## DT Progression

|  | Knowledge | Nursery | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | I can explore how things work. <br> I can explore different materials freely, in order to develop ideas about how to use them and what to make. | I can explore the natural world around me. | I can look at examples of designs and share my likes or dislikes. <br> I can talk about existing products considering: use, materials, how they work, audience, where they might be used. | I can talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion. <br> I can use knowledge of existing products to produce my own ideas. | I can research inventors, designers, engineers, chefs and manufacturers who have developed products throughout history. <br> I can talk about how well products have been designed and made considering: materials, techniques and skills used. | I can research some of the designers relevant to areas of study to generate ideas for my designs. <br> I can deconstruct existing designs/products, looking at design features and suitability for the intended audience. | I can research and deconstruct existing designs and identify features that have been used, suggesting reasons for these. <br> I can begin to research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. | I can research and deconstruct existing designs and products to identify the technical elements that will be applied to my own design, giving reasons for these. <br> I can research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. |




|  |  |  |  | I can mark and cut fabric with using given templates. I can use a running stitch. | I can measure and cut fabrics accurately using my own template. <br> I can join fabrics by over sewing. <br> I can decorate my product with buttons, beads, sequins, braids, ribbons. | I can create a simple pattern. I can use join fabric using over sewing or running stitch to fit the intended finish. <br> I can decorate my product by sewing on details such as buttons, beads, sequins, braids, ribbons. | I can join textiles with appropriate stitching. <br> I can select the most appropriate techniques to decorate textiles. <br> I can add decoration to my design using applique. <br> I can use a blanket stitch or over sewing to join two pieces of fabric. | I can create a pattern. <br> I can decorate textiles appropriately using applique or embroidery. <br> I can use a ladder stitch. <br> I can join fabrics confidently using appropriate stitches confidently. | I can create 3D products using pattern pieces and seam allowance. <br> I can join fabrics using over sewing, back stitch, blanket stitch, slip stitch or ladder stitch. <br> I can decorate textiles appropriately using applique or embroidery with accuracy. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | I know how a simple lever and slider works. | I know how a wheel and axel mechanism works. | I know how a pulley system work. | I know how a simple pneumatic system works. | I know how a cams mechanism works. | I know how a mechanism with gears works. |
|  | $\begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & \stackrel{0}{0} \\ & \stackrel{0}{0} \\ & \stackrel{0}{0} \end{aligned}$ |  |  | I can construct a simple slider with support. <br> I can construct a simple lever with support and create a product with a lever. | I can create a product with wheel and axel mechanism. | I can construct a simple pulley system. | I can deconstruct and reconstruct a range of levers and look at the relationship of the pivot point. <br> I can construct a simple pneumatic system with one moving part | I can discuss the relationship between a cam and follower, an off-centre cam, a peg cam, a pear-shaped cam and a snail cam. <br> I can choose and construct the most appropriate can for my product. | I can use my knowledge of mechanisms to create movement and suggest suitability for given product. <br> I can use cams, pulleys and gears to create movement. |

