**Knowledge and Skills Map – D.T – Working with tools, equipment, materials and**

 **components to make quality products**



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|  | **Knowledge** | **Units** | **Subject Aspects** |
| **EYFS** | Can the children use simple kitchen utensils correctly – spoon, knife, working, mixing bowls?Can the children use adhesive products (glue) to join materials together? | All food related topicsAll construction related topics. |  |
| **Year 1** | * Can they explain what they are making?
* Can they select the appropriate resources and tools?
* Can they explain which tools they are using and why?
* Can they use tools safely?
 | TaxiShade and Shelter | Wheels, axels and chassis. Making car / taxi.Design and make shelters / dens. |
| **Year 2** | * Can they join materials/components together in different ways?
* Can they measure materials to use in a model or structure?
* Can they use joining, folding or rolling to make it stronger?
 | Push and pullBeach hut | Sliders, levers and linkages to make moving greeting card.Strengthen cardboard structures |
| **Year 3** | * Can they use equipment and tool accurately and safely?
* Can they select the most appropriate materials, tools and techniques to use?
* Can they manipulate materials using a range of tools and equipment?
* Can they measure, cut and assemble with increasing accuracy?
 | Greenhouse | Design, strengthening structures, wooden dowling, cut, tools, glue gun, sheet materials. |
| **Year 4** | * Can they use equipment and tools with increased accuracy and safely?
* Can they select the most effective materials, tools and techniques to use?
* Can they manipulate materials effectively using a range of tools and equipment?
* Can they measure, cut and assemble accurately?
 | Tomb builders | Design make a shaduf - including lever or pulley mechanism. Use of hacksaws. |
| **Year 5** | * Can they choose appropriate tools and materials to ensure that the final product will appeal to the audience?
* Can they use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters?
 | Moving mechanisms. | Use of cams to make a Chinese locking box. |
| **Year 6** | * Can they choose appropriate tools and materials to ensure that the final product will appeal to the audience?
* Can they use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters?
 | Engineer | Designing, building and strengthening bridges. Use of CAD design. |