

Stage 5 Graphics Technology

Core modules: Units of work

Unit title	Light up
Unit indicative time	8 weeks (20 hours)
Unit outcomes	5.1.1; 5.3.1; 5.4.1; 5.5.2; 5.6.1; 5.6.2
Unit context	Students are required to design and draw a bedside table lamp and globe using both geometric and orthogonal techniques both by hand and proDesktop.
Student's prior learning	Students have used skills in freehand sketching and with grid paper to produce third angle drawings of products made in the Technology (Mandatory) course.
	Students have used surface development in Unit 1: Sunsmart buzz off.
	Students have used proDesktop to produce 3D models of simple shapes with various face and edge treatments.
Teaching and learning activities	The lamp is not to exceed 400 mm in height, the base and top need to be in proportion with each other. (Switches and wiring are to be ignored for the purpose of this unit of work.)
	 The globe (conventional) will be measured and hand drawn using templates, then drawn using proDesktop and saved. The lamp base will be a size and shape determined by the student. A third angle fully dimensioned drawing will be produced using a board and tee square. An accurate 3D model will be drawn on the computer. The top will be either a truncated pyramid or cone shape A third angle fully dimensioned drawing will be produced using a board and tee square. A scaled surface development will be produced. An accurate 3D model will be drawn on the computer. An assembled lamp will be produced on the computer, base and top only, various colour and material combinations will be trialled in the album view. Correct work practices and OHS are discussed throughout the unit.
Resources	 Teacher developed worksheets to support skills required of students to complete the unit of work. Text books. AS1100 for dimensioning, scaling and developments. Existing globes and lamps. Boards, tee squares and instruments. Access to computers and computer applications.
Assessment	 Completion of skills developing worksheets. An accurate third angle drawing is produced. An accurate surface development and a completed 3D <i>proDesktop</i> rendered drawing is presented showing a range of materials and colours considered. The final presentation is of high quality.