

Y6 Design Technology Knowledge Organisers



TO DO

- ☒ creative
- ☒ concept
- ☐

es!

Innovation

Existing products

A tote bag is a large and often unfastened bag with parallel handles that come from the sides of its pouch. Totes are often used as reusable shopping bags. Many companies print logos or slogans on to them.



Skill development

We will revise stitches that have previously been learnt (running stitch, cross stitch and back stitch).

We will also practise using different stitches and finishing materials to add interest and details.

We will learn all about printing techniques and use polystyrene tiles to print repeating patterns in the style of William Morris on to the fabric.



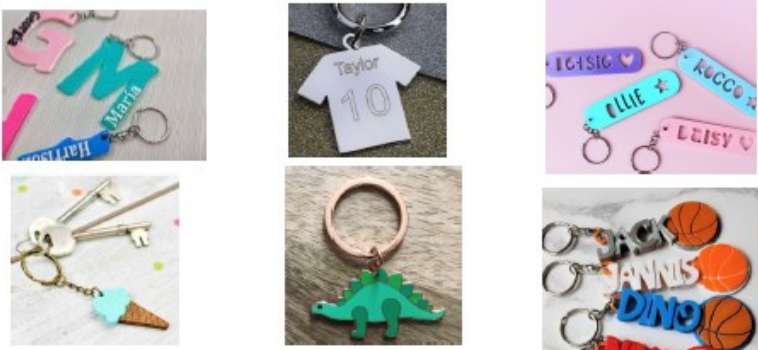
Vocabulary

seam allowance	Extra fabric allowed for joining together - 15mm for domestic
pattern or template	A shape drawn to exact shape and size, used to assist in cutting out.
sustainability	Simply put, sustainability is about small changes we can make to help look after the planet for example using a reusable shop-
specification	Describes what a product has to do.
mock up/ prototype	Quick modelling using easy to work and cheaper materials and temporary joints. Useful for checking proportions and scale.
print	A process of transferring an image from one surface (a polysty-

Y6—3D Printing and CAD design

Existing products

A keyring is a metal ring used to keep keys together. They are often decorative to help someone be able to recognise the keys as theirs. They are also a way to show your interests or something about your identity by having a design that means something to you.

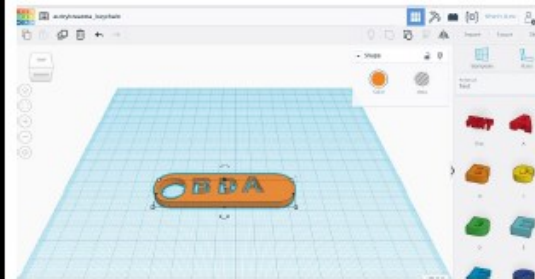
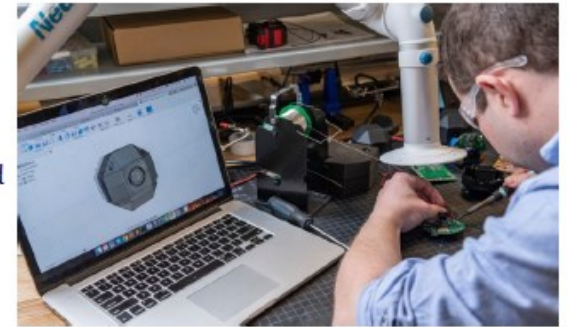


To design, make and evaluate a keyring (product) for myself (user) to use to hold my keys together when I go to secondary school (purpose).

Skill development

CAD

Computer Aided Design (CAD) is the use of computer software to create designs. CAD software is frequently used by engineers and designers. CAD software can be used to create 2D drawings or 3D models of your design.

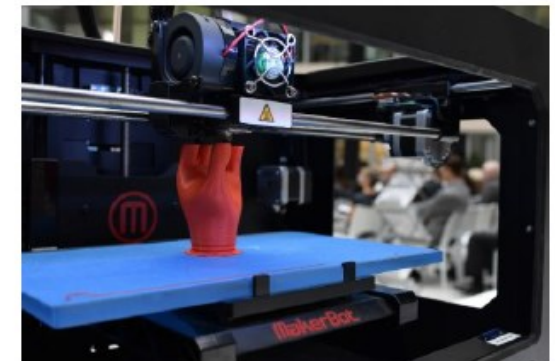


Tinkercad

Tinkercad is an online, free 3D modelling program that runs in a web browser.

3D printing

3D printing is a process in which a digital model is turned into a real life 3D object. 3D printers typically work by laying down thin layers of a material.



Key vocabulary

CAD: Computer Aided Design.

Annotated sketch: A labelled drawing.

Prototype: An experimental model.

Align: To place or arrange things in a straight line.

Dimensions: Something you can measure such as length, width or height. On Tinkercad, these measurements are in millimetres.

Duplicate: To make an exact copy of.

Group: To combine two or more shapes into a single part.

Workplane: The large, blue grid on Tinkercad where you can create your design.