

Year / Topic	Term	National Curriculum Links	Length of Topic
5.6 Virtual Design	Summer 2	IT2.1	7 Weeks
Resources SketchUp Screencast-o-matic	<p style="text-align: center;"><u>Key Classroom ICT Activity</u></p> <p>In this unit students will understand the work of architects, designers and engineers working in 3D. They will develop familiarity with a simple CAD (computer aided design) tool. Developing spatial awareness by exploring and experimenting with a 3D virtual environment. Developing a greater aesthetic awareness.</p> <p>By the end of the topic students will be able to:</p> <ul style="list-style-type: none"> • Create a simple gallery space in SketchUp. • Create a detailed 3D object using SketchUp. • Add textures and finishing touches. • Create a virtual tour. <p>Assessment - Progression Pathways All children should – <i>IT, Obtains content from the world wide web using a web browser. Uses software under the control of the teacher to create, store and edit digital content using appropriate file and folder names.</i> Most children should – <i>IT, Uses a variety of software to manipulate and present digital content. Shares their experiences of technology in school and beyond the classroom. Talks about work and makes improvements to solutions based on feedback received. Navigates the web and can carry out simple web searches to collect digital content.</i> Some children should – <i>IT, Recognises the audience when designing and creating digital content. Uses criteria to evaluate the quality of solutions, can identify improvements making some refinements to the solution and future solutions.</i></p>		
Target Skills Image editing Collecting and evaluating information.			
Curriculum Links Science – <i>properties of materials.</i> Maths – <i>measurement and geometry.</i> Art – <i>scans of original drawings.</i>			
E-Safety Coverage Students should observe good practice when searching for and selecting digital content. If students choose to locate their 3D models geographically, they should avoid sharing private information. Students should think about copyright when adding content to their model or publishing images or videos of their model.			

Assessment Criteria	5.6 Virtual Design
Emerging	<ul style="list-style-type: none"> ✓ I can use the web to find out about virtual art galleries. ✓ I can create simple objects using SketchUp. ✓ I can create a simple gallery space in SketchUp.
Developing	<ul style="list-style-type: none"> ✓ I can add furniture to my gallery in SketchUp. ✓ I can add my own artwork to my gallery. ✓ I can find features that all art galleries share using the web. ✓ I can create a detailed 3D object using SketchUp.
Secure	<ul style="list-style-type: none"> ✓ I can create a virtual tour of my gallery. ✓ I can create furniture for my gallery in SketchUp. ✓ I can use Movie Maker to edit the virtual tour of my gallery.
Mastered	<ul style="list-style-type: none"> ✓ I can add textures and finishing touches to my gallery using SketchUp. ✓ I can create a virtual tour of my gallery with an audio commentary. ✓ I can create an attractive detailed 3D object using SketchUp. ✓ I can create a detailed series of rooms and spaces in SketchUp.