

Dream Believe Shine

Ambleside Academy



Progression of Skills: Design and Technology

	YearOne	YearTwo	YearThree	YearFour	YearFive	YearSix
Design	<p>I can draw on my own experiences to think of an idea of my own and use this to create a plan.</p> <p>I can think of who I want to make my product for.</p> <p>I can suggest and discuss ideas and show what I am going to do using words and pictures through labels.</p> <p>I can describe how my product will work.</p> <p>I can create simple mock-ups using card and paper.</p>	<p>I can draw on my own and others' experiences to think of an idea of my own.</p> <p>I can think of a purpose for my product.</p> <p>I can develop my ideas through discussion, drawing and modelling.</p> <p>I can write a simple plan to allow someone else to make my product.</p> <p>I can begin to create simple criteria for my design.</p> <p>I can create mock-ups using different materials.</p>	<p>I can consider the order I will complete tasks when making my product.</p> <p>I can put together a detailed plan, which shows the order, equipment and tools needed.</p> <p>I can plan and begin to adapt the original design using drawings, models and diagrams.</p> <p>I can create a sketch to show my design and begin to annotate my choices.</p> <p>I can identify a purpose and audience for a specific product.</p> <p>I can create success criteria for my product.</p>	<p>I can plan the order I will complete tasks when making my product.</p> <p>I can put together a detailed plan, showing the order and equipment needed and explain it to others.</p> <p>I can plan and adapt the original design using drawings, models and diagrams.</p> <p>I can create a sketch to show my design and begin to annotate my choices in detail.</p> <p>I can think about how to present my product in an interesting way.</p> <p>I can create success criteria and begin to change these as needed.</p>	<p>I can develop a clear idea of what needs to be done, planning how to use materials, equipment and processes and suggesting alternatives if the first design fails.</p> <p>I can generate ideas through brainstorming and discussion and identify a purpose for my product.</p> <p>I can create a sketch to show my ideas and begin to create cross-sectional and exploded diagrams to show my plan in more detail.</p> <p>I can explain how my product will appeal to the audience.</p> <p>I can create success criteria and change these as needed.</p>	<p>I can think about specifications for my design including how it will be sold and how much it will cost.</p> <p>I can justify the use of selected materials.</p> <p>I can research and discover the products needed.</p> <p>I can suggest some alternatives plans and evaluate them.</p> <p>I can create sketches, cross-sectional diagrams and exploded diagrams to show the details of my design and explain these choices.</p> <p>I can make a prototype of my product, make any needed changes before creating the final</p>

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		<i>I can use IT to develop and generate ideas with support.</i>	<i>I can use software to create simple 2d computer aided designs and add simple details using the paint tools.</i>	<i>I can use software to create simple 3d computer aided designs and add details.</i> <i>I can use the rotate and zoom tools with support to view computer aided designs in different ways.</i>	<i>I can make a prototype of my product and consider changes needed before creating the final product.</i> <i>I can use software to create computer aided designs to meet given criteria that require accuracy.</i> <i>I can use the rotate and zoom tools to view computer aided designs in different ways and understand the reasons for doing this.</i>	<i>product and explain the reasons for this.</i> <i>I can use software to create more complex computer aided designs using design criteria and measurements.</i> <i>I can use software to accurately create different shapes to be included in my computer aided design.</i>
Make	<i>I can select the right equipment to help me create my product.</i> <i>I can develop a range of skills including attaching, cutting and measuring with help.</i> <i>I can use tools safely and carefully.</i>	<i>I can choose and use the best tools and materials to make my product.</i> <i>I can measure and cut with some accuracy.</i> <i>I can attach items in different ways and begin to understand why I have made these</i>	<i>I can choose and use the best tools and materials to make my product using appropriate vocabulary to express this.</i> <i>I can attach items in different ways and justify my decisions thinking about its</i>	<i>I can use finishing techniques to strengthen and improve the aesthetic of my product.</i> <i>I can measure, tape or pin items accurately and adapt if needed to maximise the functionality of the product.</i>	<i>I can refer to my plan and evaluate any changes that need to be made before applying finishing techniques to ensure the aesthetic of my product.</i> <i>I can measure accurately enough to ensure that everything is precise.</i>	<i>I can follow my plan and refine it as needed whilst designing my product.</i> <i>I can apply the knowledge I have to select the most suitable tools, materials and equipment.</i>

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<p>I can make a simple model that moves using split pins.</p>	<p>choices e.g. masking tape, glue, sellotape, split pins.</p> <p>I can start to experiment with making holes in different ways.</p> <p>I can combine materials to make a product.</p> <p>I can make a model with a moving part.</p>	<p>purpose and functionality.</p> <p>I can choose and use appropriate finishing techniques and begin to consider the impact this has on the aesthetic.</p> <p>I can measure and cut accurately.</p> <p>I can join different materials with some accuracy.</p> <p>I can assemble, join and combine a range of materials in order to make a product.</p> <p>I can work safely and accurately with a range of different tools.</p> <p>I can begin to use a needle and thread to create a basic stitch.</p>	<p>I can join and combine materials and components accurately in temporary and permanent ways.</p> <p>I can sew using a range of different stitches and use these to join materials.</p>	<p>I can use a range of tools and products to make my product expertly.</p> <p>I can use skills and different tools safely and effectively, considering which would benefit the functionality of my product best.</p>	<p>I can assemble parts accurately to make a working and moving model with full functionality.</p> <p>I can achieve a quality model, including the aesthetic.</p>
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<p><i>Cooking and Nutrition</i></p>	<p><i>I can understand that all food comes from plants or animals.</i></p> <p><i>I can explain how many portions of fruit and vegetables people should eat each day.</i></p> <p><i>I can begin to understand the five food groups in the Eatwell Guide.</i></p> <p><i>I can design dishes and know to select foods from each of the different groups.</i></p>	<p><i>I can understand where in the world different food comes from.</i></p> <p><i>I can understand how food is made - farmed, grown, or caught.</i></p> <p><i>I can explain how many portions of fruit and vegetable people should eat each day and begin to explain why.</i></p> <p><i>I can understand the five food groups and name and sort foods into them.</i></p> <p><i>I can design and prepare balanced dishes using all the food groups.</i></p>	<p><i>I can understand that different foods grow at different times in the year.</i></p> <p><i>I can explain where and how food is grown.</i></p> <p><i>I can explain what makes a healthy diet, including a mixture of food and drink.</i></p> <p><i>I can recognise the steps needed to handle and prepare food hygienically.</i></p> <p><i>I can follow a simple recipe with support.</i></p>	<p><i>I can identify some of the different foods grown in a specific season.</i></p> <p><i>I can explain where and how food is grown and begin to understand reasons for this.</i></p> <p><i>I can explain why nutritious food and drink are needed to be healthy and active.</i></p> <p><i>I can explain the steps needed to handle and prepare food hygienically and begin to explain why these are needed.</i></p> <p><i>I can follow a simple recipe.</i></p>	<p><i>I can identify different foods grown in a specific season and understand why this is.</i></p> <p><i>I can begin to plan meals based on nutritional needs e.g. an increase in energy.</i></p> <p><i>I can recognise a range of cooking techniques including mashing, whisking, crushing, grating, cutting, kneading and baking.</i></p> <p><i>I can handle and prepare food hygienically.</i></p> <p><i>I can begin to prepare ingredients using appropriate cooking utensils.</i></p> <p><i>I can begin to prepare and cook a range of dishes safely and hygienically.</i></p>	<p><i>I can plan a variety of dishes thinking about different needs.</i></p> <p><i>I can recognise and begin to explain a range of cooking techniques including mashing, whisking, crushing, grating, cutting, kneading and baking.</i></p> <p><i>I can handle and prepare food hygienically and explain the steps and reasons why.</i></p> <p><i>I can prepare ingredients using appropriate cooking utensils and begin to give reasons for my choices.</i></p> <p><i>I can measure and weigh ingredients to the nearest gram and millilitre.</i></p> <p><i>I can begin to show an awareness of the need</i></p>
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						to control the temperature of a heat source when using it with support.
Evaluate	<p>I can say what I like and don't like about items I am familiar with.</p> <p>I can evaluate existing products through discussions and comparisons.</p> <p>I can say what I like about my product and what I would do differently next time.</p> <p>I can say how I could improve my product.</p> <p>I can talk about if my product is what I wanted to make from my original design.</p>	<p>I can test new items and say what I like and don't like about them.</p> <p>I can evaluate existing products and write a simple evaluation for them.</p> <p>I can start to explore the different materials used in products.</p> <p>I can say what I like and dislike about my product and what I would do differently next time referring to my original design.</p> <p>I can say how I could improve my product linked to its purpose.</p> <p>I can explain why I have chosen the</p>	<p>I can research and test items and say what I like and don't like about them.</p> <p>I can respond to feedback given to me by an adult to improve my work.</p> <p>I can research given individuals and events within design and technology linked to the product I want to make.</p> <p>I can evaluate my product against design criteria and show that it meets a range of criteria.</p> <p>I can begin to reflect on the materials and techniques I have used linked to purpose,</p>	<p>I can evaluate existing items and begin to use these findings to inform my own design.</p> <p>I can respond to feedback given to me to improve my work, including through discussion with peers.</p> <p>I can research individuals and events within design and technology and begin to evaluate these.</p> <p>I can test and evaluate my product against design criteria considering the materials and techniques used.</p> <p>I can reflect on the materials and</p>	<p>I can evaluate existing items and begin to think about how well the design meets the purpose and use these findings to inform my own design.</p> <p>I can discuss my product with my peers and respond to their feedback to improve my design or product.</p> <p>I can research individuals and events within design and technology and evaluate these.</p> <p>I can confidently reflect and discuss the materials and techniques I have used linked to purpose, considering what went well and what I need</p>	<p>I can confidently evaluate existing items, identifying their purpose and how well the design meets it, and use these findings to inform my own design justifying my reasons for this.</p> <p>I can consider the views and feedback of others (e.g. the intended market) who have evaluated my product and use this to improve it.</p> <p>I can research individuals and events within design and technology and evaluate these, understanding the impact they had.</p>

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		materials and techniques used.	considering what went well and what I need to do differently next time.	techniques I have used linked to purpose, considering what went well and what I need to do differently next time.	to do differently next time. I can show enthusiasm to refine and improve my product linked to my initial design.	I can test and evaluate my product making changes as needed using market research and thinking about how it meets the success criteria. I can record evaluations using drawing with labels. I can evaluate against the original designs and think about how to improve my product and why.
Technical Knowledge	I can build simple structures, and with support, explore how they can be made stronger. I can include a given mechanism (e.g. levers, sliders, wheels and axles) in my product design. I can use a given mechanism (e.g.	I can build structures and explore how they can be made stronger, stiffer and more stable. I can explore the use of mechanisms (e.g. sliders, wheels and axles) in my product design. I can explore how the use of mechanisms	I can build more complex structures and begin to understand how to strengthen, stiffen and reinforce them. I can begin to understand that mechanical and electrical systems have an input and output process.	I can build more complex structures and strengthen, stiffen and reinforce them when given specific materials. I can begin to consider how to support my structure when planning it, and how this can be done.	I can build more complex structures and understand how to strengthen, stiffen and reinforce them choosing the materials that would be best for this. I can plan the support my structure will need, and the materials that will be required.	I can build more complex structures and understand how to strengthen, stiffen and reinforce them choosing the materials that would be best for this and justifying this choice. I can plan the support my structure will need and explain my decisions for this, and the materials needed.

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	<p>levers, sliders, wheels and axles) in my product.</p>	<p>(e.g. sliders, wheels and axles) can be used in my product.</p>	<p>I can identify the input and output of different computer systems.</p> <p>I can recognise different mechanical systems (e.g. levers and linkages) and explain their uses in existing products.</p> <p>I can begin to plan for mechanical systems (e.g. gears, pulleys, cams, levers and linkages) in my design.</p>	<p>I can recognise different mechanical systems (e.g. gears, pulleys, cams, levers and linkages) and explain the differences between them.</p> <p>I can begin to plan products which involve different mechanical systems.</p> <p>I can begin to include switches in my circuits for my product.</p> <p>I can make electrical circuits, including a series and a parallel circuit, and include these to make a functional product.</p> <p>I understand how a switch is used and can identify it in a circuit.</p> <p>I can follow simple steps to control a</p>	<p>I can identify the input and output of different systems and explain reasons why.</p> <p>I can explain differences between mechanical systems and understand the different purposes of them.</p> <p>I can plan and create products which involve different mechanical systems.</p> <p>I can include a circuit to make a functional product.</p> <p>I can follow and adapt simple steps to control a product using computing.</p>	<p>I can identify the input and output of different systems and begin to use this to control my product (e.g. bee bots).</p> <p>I can recognise the mechanical systems needed for a specific purpose and consider this when planning my product.</p> <p>I can plan and create products which involve different mechanical systems and explain reasons for my choices.</p> <p>I can create a circuit to use in my product and include a switch considering the function needed.</p> <p>I can create simple steps to control a product using computing.</p>
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				<i>product using computing.</i>		<i>I can monitor a product I have programmed and adapt it to resolve any problems which occur.</i>
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