



# Declarative, Procedural and Disciplinary Knowledge and Skill Tracker

## Computing - Design

	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
<p><b>Declarative Knowledge</b></p> <p>(Declarative knowledge is <b>explicit knowledge</b> about facts, histories, ideas, topics, principles and concepts)</p>	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Recognise common uses of information technology beyond school.</p> <p>Use logical reasoning to predict the behaviour of simple programs.</p>	<p>Use sequence, selection, and repetition in programs to design and create content that accomplish given goals.</p>	<p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Select, use and combine a variety of software to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data information.</p>
<p><b>Procedural Knowledge</b></p> <p>(It can be simply stated as knowing how to do something)</p>	<p>Know how to move the mouse pointer to draw and drag out shapes two dimensionally.</p> <p>Know how to turn two dimensional shapes into representations of three-dimensional shapes.</p> <p>Use the text to to add labels.</p> <p>Use colour fill to add colour to shapes.</p>	<p>To create multiple two-dimensional and three-dimensional shapes within each other by layering them on top of one another, for example, to create walls.</p> <p>Know how to add detailed labels and descriptions.</p> <p>Know how to match colour fill textures which are sympathetic to the real world examples of what is being designed</p>	<p>To know how to represent size and scale of a design brief with virtual representations sympathetic to the real world.</p> <p>To use digital representations of, for example, tinted glass to add refinement to designs.</p> <p>To know how to add detail descriptions to these designs to ensure clarity of what is expected from whoever uses the design to make the product.</p>
<p><b>Disciplinary Knowledge</b></p> <p>(This is Best described as the action taken within a particular subject to gain knowledge i.e. how we gain substances knowledge. For example, in history this might mean using evidence to construct a claim. Meanwhile, in science it might mean testing hypotheses. In music, it might mean reading and writing notation. As you can see it really is quite distinct with each domain)</p>	<p>As a graphic designer I can program 3 dimensional representations of 2 dimensional shapes on architectural drawing software.</p>	<p>As a graphic designer I can use computers to design representations of real-world things in order to solve problems.</p> <p>As a designer I can use different tools on SketchUp to do increasingly complex things.</p>	<p>I know that architects create things to design briefs and use computers to bring customers ideas to life.</p> <p>I know that accurate measurements on computer designs are vital to creating things accurately in the real world.</p> <p>I know that SketchUp can create material and texture representation of real-world things.</p>