

Year 8 Design and Technology Systems & Control Colour Band Descriptors

“Green” Skills Criteria - Practical	“Green” Skills Criteria - Theory
I can create Shapes using 2D Design.	I can list a range of different electronic components.
I can create basic shapes using Google Sketch Up.	I can identify the purpose of an LED.
I can use a soldering iron safely.	I know what a switch does.
I can create a working electronic circuit.	I know what CAD and CAM stand for.
I use thick and thin lines to help my designs stand out.	I can explain why not all things are made by hand.
I can identify key features of a successful product.	I know what ‘product analysis’ means.
I can assemble and construct a working product.	I know that ACCESSFM is a helpful acronym used in technology to evaluate products.

“Pink” Skills Criteria - Practical	“Pink” Skills Criteria - Theory
I can create complex shapes using 2D Design.	I can identify a range of different electronic components and their functions.
I can use the push pull tool on Google Sketch up to create 3D shapes.	I can explain the key steps in circuit construction.
I can apply coloured and textured surfaces in Google Sketch Up to enhance my designs.	I can list some advantages and disadvantages of CAD/CAM.
I can explain how a resistor works and what its purpose is.	I can identify some types of plastic.
I can identify schematic electronic symbols.	I can list some industries that rely on CAD and CAM.
I can use a soldering Iron with accuracy ensuring there are no dry joints.	I know how a product analysis can help to inform my design criteria
I can evaluate my designs.	I can list some of the key words from ACCESS FM

“Yellow” Skills Criteria - Practical	“Yellow” Skills Criteria - Theory
I can use the ‘contour Bitmap’ tool to outline shapes in 2D Design.	I can list some properties of key electronic components.
I can use the ‘follow me’ tool in Google Sketch Up to create complex shapes.	I can explain why thermoplastics can be recycled.
I can export 3D print files from Google Sketch Up.	I know a type of thermos plastic and a product that is made from it.
I can explain How CAD CAM has had an impact our modern society.	I can explain what a PCB is.
I can use detail drawings to give more information about my design ideas	I can explain how CAD and CAM has been used to make my product look more professional
I can identify the Cathode and Anode of an LED.	I can create a set of design criteria in response to my research
I can Use a range of criteria to evaluate my designs.	I can list all of the words from ACCESSFM.

"Blue" Skills Criteria - Practical	"Blue" Skills Criteria - Theory
I can use different line colours for different types of cut on 2D Design.	I can list a range of different electronic components and state their functions.
I understand and can explain how the 3D Printer works.	I can list the steps in the PCB Production Process.
I know how to import 2D Graphics into my Google Sketch Up model.	I can explain why stock forms are important.
I can select and use the required tools with accuracy.	I can state the units for electrical resistance, current and power.
I can use import 3D CAD Models into an image to show them in situ.	I can identify some social and economic impacts of CAD and CAM.
I can make use of scale dimensions to explain my designs.	I can justify my design criteria by using connectives.
I can ensure my product is accurate to specific tolerances.	I can reach conclusions in my research and use it to inform my design work.

"Salmon" Skills Criteria - Practical	"Salmon" Skills Criteria - Theory
I can develop my designs using a range of drawing strategies and techniques.	I can explain the environmental positives/negatives of using the 3D Printer to manufacture the mood light base.
I can use the 'dim lines' tool to dimension my work and prove its accuracy.	I can list in order the manufacturing steps for my mood light.
I can promote my mood light to a particular customer through thoughtful use of branding.	I can give examples of stock forms in a variety of materials and explain their uses
I can use detail drawings to explain how my final design has developed from my initial idea.	I can explain some moral and environmental impacts of CAD and CAM.
I can explain my choice of colours; i.e. why they are appropriate for that particular band/artist/customer.	I can explain how my project might be made if mass produced.
I can create a client profile based on my ideal target user.	I can use key words from ACCESSFM when generating my design criteria.
I can create an original template for Google Sketch Up.	I can develop my work after mid-point review through understanding that design is an iterative process.