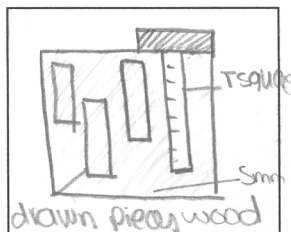
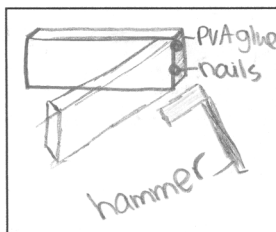


Criterion D: create

Lesson 1: 17-11

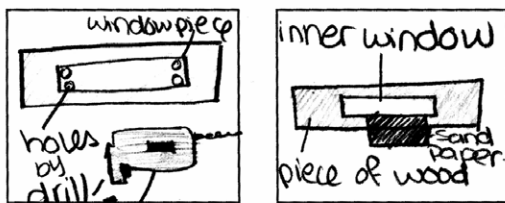
Today was our first lesson to start our creation process. We went into the wood workshop and wore our working aprons. We learned how to put different pieces of wood together, and that's by cutting them first, gluing them using PVA white glue, and then nailing them together using a nail and a hammer. However this process differs from my production plan, as I did not mention using PVA glue onto the wood, I only mentioned joining the parts with nails, using a hammer. In my production plan, my first steps were to get the bouncing balls and paint them according to the planets on my sketch. Nevertheless, I did not start with this step; today I drew the pieces I had, according to the sizes I have on my parts list on a 5mm piece of wood using the T-square, and cut the pieces using an electric saw with the help of a manufacturer in the wooden workshop. However I still did not cut the window pieces which will be made out of acrylic, I only drew them according to the sizes I have on my sketch on the wooden sides using a three square, I also did not cut the acrylic pieces in which I am aiming to have on the sides as windows, as I did not have enough time, this will probably be what I will do tomorrow. What I finished today was not listed first on my production plan, I had many other things to do at the beginning such as painting the balls, and drilling holes onto them. Looking back at my production plan, it says that the windows would be cut using a handsaw. However Miss [REDACTED] told me today, that next lesson I am going to do the outlining of the windows using a drill, and then use the Jigsaw to remove the inner piece. After this step, I would cut pieces of acrylic, and stick them onto the back of the wooden pieces, to have window like structure which open to a base decorated with colorful stars.



Lesson 2 18-11

Today was our second lesson in the creation process. We spent our time in the wooden workshop. First I wore my apron. I got all my wooden pieces. Then I, with the help of the teacher made circular holes into the windows on my sides using the drill, one at the left side and the other at the right side, of every drawn window. Then I headed to the Jigsaw, I put one of my side wooden pieces on a wooden base, then using the Jigsaw, starting with the hole I earlier made, I started cutting the inner windows, according to the lines I have earlier drawn. I found it hard to work with the Jigsaw, as it's too dangerous, and hard to have accurate sides. However I managed to finish the sides of all my bases with the help of Miss [REDACTED]. My first piece was rather crooked from the sides, but I managed to fix it, by increasing the length of the front and backsides, and re cutting the windows using the Jigsaw. When I was done, I used sand paper to sand the inner linings of the windows as to have them more straight and accurate. In my production plan, I said that I was going to cut the windows using the handsaw. However this was impossible, I was taught a much easier way, by using the electric drill to make holes in the piece I wanted to cut out, and then cut it out using

the jigsaw, which is much easier than using the handsaw. My next step would be cutting pieces of acrylic, to stick them onto the back of those windows, and decorating my base with stars. Which could be seen by the window sides. In today's lesson, I was exposed to many new instruments, which made the steady hand game easier to do, in accordance to my production plan. which was impossible to do. However I am in the right sequence of my production plan, as after cutting the pieces, I had to cut the inner windows, and then cut the acrylic and stick them onto the back of those pieces. *however, I was done with what I had planned to do today.*



Lesson 3

23-11

Today was actually my third lesson in the wooden workshop, I did not do much, since it's Tuesday, and the lesson was too short. I only drew my windows on the pieces of acrylic, using the T-square and triangles, and of course a pencil according to the sizes of the windows on my parts list. Then I changed the nail of the Jigsaw to the one used in acrylic, and I cut my pieces. Afterwards, I heated the glue gun, and stuck the pieces of acrylic to the back of my wooden sidepieces, where they fitted accurately. I had to repeat the backside, as I did not need a window in it, which I had already stuck. So using the electric drill, the teacher at the workshop, cut another piece using MDF wood, which has the same size of my front side. In my production plan, I did not mention using the T-square to draw my windows on the pieces of acrylic, so this was a modification. In addition, in my production plan, I was not aware that the backside should have no window, and this caused me to repeat that part. My next step would probably be nailing the sides together.

this was what I planned to do today.



Lesson 4

1/12

Finally, today I nailed my wooden sides with windows together; I used the hammer, nails and PVA white glue as to have firmer bases when the glue dries sticking the parts together. First I put white PVA glue on all the outer parts of the sides, which would be attached to another piece. I nailed the front part to the sides, after that I added glue to the pieces and then I added the backside, after adding the glue to it... At the beginning I found it rather difficult to get the nails in the right places, and have the sides of 90 degrees. However I managed in the end to have an accurate piece of work, by hammering the nails in a sideways position so that the nails would not bend while I'm hammering. I also had to hold the nails with my hands at the beginning so that

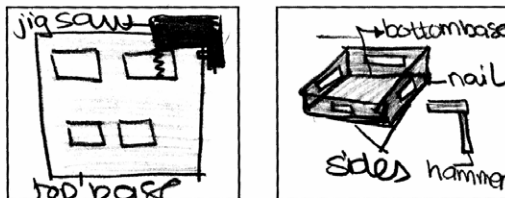
they would not bend. I noticed that the nails caused small cracks in the wood, but fortunately they are from the inside. Looking at the base, I realized that the stars in the base would not be seen clearly, so I decided, to have small acrylic windows on the top base. I took the piece of wood; I drew 4 small rectangles at the sides, using the T-square and a pencil, in which I would have my windows to overview the inner base. Today, I only made holes in those rectangles, using the drill, so that it would be more easier for me to cut them tomorrow using the jigsaw. This addition of windows at the top base was not mentioned in my production plan, my sketch or my parts list, since I was not aware that the stars would not be seen from the sides only, therefore to have the game more creative, I decided to have windows in my upper base, which would overview my decorated base. I did not change the way I was aiming to nail the sides together, since the way to put the parts together using the nails and a hammer was clearly explained in my plan, however I had to glue to pieces using PVA white glue before nailing them, as to have a more accurate base, and this was not mentioned in my production plan, however, I was done with what I planned to do today.



Lesson 5

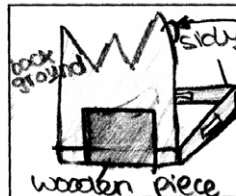
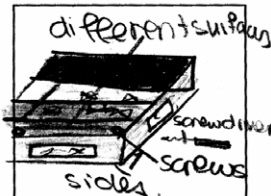
2/12

Today, I used the Jigsaw, to cut off the windows form my upper base, I managed to do that, and had accurate windows. After that, I cut equal pieces of acrylic, using the electric drill. I heated the glue gun, and stuck the pieces onto the back of my top base according to where my 4 small windows were located. This whole procedure was not included in my production plan, since I did not aim to have small windows from my top base, therefore, I did not include any of the steps, I made today in my plan. However, I have included steps to cut pieces for windows and stick acrylic on their backs, not mentioning the top base. After that, I took my bottom base, glued the sides of it, and nailed it to the sides I already have attached to each other, I used the nails, PVA glue, and a hammer, to adjust the base, and attach it to the four sides, and had a box like figure with a base. This is all what I was able to do today, as it took me a lot of time to cut the windows using the jigsaw, since I tried to be as accurate as possible. For today, this is what I did; however I am aiming to stay after school to work on wire shape, and start painting the background, showing surfaces of planets.



today I finished all the game, it
look me as planned

However in my production plan, I mentioned that I would stick the background to the back side, without mentioning the piece of wood I had to have, this is because I did not realize that my background was too heavy to be held on its own to the base, and therefore I needed to add the piece of wood. This piece was also not mentioned in my parts list, so it was actually a modification that was added to the final product.



After that, I cut part of the wire shape, and made it curved using pliers. I stuck the piece onto the back using the glue gun, as a place to put the handle

Modifications:

- 1- using PVA glue to attach the different sides together instead of only nails, as to have a firmer base
- 2- the order of steps to be done, as to get the product ready, since some steps had to come before the others as they were more or less important
- 3- the colors of the planets and their surfaces, as the ones in my sketch were not very accurate, so the colors in the real product differ from those in the sketch
- 4- using clay to make the balls, instead of using bouncing balls, since the bouncing balls were not available, and too heavy for the wire to hold
- 5- adjusting the wire holding the planets from the back of the background, by making holes in the background using the drill, and getting those wires to stick out of the holes, and twist them from the other side of the background, since only gluing them would not be enough to hold them and adjust them in place
- 6- using screws to adjust the top base instead of using nails, so that they could be removed easily if a problem in the circuit was present or if we needed to recharge the battery if it ran out of energy
- 7- adding decorations to the background and to the sides and top base, as to have the base and the sides look more attractive and eye catching
- 8- using a piece of wood to adjust the background since it was too heavy to be stick on its own to the sides due to the clay balls which were heavy
- 9- Adding windows to my top base for the inner base to show. Since the acrylic windows on the sides were not enough to show the decorations in the base.
- 10- Using the jigsaw in different ways, either to cut the windows on the wood piece or the acrylic pieces, only by changing its nail, instead of using the hand saw for the wood.
- 11- Shaping the handle using the lathe and a woodturning tool which was not mentioned in my production plan, as I did not give the handle any importance
- 12- Making holes using the dill in the top base, for the LED, the French clip, and the handle to come out of, this was not mentioned in my production plan
- 13- Having the wire shape attached to the inner circuit
- 14- Using the solder machine to stick the handle to the wire which is connected to the printed circuit board
- 15- Changing the whole shape of the wire shape, to a rocket instead of a sun with rays, since it is more suitable for my target group
- 16- Using the pliers to shape and cut the wire instead of shaping it using the hands

- 17- Shaping the wire by first, drawing it using pencil on a piece of wood, then hammering nails on the drawn line, and then shaping the wire around the nails, and hammering the nails sideways to adjust the wire in place, and then removing the nails using the pliers to get the shape wanted, however in my production plan, I mentioned shaping the wire using our hands, so I was exposed to a new technique of shaping wires, which is much more accurate and safe
- 18- Making holes using the drills in the windows before cutting them, using the jigsaw, which made it much easier. This was not mentioned in my production plan.
- 19- I used different decorating materials such as beads, glitter, cotton, and wood as to make the game look more attractive
- 20- Not having name tags on the planets, which were found in my sketch, since it would be too heavy for the wire to hold the planets and their name tags, so I decided not to have them at all, as to have my planets adjusted in place, held tightly to the wire without causing them to tilt to either side.