****Stakesby Primary Academy Design Technology Disciplinary Progression of Skills *Commitment Kindness Excellence*

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| Year Group | Design | Make | Evaluate | Food and Nutrition | Materials/ Structures | Mechanisms |
| EYFS | I can select appropriate resources.  I can use gestures, talking and arrangements of materials and components to show design.  I can use contexts set by the teacher and myself.  I can use vocabulary plan, make, evaluate. | I can construct with a purpose, using a variety of resources.  I can use simple tools and techniques.  I can build / construct with a wide range of objects.  I can select tools and techniques to shape, assemble and join.  I can replicate structures with materials / components.  I can record experiences by drawing, writing, voice recording. | I can practise some appropriate safety measures independently.  I can talk about how things work.  I can describe what worked well/ not so well when making my design.  I can suggest ways to improve my work. | I can practise stirring, mixing, pouring, blending.  I can discuss how to make an activity safe and hygienic. | I can begin to build structures with a range of materials inside and out. | I can (with support), begin to incorporate simple moving parts into models.  E.g. use split pins to make body parts move.  I can show an interest in technological toys. |
| Year 1 | I can create my own ideas.  I can explain what my product is for, and how it will work.  I can use pictures and words to plan, begin to use models.  I can design a product for themselves, following design criteria.  I can research similar existing products. | I can explain what I am making and consider what I need to do next.  I can select tools/equipment to cut, shape, join, finish and explain choices.  I can measure, mark out, cut and shape, with support.  I can choose suitable materials and explain choices.  I can work in a safe and hygienic manner. | I can talk about my work, linking it to what I was asked to do.  I can talk about existing products considering: use, materials, how they work, audience, where they might be used.  I can talk about existing products, and say what is and isn’t good.  I can talk about things that other people have made.  I can begin to talk about what could make product better. | I can describe food textures.  I can wash hands and clean surfaces.  I can think of interesting ways to decorate food.  I can cut, peel and grate safely, with support.  I can create a healthy smoothie. | I can begin to measure and join materials, with some support.  I can suggest ways to make material/product stronger.  I can design and make a city building. | I can begin to use levers or slides.  I can make a toy that moves. |
| Year 2 | I can explain what I want to do and describe how I might do it.  I can explain purpose of product, how it will work and how it will be suitable for the user.  I can describe design using pictures, words, models, diagrams and begin to use ICT.  I can design products for myself and others following design criteria.  I can choose best tools and materials, and explain my choices.  I can use knowledge of existing products to produce ideas. | I can explain what I am making and why it fits the purpose.  I can make suggestions as to what I need to do next.  I can join materials/ components together in different ways.  I can measure, mark out, cut and shape materials and components, with support.  I can describe which tools I am using and why.  I can choose suitable materials and explain choices depending on characteristics.  I can use finishing techniques to make product look good.  I can work safely and hygienically. | I can describe what went well, thinking about the design criteria.  I can talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion.  I can evaluate how good existing products are.  I can talk about what they would do differently if I were to do it again and why. | I can describe properties of ingredients.  I can cut, peel and grate with increasing confidence.  I can create a seasonal fruit dessert. | I can measure materials.  I can join materials in different ways.  I can use joining, rolling or folding to make it stronger.  I can use own ideas to try to make product stronger.  I can make a bus that moves. | I can, with some independence, explore and use winding mechanisms.  I can use levers or slides.  I can begin to understand how to use wheels and axles.  I can use scissors safely.  I can make a bus that moves. |
| Year 3 | I can begin to research others’ needs.  I can show design meets a range of requirements.  I can follow a given design criteria.  I can have at least one idea about how to create product.  I can create a plan which shows order, equipment and tools.  I can describe design using an accurately labelled sketch and words.  I can explain how product will work. | I can select suitable tools/ equipment, explain choices; begin to use them accurately.  I can select appropriate materials, fit for purpose.  I can work through a plan in order.  I can consider how good product will be.  I can begin to measure, mark out, cut and shape materials/ components with some accuracy.  I can begin to assemble, join and combine materials and components with some accuracy.  I can begin to apply a range of finishing techniques with some accuracy. | I can look at design criteria while designing and making.  I can use design criteria to evaluate finished product.  I can say what I would change to make design better.  I can begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose. | I can carefully select ingredients.  I can use equipment safely.  I can make a product look attractive.  I can think about how to grow plants to use in cooking.  I can begin to prepare and cook some dishes safely and hygienically.  I can grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. | I can use appropriate materials.  I can work accurately to make cuts and holes.  I can join materials.  I can begin to make strong structures. | I can select appropriate tools / techniques.  I can alter a product after checking in order to improve it.  I can begin to try new/different ideas.  I can use simple lever and linkages to create movement. |
| Year 4 | I can use research for design ideas.  I can show how a design meets a range of requirements and is fit for purpose.  I can begin to create own design criteria.  I can have at least one idea about how to create product and suggest improvements for design.  I can produce a plan and explain it to others.  I can say how realistic plan is.  I can include annotated sketches.  I can make and explain design decisions considering availability of resources.  I can make a prototype.  I can begin to use computers to show design. | I can select suitable tools and equipment, explain choices in relation to required techniques and use accurately.  I can select appropriate materials, fit for purpose; explain choices.  I can work through plans in order.  I can realise if product is going to be good quality.  I can measure, mark out, cut and shape materials/components with some accuracy.  I can assemble, join and combine materials and components with some accuracy.  I can apply a range of finishing techniques with some accuracy. | I can refer to design criteria while designing and making.  I can use criteria to evaluate product.  I can begin to explain how I could improve my original design.  I can evaluate existing products, considering: how well they’ve been made, materials, whether they work, how they have been made, fit for purpose. | I can think about presenting product in interesting/ attractive ways.  I can use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. | I can measure carefully to avoid mistakes.  I can attempt to make product strong.  I can continue working on product even if original didn’t work.  I can make a strong, stiff structure. | I can select most appropriate tools/ techniques.  I can explain alterations to product after checking it.  I can grow in confidence about trying new / different ideas.  I can use levers and linkages to create movement.  I can use pneumatics to create movement. |
| Year 5 | I can use the internet and questionnaires for research and design ideas.  I can take a user’s view into account when designing.  I can begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose.  I can create my own design criteria.  I can create a range of ideas.  I can produce a logical, realistic plan and explain it to others.  I can use cross-sectional planning and annotated sketches.  I can make design decisions considering time and resources.  I can model and refine design ideas by making prototypes and using pattern pieces.  I can use computer-aided designs. | I can use selected tools/equipment with good level of precision.  I can produce suitable lists of tools, equipment/materials needed.  I can select appropriate materials, fit for purpose; explain choices, considering functionality.  I can create and follow detailed step-by-step plan.  I can (usually) accurately measure, mark out, cut and shape materials/components.  I can (usually) accurately assemble, join and combine materials/ components.  I can (usually) accurately apply a range of finishing techniques.  I can use techniques that involve a small number of steps. | I can evaluate quality of design while designing and making.  I can evaluate ideas and finished product against specification, considering purpose and appearance.  I can test and evaluate final product.  I can evaluate and discuss existing products, considering: how well they’ve been made, materials, whether they work, how they have been made, fit for purpose.  I can begin to evaluate how much products cost.  I can research how sustainable materials are. | I can present product well - interesting, attractive, fit for purpose.  I can prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source.  I can use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. | I can select materials carefully, considering intended use of product and appearance.  I can measure accurately enough to ensure precision.  I can ensure product is strong and fit for purpose.  I can begin to reinforce and strengthen a 3D frame. | I can refine product after testing.  I can grow in confidence about trying new / different ideas.  I can use cams, pulleys or gears to create movement. |
| Year 6 | I can draw on market research to inform design.  I can use research of user’s individual needs, wants and requirements for design.  I can identify features of design that will appeal to the intended user.  I can create own design criteria and specification.  I can come up with innovative design ideas.  I can follow and refine a logical plan.  I can use annotated sketches, cross-sectional planning and diagrams.  I can make design decisions, considering, resources and cost.  I can clearly explain how parts of design will work, and how they are fit for purpose.  I can independently model and refine design ideas by making prototypes and using pattern pieces.  I can use computer-aided designs. | I can use selected tools and equipment precisely.  I can produce suitable lists of tools, equipment, materials needed, considering constraints.  I can create, follow, and adapt detailed step-by-step plans.  I can accurately measure, mark out, cut and shape materials/ components.  I can accurately assemble, join and combine materials/ components.  I can accurately apply a range of finishing techniques.  I can use techniques that involve a number of steps.  I can be resourceful with practical problems. | I can evaluate quality of design while designing and making; is it fit for purpose?  I can keep checking design is the best it can be.  I can evaluate ideas and finished product against specification, stating if it’s fit for purpose.  I can test and evaluate final product; explain what would improve it and the effect different resources may have had.  I can, thorough evaluations of existing products, consider: how well they’ve been made, materials, whether they work, how they’ve been made, are they fit for purpose?  I can evaluate how much products cost to make and how innovative they are.  I can give opinions on some key inventors/designers/ engineers/ chefs/ manufacturers. | I can understand a recipe can be adapted by adding / substituting ingredients.  I can adapt recipes to change appearance, taste, texture or aroma.  I can prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source.  I can use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. | I can select materials carefully, considering intended use of the product, the aesthetics and functionality.  I can reinforce and strengthen a 3D frame. | I can refine product after testing, considering aesthetics, functionality and purpose Incorporate hydraulics and pneumatics.  I can be confident to try new / different ideas.  I can use cams, pulleys and gears to create movement. |