Project 2

There are many other software packages online (and free) for making 3D objects such is **TinkerCAD.** This is an online 3D design program that allows you to quickly make in object, however, does require you to make an account.

3D printing has been around for many years, however, the costs of buying a machine have been extremely high. It the last few years companies have found a way to design a 3D printer than is affordable to households and schools.

These machines can differ in the methods, materials, and quality they use to produce 3D objects but the process for designing the object is still the same. The machines are not perfect and sometimes things don't work out as expected (see 'Things to Consider' below).

There are also many websites that are libraries of 3D objects that people have designed and shared. www.thingiverse.com is a popular one.

Project 2:

Using Google Sketchup design an object to store/hold your earbuds.

Take a look at ideas www.thingiverse.com in but be careful not to copy.

Your object should be:

1) Measured and designed accurately! THIS IS NOT A SKETCH

- measure your earbud diameter, wire thickness, plug length etc.

2) Your design

3) Only 1 piece

4) Oriented with flat surface down (see below about overhanging areas and height concerns)

Things to consider:

1) The printer makes objects 1 thin layer at a time so if an object has 'overhangs' (part that stick out into space) then support needs to be printed to hold it up. This support needs to be removed after printing and can sometimes be difficult.

2) Large or tall objects can take many hours (and more money) to print.

3) Our machines only print in one colour.