SAINT GEORGE

Year 11 Design & Technology: NEA improvements

All work created should be sent to me via email (If you have drawn something you should photograph it carefully and attach it to an email to myself. (You could use a camera or a smart phone to do so) All digital work should be sent in a brand new Powerpoint slide (Remember you have access to powerpoint through your office 365 school email account.)

Having now gone through all of your NEA folders there are some general areas that everybody could work on in order to pick up more marks. NEA's are an area that will very likely be looked at for final grades given the current pandemic, so the better quality you put into these tasks the better.

Task 1: Initial design ideas: Thinking about the design brief and specification that you have already written (Look at your NEA powerpoint for reference or email me if you don't have a copy lgilbank@stgcc.co.uk) create at least 4 more initial ideas for a product that you COULD have made instead of the one that you did. Your design ideas must be:

- drawn out neatly and clearly
- Be fully annotated to explain what they are, how they function and how the meet the context that you have selected.
- Be drawn on paper with full colour

Task 2: If you have access to the internet you should use sketchup online (<u>https://app.sketchup.com/app</u>) to create the idea that you did make (And another that you didn't. (Therefore you should have 2 different sketchup designs) USE THE QUICK START GUIDE TO HELP YOU!

You should place screen shots of your sketchup design in a new powerpoint slide (not your NEA) and annotate these to explain how they work.

IF YOU HAVE ALREADY created a sketchup design of your product you should use this to create variations of your idea (For example can you change the colours/ textures of your idea (Each time that you have done this you should get a new screen shot and put it into a new powerpoint slide (Not your NEA) and send it to me via email lgilbank@stgcc.co.uk

TASK 3: MODIFICATIONS! Draw out the product that you created WITH the modifications that you would make if you were to do it again. Consider the following in your drawing:

- What would make your product more user friendly? Is it very heavy, could it be more easily transported ect?
- How could your product be more eco friendly? Could you use more sustainable materials could the product be produced by a fair trade company if it were to be sold commercially?
- How would you change your product if you were going to make hundreds in order to sell it on a commercial level?

Your drawing should be neat, clear and fully annotated to show where the modifications are and WHY you have added them.

Sketchup for Web - Quick start guide





To begin search for Sketchup for web and create an account using your school email address. Select create new and the millimeters option to get started.

https://app.sketchup.com/app





Begin by creating basic shapes using the shapes tool to the right. Draw your shape flat on the floor and then use the 'Push Pull' tool to form a 3d Shape. The 'Push Pull' tool can both pull out or push in (As is shown in the pictures above and below.)







If you want a shape perfectly inline with an existing shape (Such as a square within a square 1cm from the edge all around) use the 'Offset' tool. If you would like to erase a panel as shown below, first pull it out using the 'push pull' tool and then erase the edges as shown above.



Sketchnp for Web - Quick start guide



To add more custom shapes use the line tool to draw the outline of your shape. Upon completing a side the shape will automatically fill its self in as can be seen above. Remember to use the pan and orbit tool to look at your design from multiple angles in order to check you are drawing where you desire.



Use the paint tool to explore colour and textures. There are multiple pre set textures which you can select from. Alternatively you can search for your own to include in your design.

Top tip: It is worth experimenting with at least 3 or 4 different colour/ texture choices and getting screen shots for your project throughout to show that you have considered multiple aesthetics in your design.



angent to Edge

To curve the edges of a shape, use the 'arc' tool to draw the curve that you desire and then select the 'Follow me' tool to create the curve. Erase the areas that you no longer desire as can be seen to the right.