## DESIGN: developing, planning and communicating ideas

| EYFS | Year 1 Developing | Year 2 Expected | Year 3 Expected | Year 4 Expected | Year 5 Expected | Year 6 Expected | Year 6 Exceeded |
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| Manipulates materials to achieve a planned effect. Constructs with a purpose in mind, using a variety of resources. <br> Selects tools and techniques needed to shape, assemble and join materials they are using. | Use pictures and words to convey what they want to design and make. <br> Design an appropriate product for a given target group. <br> Year 1 Expected Use labelled drawing to record ideas <br> Identify a target group for what they design and make. | Explain what they are making using notes. <br> Identify a purpose for what they intend to design and make. | Investigate similar products to the one to be made to give starting points for a labelled design. <br> Identify purpose and establish criteria for success. | Develop more than one design making labelled drawings from different views showing specific features. | Sketch alternative ideas and select one idea to develop in depth. | Develop a design specification which can be read/ followed by someone else. | Continue designing in detail; include technical details of materials and processes; produce a final design proposal; working drawing; cutting list; details to allow another person to make the product. |

## MAKE: working with tools, equipment, materials and components

Constructs with a purpose in mind, using a variety of resources.

Children show good control and coordination in large and small
movements.. They handle equipment and tools effectively, including pencils for writing.

With help measure, mark out, cut and shape materials e.g. paper, card and pieces of dowel.

With support create simple moving vehicles with wheels.

Make vehicles with construction kits which contain free running wheels.

Measure, mark out, cut and score independently but not necessarily accurately.

Measure, mark out, cut and score materials independently within 1 cm accuracy.
chassis using an axel using a range of materials such as tubes, dowel and cotton reels.

Make structures more stable giving them a wide base

Create simple frame

Measure, mark out, cut and shape materials independently within 5 mm accuracy. or shell structure.

Measure, mark out cut and shape materials independently within 3 mm accuracy.

Incorporate a motor and a switch into a model.

## Build a framework

to support mechanisms.
$\left.\begin{array}{|l|l|}\begin{array}{l}\text { Measure, mark out, } \\ \text { cut and shape } \\ \text { materials } \\ \text { independently within } \\ \text { 1mm accuracy e.g. } \\ \text { use a craft knife } \\ \text { and safety ruler to } \\ \text { cut slots. }\end{array} & \begin{array}{l}\text { make use of more } \\ \text { specialist equipment } \\ \text { to mark out }\end{array} \\ \text { Control a model } \\ \text { using an ICT control } \\ \text { programme }\end{array} \begin{array}{l}\text { Describe how more } \\ \text { complex electrical } \\ \text { circuits and } \\ \text { components can be } \\ \text { used to create } \\ \text { functional products }\end{array}\right\}$
changes in


| EVALUATE | Talk about what <br> they like and dislike <br> about the items <br> they have made. <br> Talk about what <br> they like and dislike <br> about the items <br> they have made and <br> discuss possible <br> changes they would <br> make next time. | Discuss the changes <br> they have made <br> during the making <br> process and explain <br> why. | Identify the <br> strengths and <br> weaknesses of the <br> design/product they <br> have made. | Discuss how well the <br> finished product <br> meets the design <br> criteria. | Discuss how well the <br> finished product <br> meets the design <br> criteria and how well <br> it meets the needs <br> of the user. | Reflect on their <br> work using the <br> design criteria <br> stating how well the <br> design and finished <br> product fits the <br> needs of the user. <br> organise and <br> effectively use a <br> detailed product <br> analysis system <br> autonomously. |
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| Below age related <br> expectations |  |  |  |  |  |  |
| At age related <br> expectations |  |  |  |  |  |  |
| Exceeding age <br> related <br> expectations |  |  |  |  |  |  |

