

Please use this as a reference point when planning and teaching units of work, drawing on later or earlier skills to support and extend children. The skills are ongoing and should be used in each unit in some way even if it is verbal evaluating. Designing will link in with art and can be used as a way to practice drawing and sketching on top of the art units. This should not be used instead of art.

Designing thinking, sketching ideas, exploring ideas, looking at purpose, audience and context, communicating ideas, developing thinking						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Thinking about what it is they are going to make – constructing for a purpose</p> <p>Thinking about range of materials and resources that can be used, including how they can combine different materials</p> <p>Suggesting ideas to others on how to make it in a group</p> <p>Drawing design before making with simple labels</p>	<p>Drawing on own experiences to generate ideas</p> <p>Suggesting ideas and explaining what they are going to do</p> <p>Identify a target group for what they intend to design and make</p> <p>Making simple drawings to show design</p> <p>Exploring different potential designs they could make</p> <p>Model their ideas using card and paper</p> <p>Developing design ideas applying findings from earlier research and planning</p> <p>Can plan by suggesting what to do next</p> <p>Plans what resources they can use</p>	<p>Generate ideas by drawing on their own and other people's experiences</p> <p>Developing their ideas and plans through discussion, observation, drawing and modelling</p> <p>Identify a purpose for what they intend to design and make</p> <p>Identify simple design criteria</p> <p>Make simple drawings and label parts</p> <p>Can say how their product will work</p> <p>Makes appropriate choices about the materials they can use, thinking about why some are better.</p>	<p>Generate ideas for an item considering its purpose and the user/s</p> <p>Identify a purpose and establish criteria for a successful product</p> <p>Plan the order of their work before starting</p> <p>Explore, develop and communicate design proposals by modelling ideas</p> <p>Making drawings with labels when designing</p> <p>Exploring and examining different materials, skills and techniques</p>	<p>Generate ideas considering the purposes for which they are designing</p> <p>Making labelled drawings from different views showing specific features</p> <p>Developing a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempt fails</p> <p>Evaluate products and identify criteria that can be used for own designs</p>	<p>Generate ideas through brainstorming and identify and purpose for their product</p> <p>Draw up a specification for their design</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempt fail</p> <p>Use results of investigations, information sources, including ICT when developing design ideas</p>	<p>Communicate their ideas through detailed labelled drawings</p> <p>Develop a design specification</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques.</p>

Making planning how they will go about making their design, using practical skills and techniques, making the products work

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Understands that different media can be combined to create new effects.</p> <p>Manipulates materials to achieve a planned effect.</p> <p>Constructs with a purpose in mind, using a variety of resources.</p> <p>Uses simple tools and techniques competently and appropriately.</p> <p>Selects appropriate resources and adapts work where necessary.</p> <p>Selects tools and techniques needed to shape, assemble and join materials they are using.</p>	<p>Can make their design using appropriate techniques</p> <p>Selects appropriate tools with guidance or modelling</p> <p>Selects from a range of materials and components suitable for the task</p> <p>Uses tools safely and follows safety procedures.</p> <p>Can measure, mark out, cut and shape materials and components with guidance.</p> <p>Uses simple finishing techniques to improve the appearance of their product.</p>	<p>Selects from a range of materials and components according to their characteristics.</p> <p>Selects appropriate tools: uses vocabulary to describe and name them.</p> <p>Follows safety and hygiene procedures</p> <p>Uses finishing techniques including those from art</p> <p>Can assemble, join and combine materials and components in order to make a product.</p> <p>Can cut, shape and join fabric to make a simple garment using basic sewing techniques.</p> <p>Can choose and use appropriate finishing techniques.</p>	<p>Selects tools and techniques for making their product</p> <p>Can measure, mark out, cut, score, and assemble components with increasing accuracy.</p> <p>Works safely and accurately with a range of simple tools.</p> <p>Thinks about their ideas as they make progress and be willing to change things if this helps them improve their work.</p> <p>Can measure, tape or pin, cut, and join fabric with some accuracy.</p> <p>Uses finishing techniques to strengthen and improve the appearance of their product using a range of equipment.</p>	<p>Selects appropriate tools and techniques for making their product.</p> <p>Can measure, mark out, cut, and shape a range of materials using appropriate tools.</p> <p>Can join and combine materials and components accurately in temporary and permanent ways.</p> <p>Can knit, weave, and sew using a range of different stitches,</p> <p>Can measure, tape or pin, cut, and join fabric with some accuracy.</p> <p>Uses simple graphical communication techniques.</p>	<p>Selects appropriate materials, tools and techniques.</p> <p>Can measure and mark out accurately.</p> <p>Shows skills when using different tools and equipment safely and accurately.</p> <p>Can weigh and measure accurately (time, dry ingredients, liquids).</p> <p>Cuts and joins with accuracy to ensure a good-quality finish to the product.</p>	<p>Selects appropriate tools and materials, components and techniques.</p> <p>Can assemble components to make working models.</p> <p>Uses a range of tools safely and accurately.</p> <p>Constructs products using permanent joining techniques.</p> <p>Make modifications as they go along.</p> <p>Pin, sews and stitches materials together to create a product.</p> <p>Can achieve a quality product matching the specifications.</p>

Technical knowledge tools and purposes, how to make things work, effects of tools

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Uses simple tools and techniques competently and appropriately</p> <p>Selects appropriate resources and adapts work where necessary.</p> <p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p>	<p>Knows about some simple working characteristics of materials and components</p> <p>Knows how some simple mechanisms move such as levers, sliders, wheels, and axels.</p> <p>Is aware that resources can be used to strengthen structures.</p> <p>Develops understanding of food which shares sensory characteristics e.g. savory, sweet, juicy.</p> <p>Can use some technical vocabulary correctly in projects they are undertaking.</p>	<p>Knows about working characteristics of materials and components.</p> <p>Knows about how simple mechanisms move such as levers, sliders, wheels, and axels.</p> <p>Knows how freestanding structures can be made stronger, stiffer and more stable.</p> <p>Knows that a 3-D textiles product can be assembled from two identical fabric shapes.</p> <p>Is aware that food ingredients should be combined according to their sensory characteristics.</p> <p>Uses correct technical vocabulary for the different projects.</p>	<p>Is aware that learning in other subjects such as science and maths can help design and make products work.</p> <p>Knows that materials have both functional properties and aesthetic qualities.</p> <p>Knows that materials can be combined and mixed to create more useful characteristics.</p> <p>Mostly uses correct technical vocabulary accurately for the different projects.</p> <p>Develops understanding of how mechanical systems create movement.</p> <p>Knows how simple electrical circuits and components can be used to create functional products.</p> <p>Can make strong, stiff shell structures.</p>	<p>Can use learning from science and maths to help design and make products work.</p> <p>Can name some functional properties and aesthetic qualities of materials.</p> <p>Knows how some materials can be combined and mixed to create more useful characteristics.</p> <p>Uses correct technical vocabulary accurately for the different projects.</p> <p>Knows how mechanical systems such as levers, linkages, or pneumatic systems create movement.</p> <p>Can program a computer to control their products.</p> <p>Knows that a single fabric shape can be used to create a 3D textiles product.</p>	<p>Can transfer learning from science and maths for use to help design and make products work.</p> <p>Can discuss the functional properties and aesthetic qualities of materials.</p> <p>Can combine and mix different materials to create more useful characteristics.</p> <p>Knows that mechanical and electrical systems have an input, process, and output.</p> <p>Can reinforce and strengthen a 3D framework.</p> <p>Knows how to use a computer to monitor changes in the environment and control their products.</p> <p>Knows that a 3D textiles product can be made from a combination of fabric shapes.</p>	<p>Knows how to use learning from science and maths to help design and make products work.</p> <p>Can say why they have chosen materials based on their functional properties and aesthetic qualities.</p> <p>Can discuss reasons for combining and mixing different materials to create more useful characteristics.</p> <p>Knows how more complex electrical circuits and components can be used to create functional products.</p> <p>Knows that a recipe can be adapted by adding or substituting one or more ingredients.</p>

Evaluating own ideas, existing products, accuracy of design, effectiveness, quality, comparisons of others work

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They develop their own explanations by connecting ideas or events.</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>Exceeding:</p> <p>Talks about the plans they made and what they could do to change them if they were going to make it again.</p>	<p>Talks about their design ideas and what they are making.</p> <p>Can evaluate their product by discussing how well it works in relation to the purpose.</p> <p>Can evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>Can evaluate their product by asking questions about what they have made and how they have gone about it.</p> <p>Explores how products work and how or where they might be used.</p> <p>Explores what they like and dislike about products.</p>	<p>Can make simple judgements about their products and ideas against their design criteria.</p> <p>Can evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>Can talk about their ideas, saying what they like and dislike about them.</p> <p>They explore what products and individual materials are made from.</p>	<p>Can evaluate their product against original design criteria e.g. how well it meets its intended purpose.</p> <p>Can disassemble and evaluate familiar products.</p> <p>Looks at how well products work to achieve their purposes.</p> <p>Knows whether some products can be recycled or reused.</p> <p>Looks at inventors, designers, engineers, chefs, and manufacturers who have developed ground-breaking products.</p>	<p>Can evaluate their work both during and at the end of the assignment.</p> <p>Can evaluate their products by carrying out appropriate tests.</p> <p>Can analyse how well products meet users needs and wants.</p> <p>Can analyse whether products can be recycled or reused.</p> <p>Can discuss some key inventors, designers, engineers, chefs, and manufacturers who have developed ground-breaking products.</p>	<p>They evaluate a product against the original design specification.</p> <p>Can evaluate their product personally and seek evaluation from others.</p> <p>Listens to feedback from others about what works well and what they can do to improve their product.</p> <p>Looks at how well materials have been used and how effective they are in the final product.</p> <p>Knows about inventors, designers, engineers, chefs, and manufacturers who have developed ground-breaking products.</p>	<p>Can evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Considers the views of others, including intended users, to improve their work.</p> <p>Can record their evaluations using drawings with labels.</p> <p>Can evaluate against their original criteria and suggest ways that their product could be improved.</p> <p>Looks into how sustainable the materials in the products are.</p> <p>Explores the impact products have beyond their intended purpose.</p>

Cooking and nutrition origins of food, food preparation, nutritional value, how to cook it

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Handwashing and germs – importance of making sure hands are clean before touching food</p> <p>Knowing that some food is grown/ gathered from places</p> <p>Knowing that some food is made by mixing things together e.g. different things needed to make cake</p> <p>Aware that some things are healthy and some things shouldn't be eaten all the time</p>	<p>Uses basic food handling hygiene practices and personal hygiene.</p> <p>Knows that food comes from plants or animals.</p> <p>Knows of some food that is farmed, grown, or caught.</p> <p>Can name and sort some food into different food groups e.g. vegetables.</p> <p>Is beginning to use techniques such as cutting, peeling and grating.</p> <p>Can name some fruits and vegetables they know to be healthy for your five a day.</p>	<p>Follows safe procedures for food safety and hygiene.</p> <p>Knows that food has to be farmed, grown elsewhere, or caught.</p> <p>Can name and sort foods into the five main food groups.</p> <p>Knows how to prepare simple dishes safely without using a heat source.</p> <p>Can safely use techniques such as cutting, peeling and grating.</p> <p>Knows that everyone should eat at least five portions of fruit and vegetables every day.</p>	<p>Can demonstrate hygienic food preparation and storage.</p> <p>Developing the knowledge and skills to cook a variety of predominantly savory dishes safely and hygienically, using a heat source where appropriate.</p> <p>Developing their skill in using a range of techniques.</p> <p>Shows some understanding of different foods and drinks that help to make up a balance diet.</p> <p>Is aware of some food and drink that help to provide energy for active and healthy lifestyles.</p>	<p>Can explain why steps are taken to ensure food is prepared and stored hygienically.</p> <p>Knows how to prepare and cook a variety of predominantly savory dishes safely including through using a heat source.</p> <p>Can accurately use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading, and baking.</p> <p>Knows that a healthy diet is made up from a variety and balance of different food and drink.</p> <p>Knows that to be active and healthy, food and drink are needed to provide energy for the body.</p>	<p>Can apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens.</p> <p>Can name some food that is grown, reared and caught in the UK and Europe.</p> <p>Is aware of some food that can't be obtained all year round.</p> <p>Developing knowledge of how some key food is processed into ingredients that can be eaten or used in cooking.</p> <p>Can accurately prepare and cook a variety of predominantly savory dishes safely including through using a heat source.</p>	<p>Knows that food is grown, reared, and caught in the UK, Europe and the wider world.</p> <p>Knows that seasons may affect the food available, limiting them.</p> <p>Knows how food is processed into ingredients that can be eaten or used in cooking.</p> <p>Knows that recipes can be adapted to change the appearance, taste, texture and aroma.</p> <p>Knows that different food and drink contain different substances – nutrients, water and fiber – that are needed for health.</p>