subject:	Design and Technology (KS2)
Year Group	Autumn	Spring	Summer		
Year 3	<ul style="list-style-type: none"> Know how to consider the needs of individuals and groups to create different design briefs for projects. Know how to make a step by step plan for a given project. Know how to identify the strengths and weaknesses of ideas. Know when to evaluate existing products – What works better than others? <p><u>Stone Age to Iron Age</u></p> <ul style="list-style-type: none"> Know how to apply the principles of a healthy diet. Can follow a simple recipe for a fruit stew for a Stone Age family. Know the names of 2 famous Chefs – James Martin, Delia Smith Know how to crack an egg. 	<ul style="list-style-type: none"> Know how to consider the needs of individuals and groups to create different design briefs for projects. Know how to make a step by step plan for a given project. Know how to identify the strengths and weaknesses of ideas. Know when to evaluate existing products – What works better than others? <p><u>Local History of Redcar</u></p> <ul style="list-style-type: none"> Can understand and use mechanical systems. Knows that a mechanism model design can be for different people - by refining. Can make a product which uses forces for launching – Design and build a new launcher for the Redcar lifeboat – linked to forces (Science) and Local history topic – Redcar 	<ul style="list-style-type: none"> Know how to consider the needs of individuals and groups to create different design briefs for projects. Know how to make a step by step plan for a given project. Know how to identify the strengths and weaknesses of ideas. Know when to evaluate existing products – What works better than others? <p><u>Ancient civilization - Ancient Egypt</u></p> <ul style="list-style-type: none"> Know how to work accurately to measure, make cuts and make holes. Can select tools and equipment suitable for the task – design and make own pyramid/burial chamber – linked with Egyptians 		
Year 4	<ul style="list-style-type: none"> Know how to use the ideas of experts and existing designs to help design a product. Know how to make a detailed plan for a product and explain it (with specifications). Know how to consider the views of others including any intended users to improve the work/product. Know how and when to evaluate their design for purpose and appearance and suggest improvements. <p><u>Roman invasion of Britain</u></p> <ul style="list-style-type: none"> Knows how to select materials and components suitable for a task Knows when to make accurate measurements to nearest CM – Catapult for a Roman soldier. 	<ul style="list-style-type: none"> Know how to use the ideas of experts and existing designs to help design a product. Know how to make a detailed plan for a product and explain it (with specifications). Know how to consider the views of others including any intended users to improve the work/product. Know how and when to evaluate their design for purpose and appearance and suggest improvements. <p><u>Anglo Saxons/Scots</u></p> <ul style="list-style-type: none"> Knows how to apply the principles of a healthy diet – Can follow a recipe for cooking eggs for a Saxon family. Knows which tools to select and which equipment is suitable for the task – different ways to cook and egg – scrambled or poached – using a microwave 	<ul style="list-style-type: none"> Know how to use the ideas of experts and existing designs to help design a product. Know how to make a detailed plan for a product and explain it (with specifications). Know how to consider the views of others including any intended users to improve the work/product. Know how and when to evaluate their design for purpose and appearance and suggest improvements. <p><u>Vikings</u></p> <ul style="list-style-type: none"> Know how to use mechanical systems. Can make a product which uses electrical components – hand held fan, a game show buzzer or a house alarm sensor – linked to electricity in Science 		

<p>Year 5</p>	<ul style="list-style-type: none"> Know how to gather ideas through a range of research methods and know when to develop alternative plans. Know that materials have functional and aesthetic qualities. Know how to critically evaluate the quality of their design, manufacture and whether or not it fulfils the original design brief. <p>Mayans</p> <ul style="list-style-type: none"> Knows how to peel, chop, slice, Grate, mix and spread ingredients - make guacamole and salsa. 	<ul style="list-style-type: none"> Know how to gather ideas through a range of research methods and know when to develop alternative plans. Know that materials have functional and aesthetic qualities. Know how to critically evaluate the quality of their design, manufacture and whether or not it fulfils the original design brief. <p>Tudors - Conflicts–War of the Roses, Spanish Armada</p> <ul style="list-style-type: none"> Knows that 3D textiles can be combined to make a product. Knows the importance and can produce a design specification – for a product. Tudor sailor’s gunpowder bag 	<ul style="list-style-type: none"> Know how to gather ideas through a range of research methods and know when to develop alternative plans. Know that materials have functional and aesthetic qualities. Know how to critically evaluate the quality of their design, manufacture and whether or not it fulfils the original design brief. <p>Victorians (Industrial Revolution)</p> <ul style="list-style-type: none"> Know how to make a prototype using accurate measurements to nearest MM Knows how to use tools for accurate assembly – design and build a bridge with a mechanism linked to water cycle/rivers topic.
<p>Year 6</p>	<ul style="list-style-type: none"> Know how to identify the needs, wants and preferences and values of individuals and groups and can use a form of market research to inform their planning. Know how to justify their plans and ideas by considering different cultures, societies and environments in their plans and designs. Know how to compare ideas to an original design brief. Know how to investigate innovation and sustainability. Know how to test and fully evaluate the product against clear criteria and then make refinements to the product. <p>Ancient Greece</p> <ul style="list-style-type: none"> Knows the architect Sir Robert Smirke and can name two or more of his buildings – British Museum, The Royal Mint, and The British Library. Can plan and build model of new museum in style of Sir Robert Smirke - Linked to Art scheme – Greek inspired architecture. 	<ul style="list-style-type: none"> Knows how to identify the needs, wants and preferences and values of individuals and groups and can use a form of market research to inform their planning. Know how to justify their plans and ideas by considering different cultures, societies and environments in their plans and designs. Know how to compare ideas to an original design brief. Know how to investigate innovation and sustainability. Knows how to test and fully evaluate the product against clear criteria and then make refinements to the product. <p>Conflicts – WWI + Churchill Hitler</p> <ul style="list-style-type: none"> Is able to work out ratios in recipes to be able to adapt them for appearance, taste, texture, aroma and different cultures. Is able to use a technique that involves a number of steps – Bake Bread and Butter Pudding – Private Peaceful – WWI Know how people were able to protect themselves during a WW2 bombing raid – Anderson and Morrison shelters Know how to investigate, plan and build a scaled model of a Morrison bomb shelter to fit a toy doll. 	<ul style="list-style-type: none"> Knows how to identify the needs, wants and preferences and values of individuals and groups and can use a form of market research to inform their planning. Know how to justify their plans and ideas by considering different cultures, societies and environments in their plans and designs. Know how to compare ideas to an original design brief. Know how to investigate innovation and sustainability. Knows how to test and fully evaluate the product against clear criteria and then make refinements to the product. <p>Britain since 1948</p> <ul style="list-style-type: none"> Can apply their understanding of computer programming to program, monitor and control a product – robot to patrol an area in a new town. Is able to use a technique/ algorithm that involves a number of inputs. <ul style="list-style-type: none"> Knows who invented various forms of transport ... <ul style="list-style-type: none"> ➤ Bike ➤ Car ➤ Plane ➤ Train – Linked to Year 5 Victorians