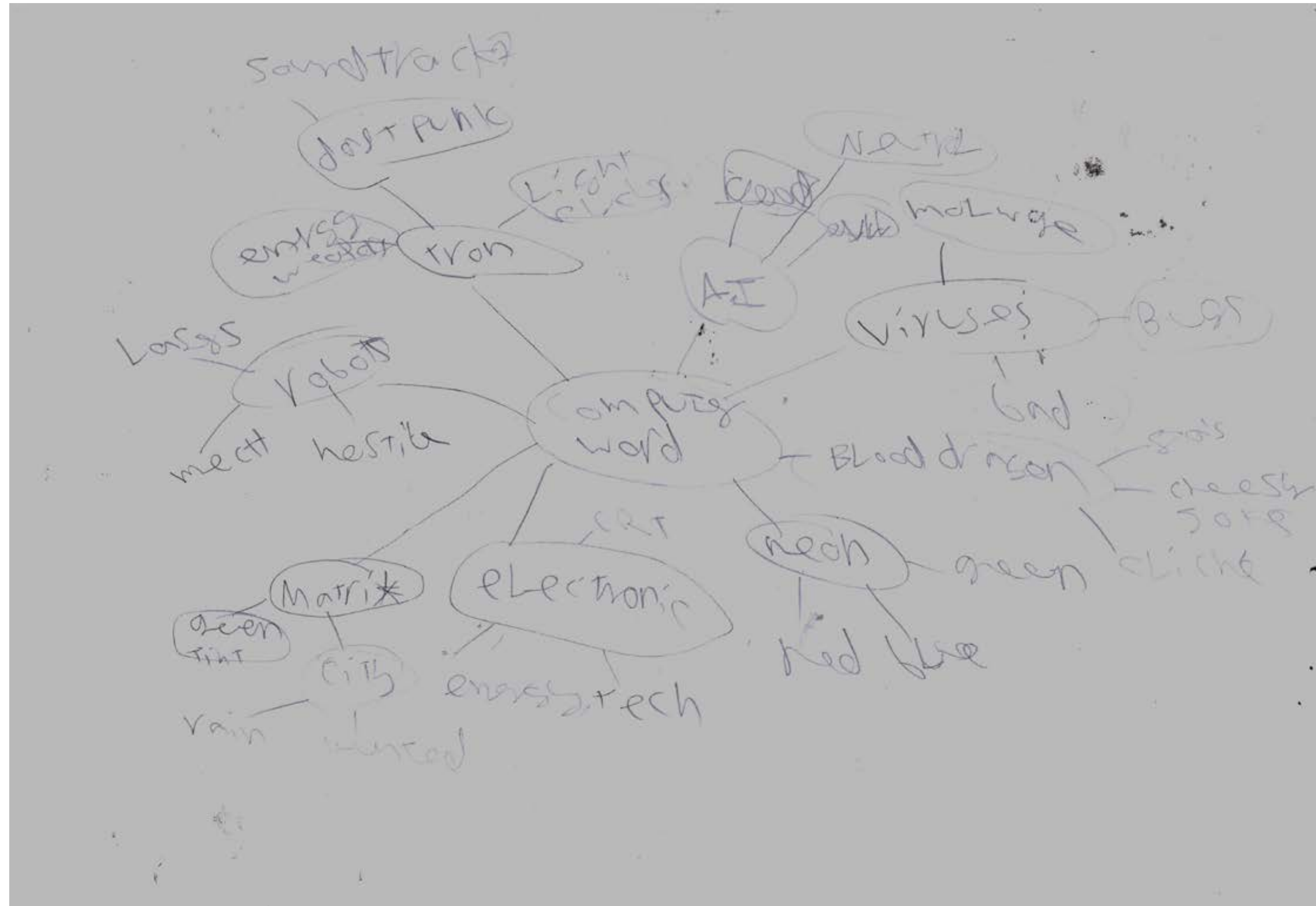


**COMPUTER GAMES DESIGN
PROJECT 1:
ENVIROMENTS
BY ISAAC MURPHY**



MOODBOARD COMPUTER WORLD



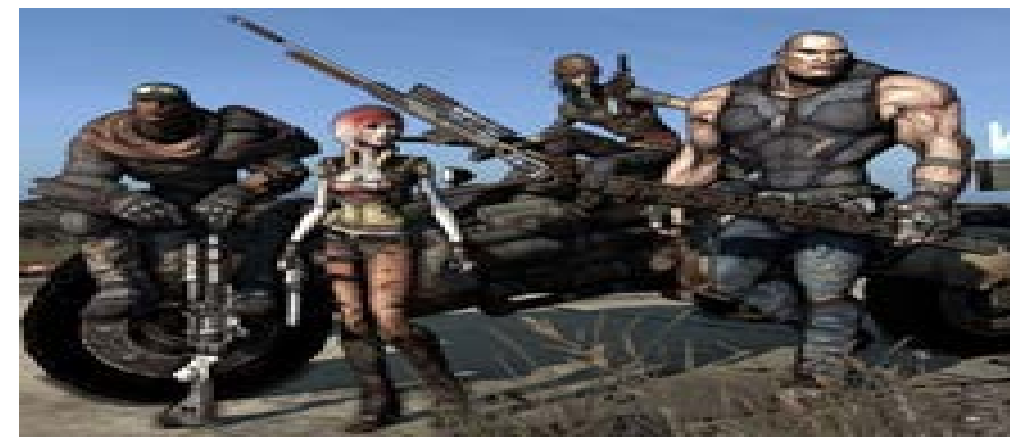
Game styles

Cel-Shading

The sly raccoon series uses cel-shading to help attract the younger audience while also giving the game a 'toony' feel, the style helps with the gameplay as it makes objects within the world stand out more and it makes it easier to navigate through the world

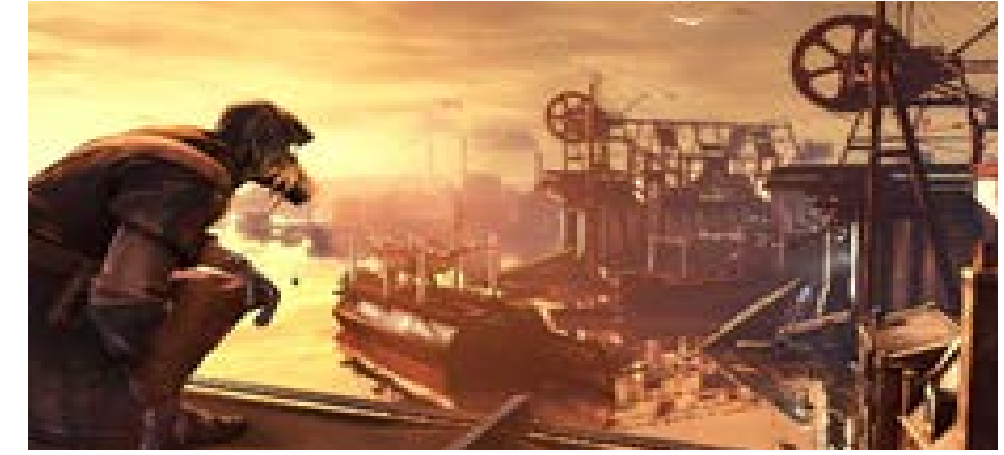


The Borderlands series uses cel-shading for their style to help convey that the game is a little bit mental with all the characters, weapons, enemies and objects. It also adds to the gameplay by making the environment and overall feel of the game more exciting and crazy.



Steampunk

Dishonored's steam punk style is quite unique from other steampunk styled games due to the fact that the game revolves around whale oil and analogue contraptions. Its art style also helps with gameplay in the fact that you feel a part of the world you're playing in.



Guns of Icarus is a very steampunk styled airship naval battle type game where you have a team of players working together to take down another team's airship, the style adds to the feel of the game by making the ships seem more rudimentary and fragile as they look like they were just held together by bolts and straps. It also adds to the gameplay by making the player work around the limits of the materials of the craft.



Pixel

Minecraft pixel style is one of the reason it is selling so well by the fact that it helps make the game look simplistic and nostalgic in a way, it helps with gameplay because of the simple looks of the game it makes every little block look different and easily distinguishable making the game easier to play, also you can add different resource/texture packs so you can make the game look how you want.

Metroid was one the first games I believe to feature 16bit graphics which gave it he pixel art style which gave the environment a lot more variety and it also made the gameplay feel new and special.

Exaggeration

No man's sky is a perfect example of exaggeration as it was boasted to so many features like multiplayer and 18 quintillion earth sized planets but didn't show much of what it boasted. But the art style shows animals and building that are truly massive as well as space stations and ships.

War thunder's style of exaggeration is by making the Russian tanks more powerful than what they are. While making the other countries tanks weaker



Photorealism

The last of us was an extremely beautiful game in just the settings alone on the PS3 but when naughty dog remastered the game for the PS4 it really shown how beautiful the game could be and it also added to the gameplay by making the game look like it could be a real life situation.

Grand theft auto's photo-realistic style helped make the game look as real as possible while still being in a made up city. The sunrises and sunsets in the game help bring a sense of beauty to the game when you are not robbing liquor stores.

Cyberpunk

Deus Ex's Cyberpunk art style really helped with the game by making the augmented people stand out amongst the rest and kind of gave the game that gritty type of robot style gameplay without playing as a robot.

Call of duty advanced warfare's cyberpunk style is very basic with exoskeletons and robots around the place as well as crazy guns the style of the game helped ruin the call of duty franchise.



Black and White

Antenna did really well with the black and white style by making the game spooky and eerie even though it was not classed as a spooky game.

Pong simplistic black and white design made the game very simple and fun to enjoy without getting overwhelmed.

Anime

RWBY GRIMM ECLIPSE: the art style of the game is very similar to the style the anime is. This helps adds a feeling that you are in actually playing in the universe of the anime it also helps the game look amazing while being able to portray the characters realistically in size and appearance. As well as the size of the creatures

Attack on titans art style helps portray the titans as what they are and helps convey the story.

Manga

Manga is pretty much the same as anime



Style Sheet

Environment breakdown
the enviroment is in the atlassian forests which is coverd in trees and lakes and has mountains to the north, the forests are in habitited by creatures of grimm like beowolves and ursas and the mountains have nevermores and ursas, there are ferocious snow storms that can hit the area without any warning.

How will you make it Your Own?
i will make it my own by creating what the enviroment from my own vision as my inspiration has not yet showed what it is like, i will also be using my own character.
also use the colours of the main team from RWBY (Red,White,Black,Yellow and also purple's, blue's and greens.

References and Influences
.RWBY
.Russian forests



Style Characteristics
cell shading
bright colours

Theme Characteristics
.snow
.forests
.mountians
.lakes
.caves
.Beowolves
.Ursas
.Nevermores
.snowstorms
.muted sounds (footprints, voice)

Perpetual winter near future world of remnant atlassian forest.

The continent of Atlas is on the northern hemisphere of remnant so the majority of the land is covered in a thick blanket of snow with deep forests and mountains, there are fresh flowing streams from the mountains but they tend to freeze up the closer to the ground they get even though there are a few streams and lakes scattered around the forests but the majority of atlas's forests are very rarely explored since there are creatures of Grimm within the forests and the ferocious snow storms can appear from now where and takedown any aircraft caught in them.

The forests consist of pine trees mainly but vary depending on where the forest is. There are also crashed aircraft from atlas some prototypes and some commercial which have been unlucky enough to get caught in snowstorms or get taken down by giant Nevermores.

During the day the temperatures are 15 degrees below zero so most unprepared people freeze to death with in minuets or get eaten alive, during the night temperatures get even colder as they can go to -25 to -30 degrees so shelter is a must even if it's just a cave. The day/night cycle is 24 hours long.

The mountains would be one of the few ways to be able to get noticed and extracted from the area but they are steep and full of hazards from Grimm and the elements, food is very hard to come by as Grimm turn to dust once killed, the only way of getting any kind of nourishment would to find fruits high up in the trees, sap from some of the trees or any kinds of berries or vegetables that hide around caves and mountains, the occasional deer may be spotted but they are often too quick to hunt efficiently.

There are also vast crevasses and underground caves that can be used for shelter from the elements but they are often hard to find due to being covered in a layer of ice

In certain parts of the forest there are hidden warehouses that belong to either the Schnee dust corporation, the atlas military or the white fang, the warehouses will have supply's but also guarded buy whatever faction they belong to, even though the atlas one are the most heavily guarded they will permit hunters and huntresses to re-supply and take refuge if there is a storm.

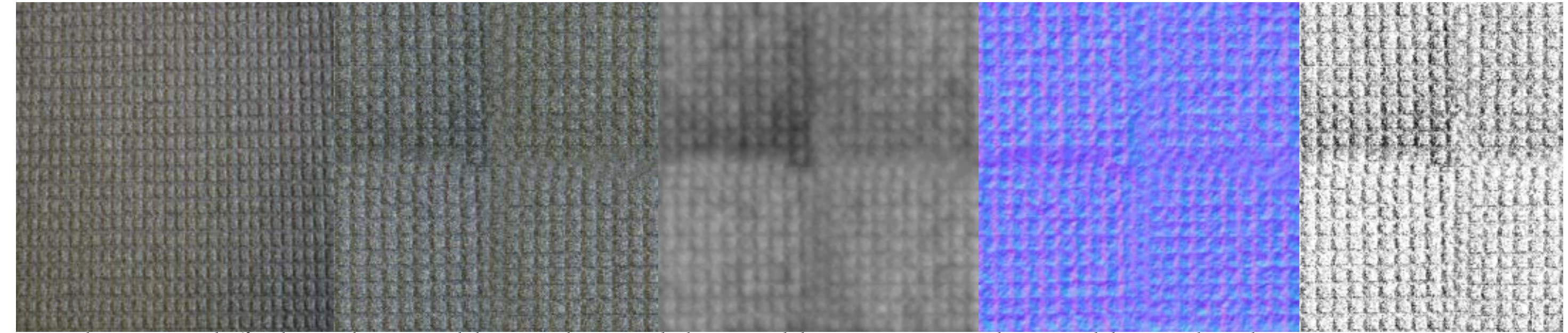
There are multiple resources in the forest ranging from wood and leaves to stone and sap. There can be chunks of unmined dust crystals but depending on the type of dust it is depends on what it can be used for weather its starting fires to defending against hostiles to even powering devices and machines.

The inhabitants of Remnant evolved to utilise dust to help them with their daily life and also fight back the creatures of Grimm but only specially trained people can fight them effectively with dust and they are called huntsmen and huntress's where they go to specially built academy's to train.

Each huntsman or huntress has their own unique hand forged weapon designed to help them combat the creatures of Grimm. The weapon is unique to each hunter no two are alike un less they are supposed to come as a pair for the user.

There is also a divide between the inhabitants as half of them evolved with animal traits such as tails, ears or antlers, these people are called Faunus and are generally classed as second class citizens but are fighting for equality.

Texture Creation



Original Image i stared off with

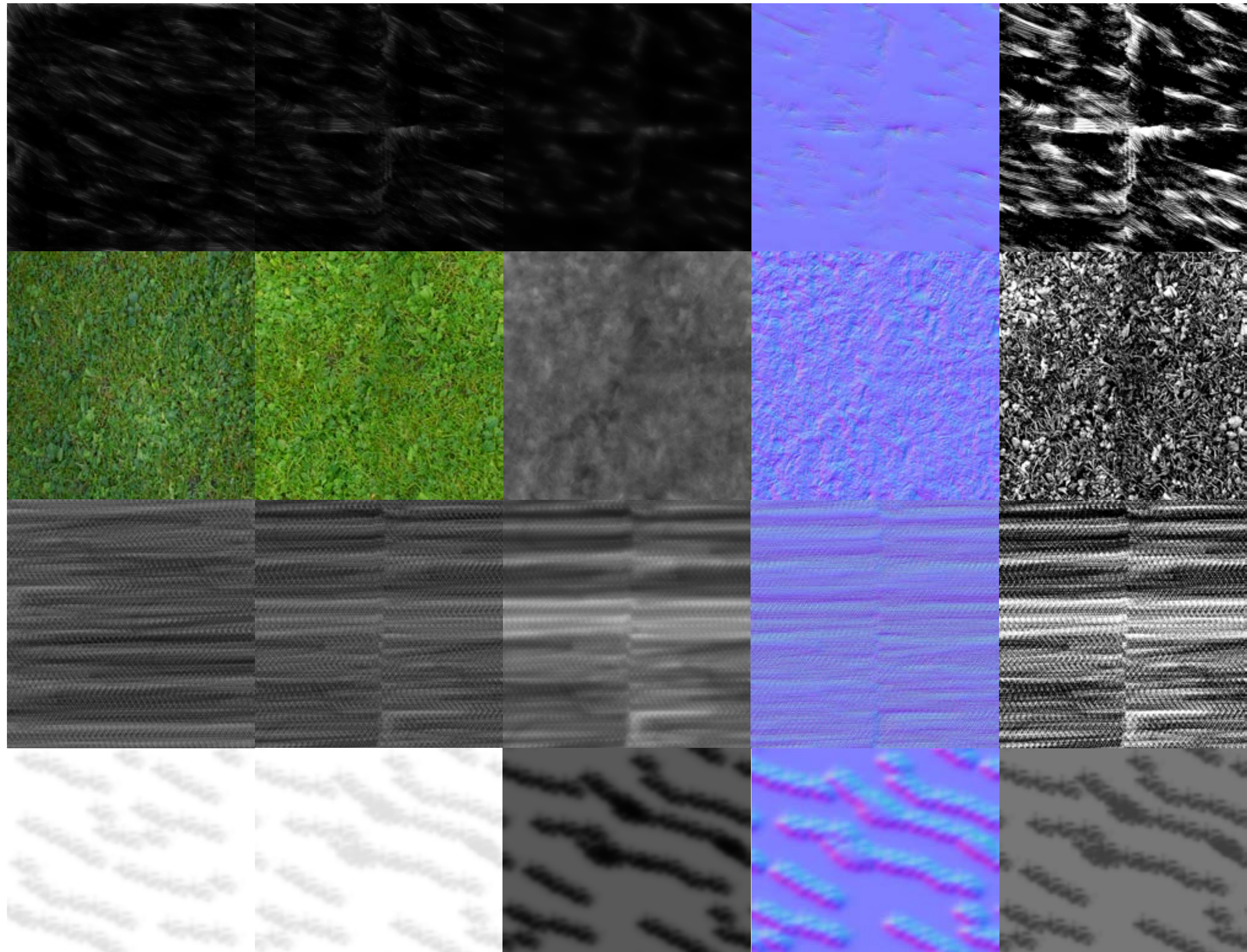
i then cropped the image then resized it to 1024 pixels by 1024, after doing that i offset the image by 512 each way until it looked like this.

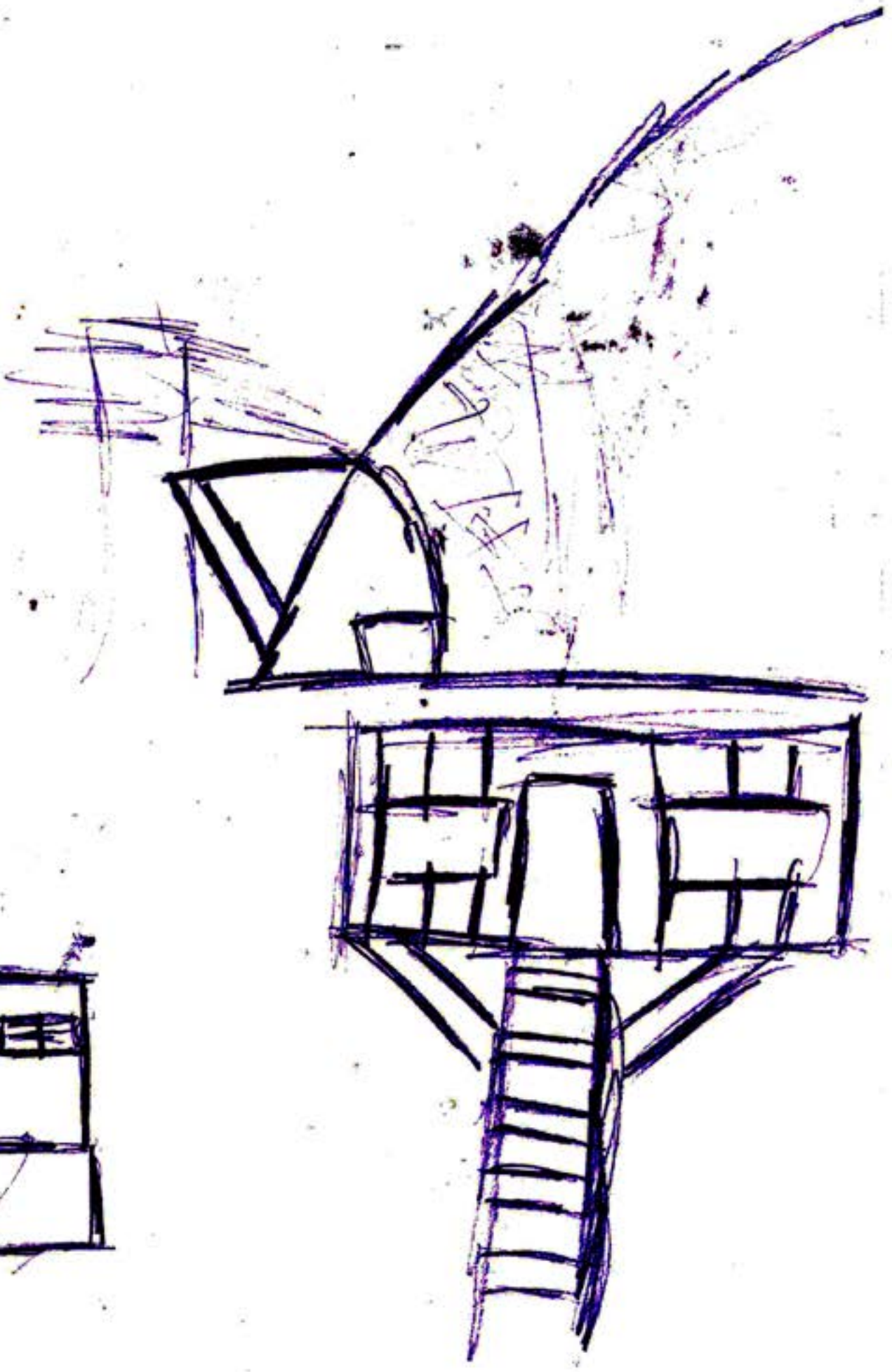
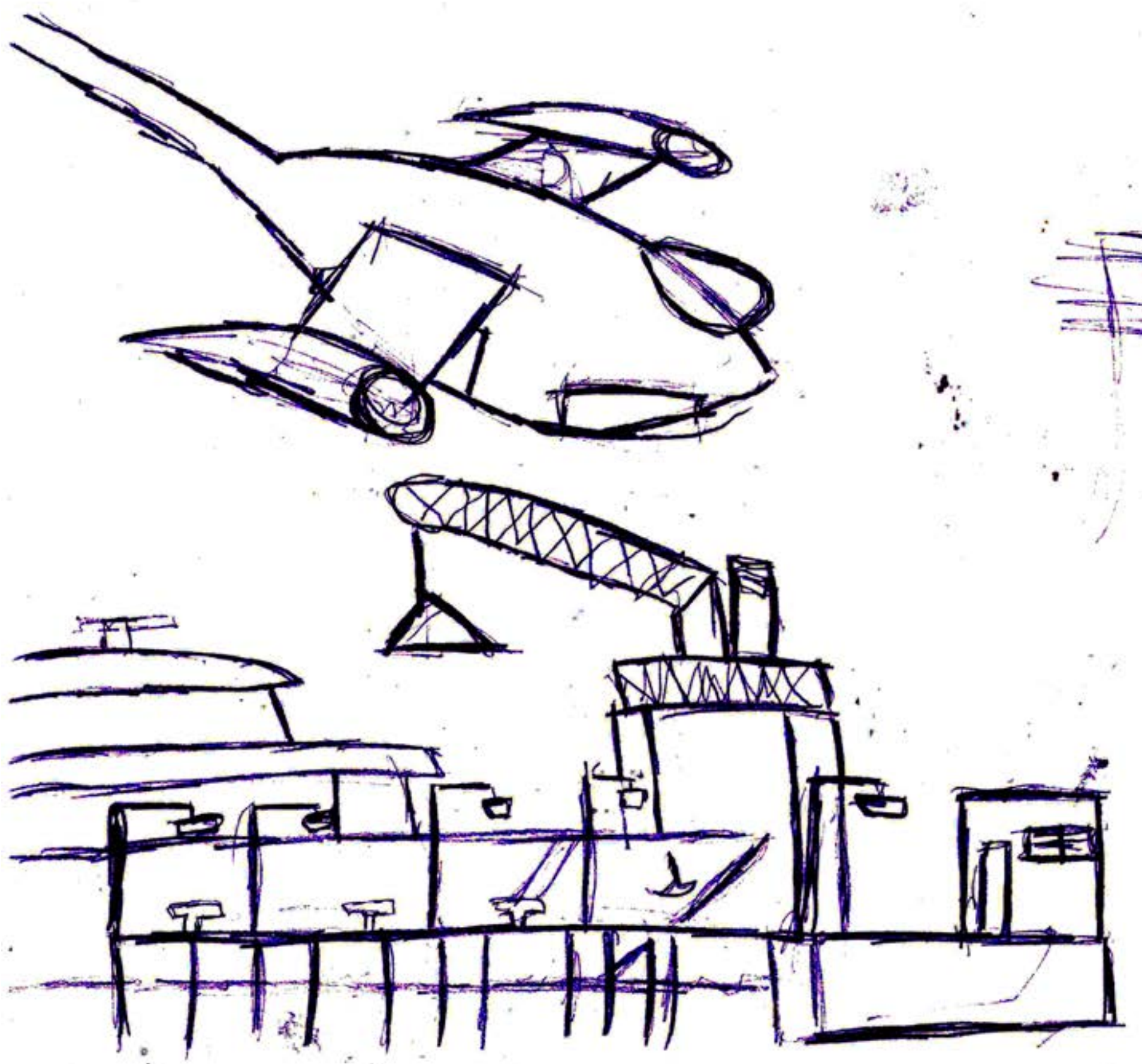
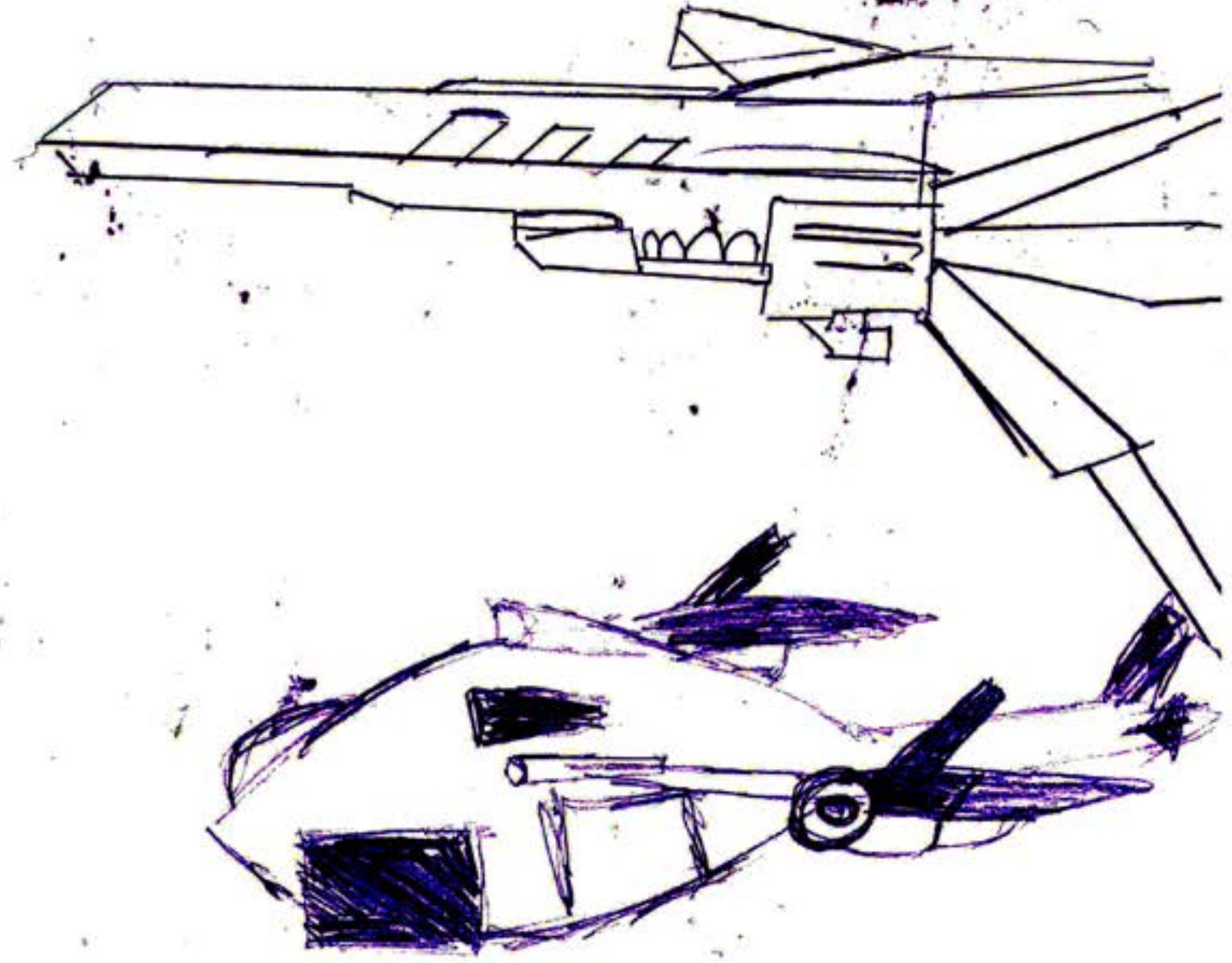
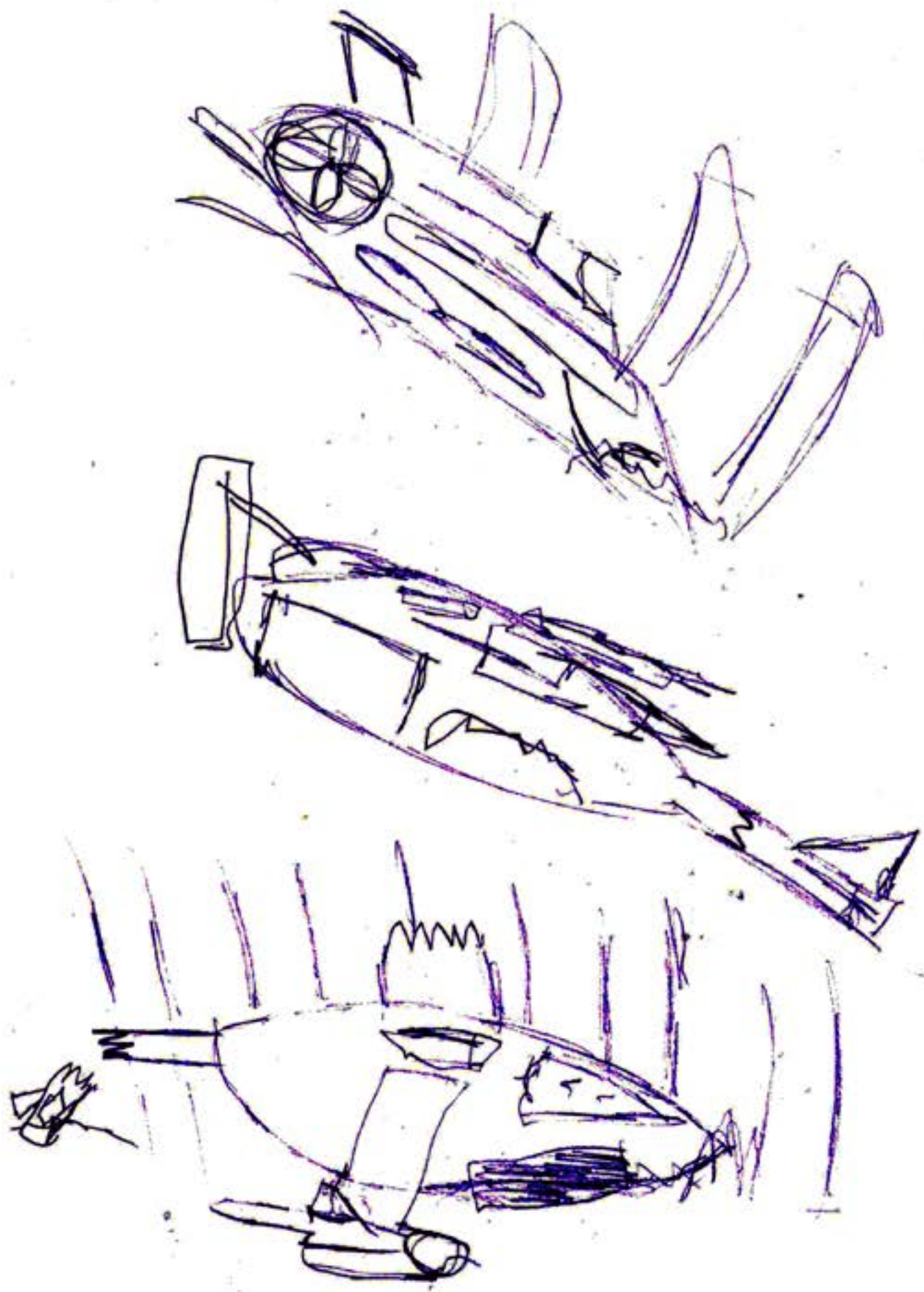
after that i attempted to smooth the break lines so they looked seamless

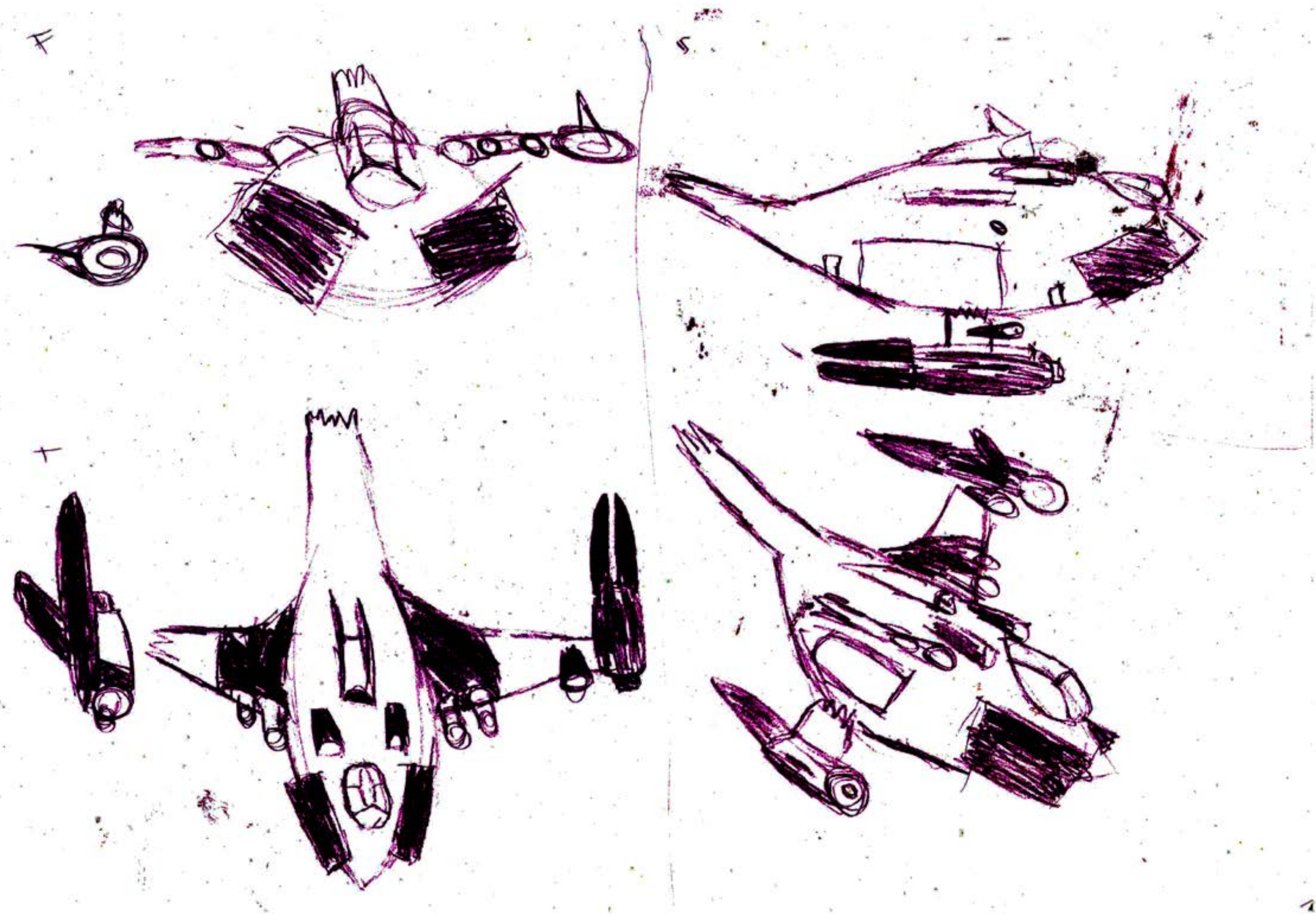
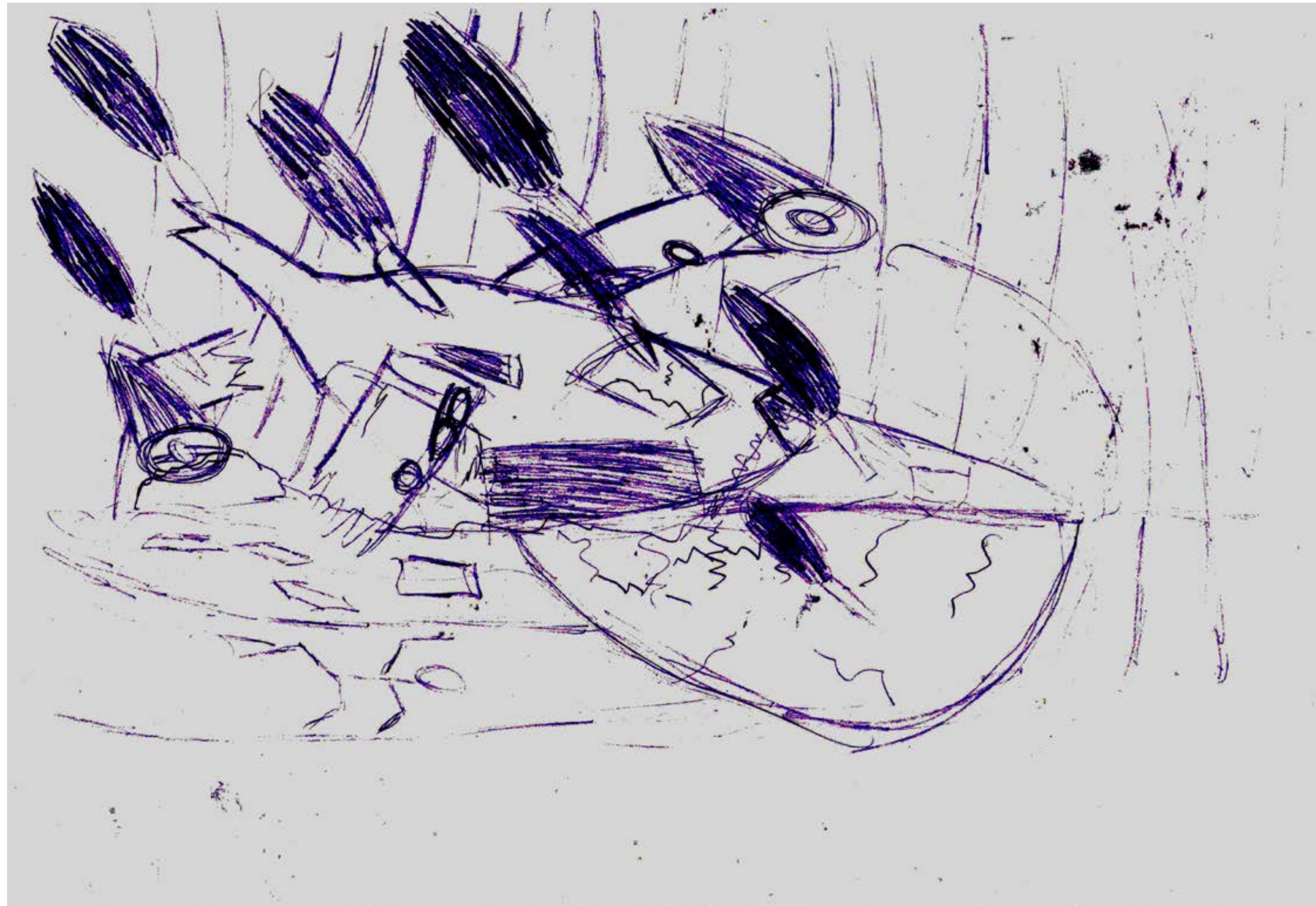
i then created the Bump map, By clicking on create Bump map in the toolbar and moving the sliders until it looked right

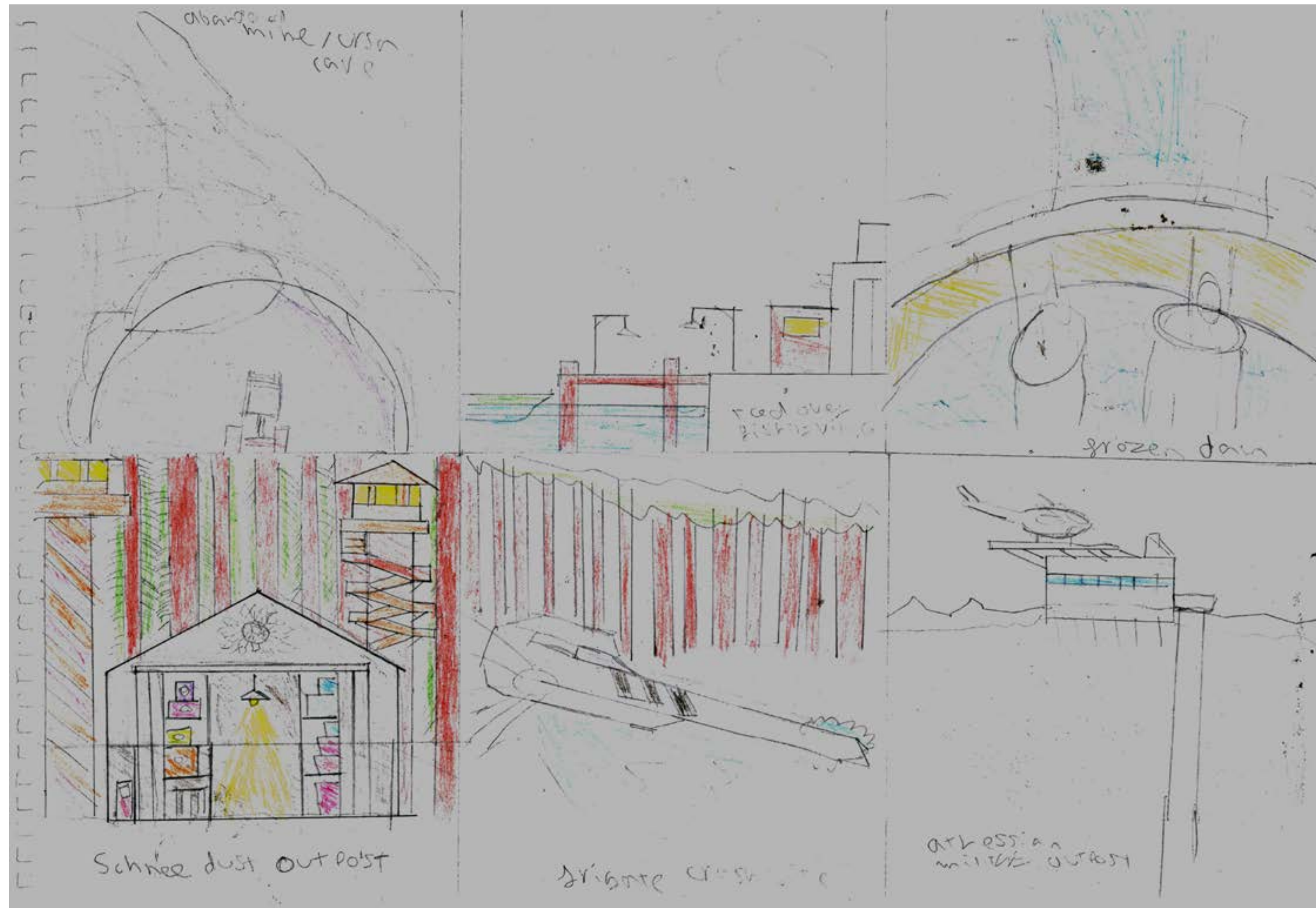
i then created the normal map by clicking create normal map in the toolbar and moving the sliders till it looked good

here i have created the spectral map by desaturating the image and then moving the exposure levels so the image has high contrast levels

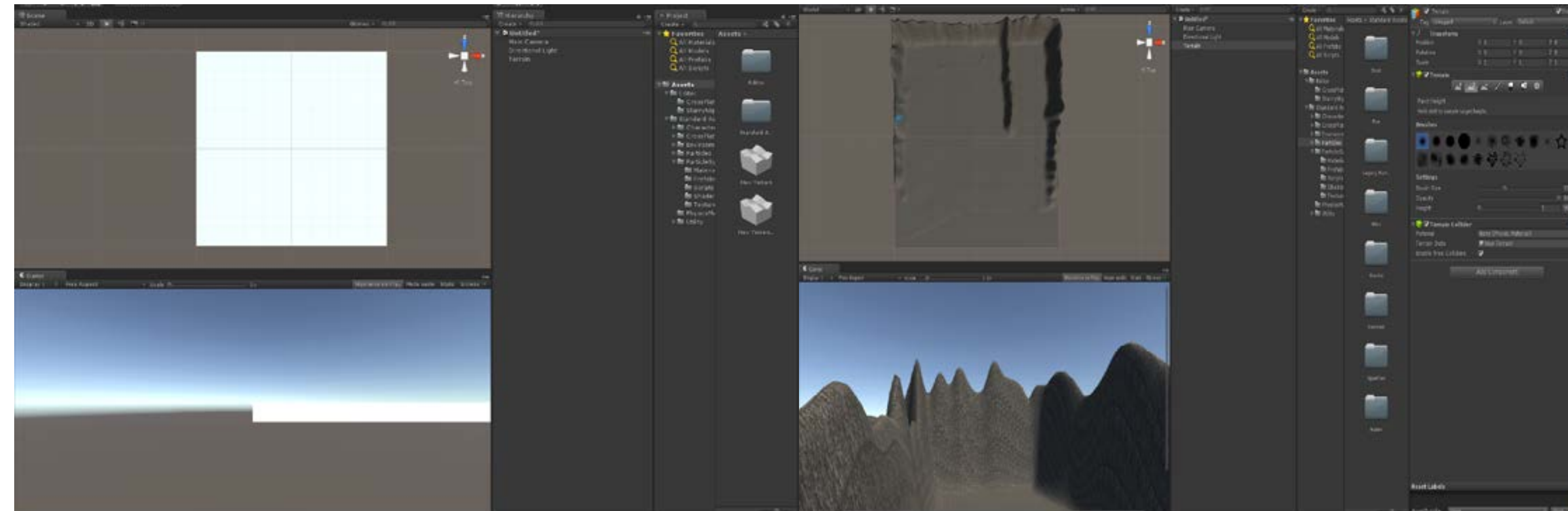








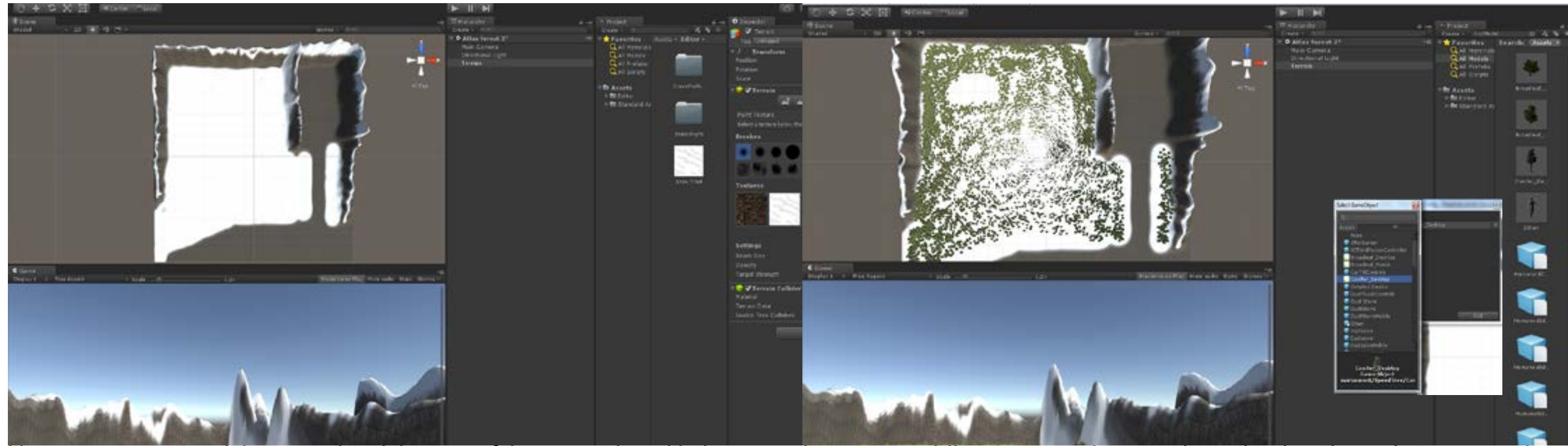
Creating my environment



i first started making my by importing the asset packs i will be needing which are; environment, character, particles and the skybox that i will need.

i then created the terrain from selecting it in the gameobject creation menu, i then resized the terrain from 500x500 to 2000x2000 so i would have enough room to add all the areas in my thumbnails

i then gave the base a rocky type texture for the mountains im going to go back over the flat area with a snow texture, i raised the floor about 5 meters from the base so i could then go back and lower a certain area to put in an ice lake, i then raised the top and side edges of the map to create mountains which will also act as borders/barriers, i also created a ridge just to the right of the centre of the map to create a an area to where the dam is going to go.

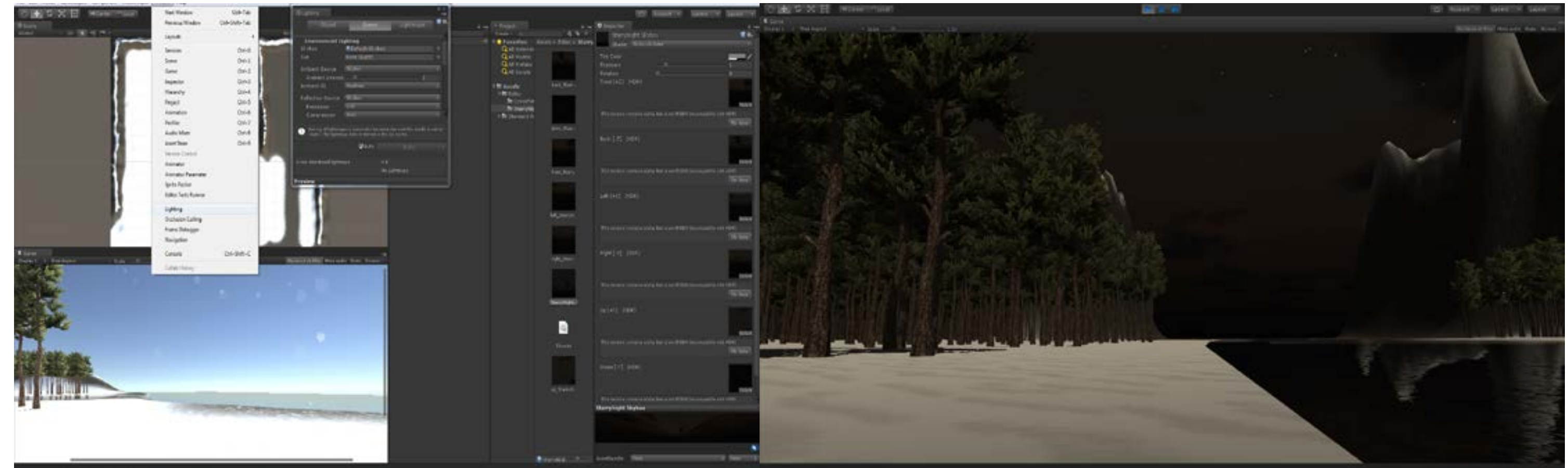
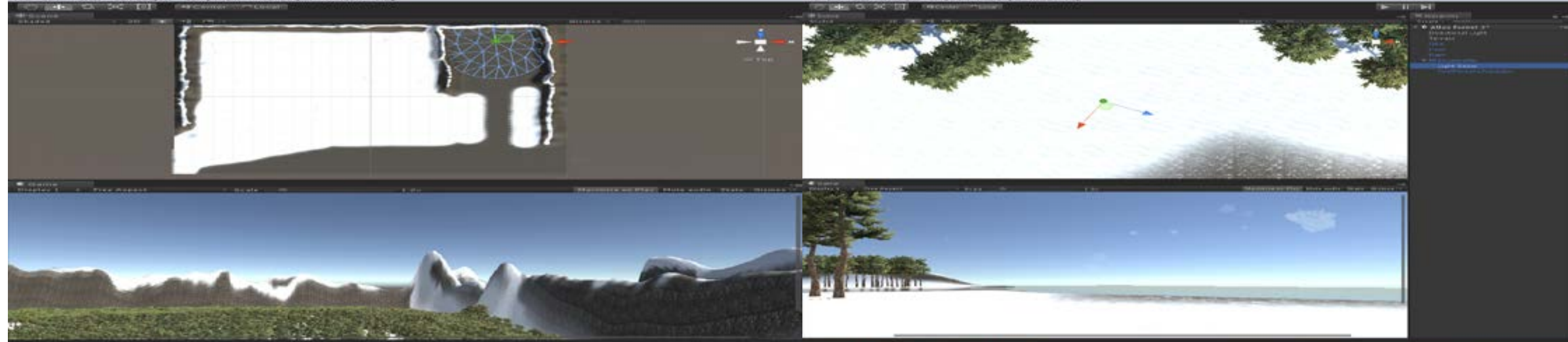


i have now re-textured the ground and the tops of the mountains with then snow texture that i created. i used a large brush size to do the ground with since i need a large area covered but when i did the tops of the mountains i used a much smaller brush to give the mountains a snow capped look.

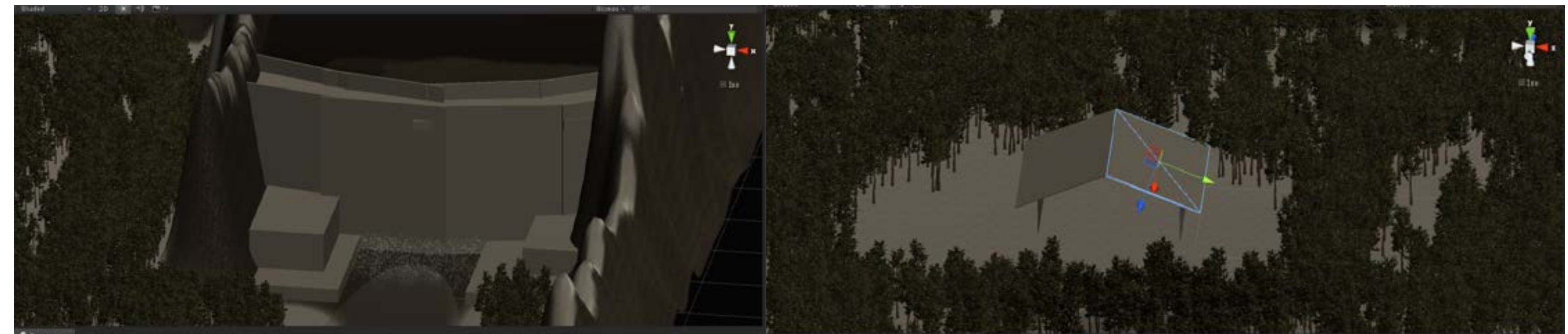
i am now adding trees to the map by selecting the paint trees tool and selecting conifer as they are the tree that is most likely going to be seen in this environment.

i have now added a water surface to the lake, river and dam areas, i did this by going into standard assets, environment, water, water, prefabs and then selecting water Pro-nighttime, i then re-sized and altered the shape of the water planes to fit the lake, river beds and the shape of the dam.

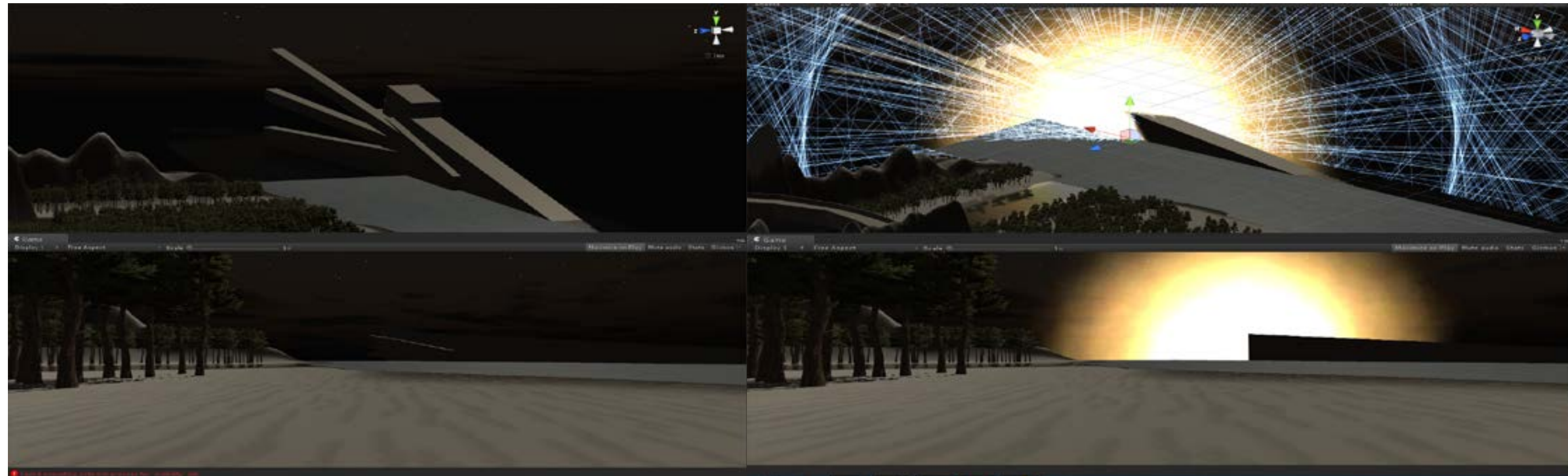
i have now inserted a 'first person camera' by going into standard assets, characters, first person, prefabs and first person controller. after doing that i placed the controller into a part of the map that i wanted i then removed the main camera and added snow particles to follow the controller by getting them from the particles menu and placing them within the first-person controller tab.



i am now adding in the sky-box, i did this by going into window-lighting and then dragged the skybox i had ready into the skybox menu. i have also turned down the directional light so the skybox has better effect. as it is a night-time environment.



i have decided to add in a dam out of cubes to which i have reshaped this will be a place holder for if i get to make one in 3ds max. i have also use and re-sizing them to make a warehouse looking building water falls to show where the water leaves the dam.

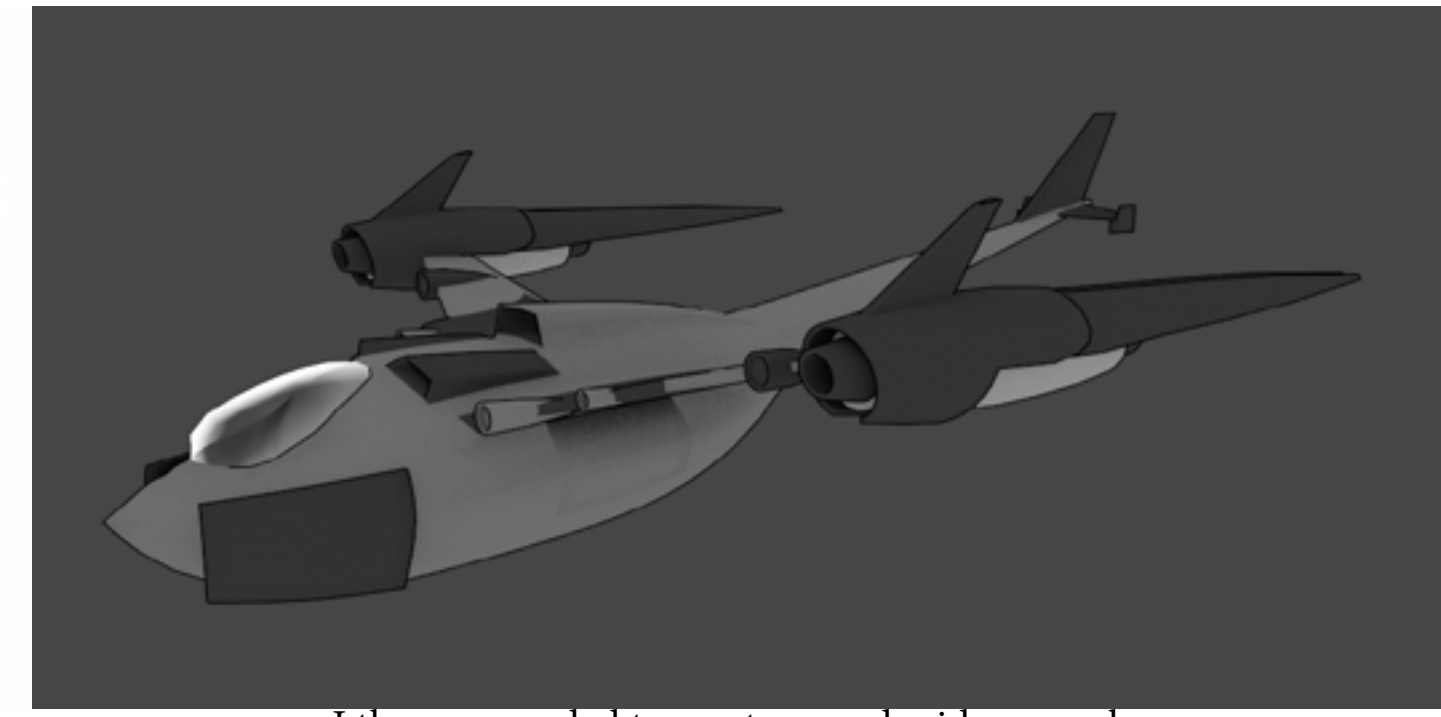
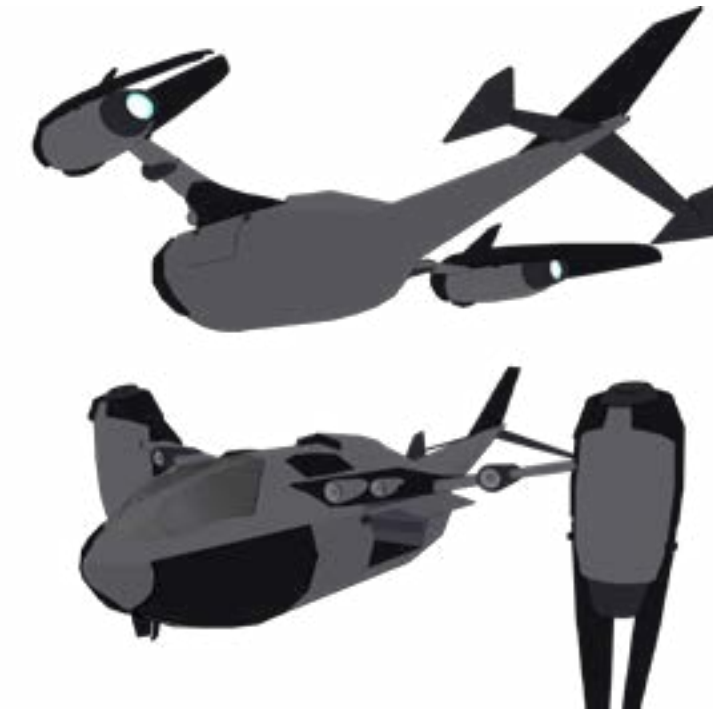


i have now added a place holder for the frigate that has crashed into the ice lake, i have also added a ice sheet on to the lake and change the material properties to ice to make ice slippery

i got bored and decided to harness the sun on to the ship

CREATING MY FIRST DWELLING

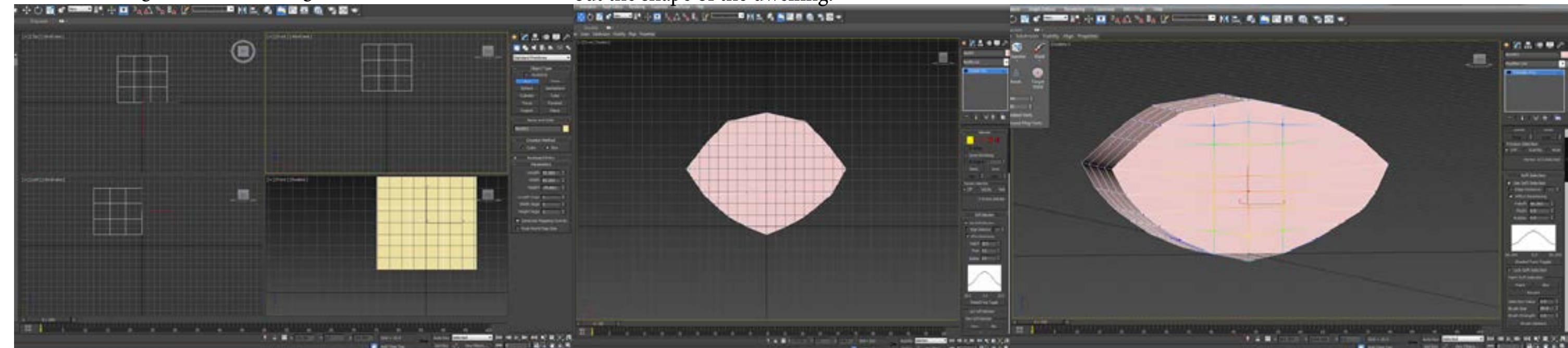
I am trying to re-create the Bull head airship from RWBY but make it look like it has crashed in a forest

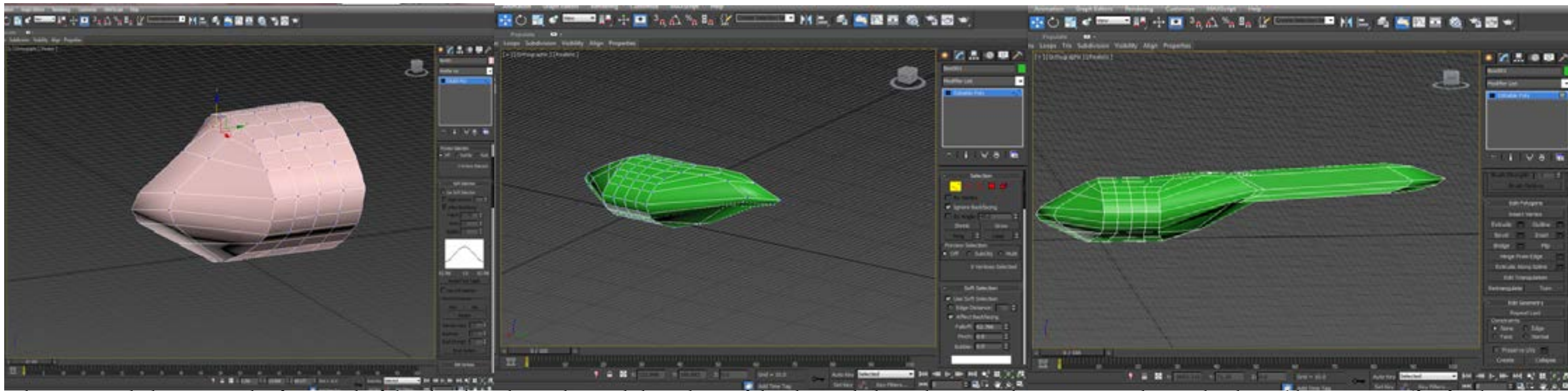


I then proceeded to create a crude side ways ellipse shape to get the basic shape of my dwelling using the four parameters I have. I then proceeded to add more lines of geometry to help smooth out the shape of the dwelling.

Now that I have smoothed the shape off to an extent that I am contempt with, I am starting to extrude the front of the shape with soft-selection fall off set to 62, to help give the shape a more ship like look

I started my dwelling by creating a box with the parameters set to 4 on the length, width and height.



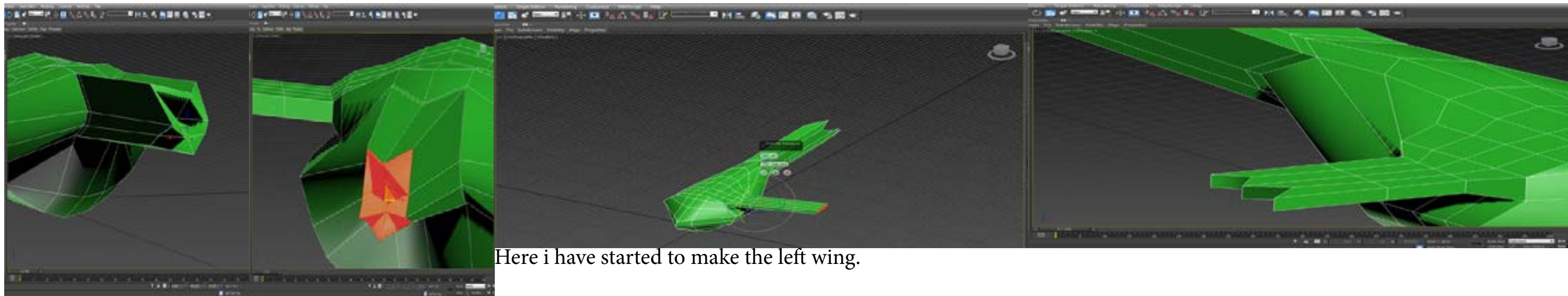


I then proceeded to create the front end of the ship by extruding the front with soft selection on and at 62

I have changed the colour of the ship to help make it stand out and easier to model,

I now started to make the tail by turning off soft selection and extruding by 2 layers the first layer to help separated from the body of the craft so the tail does not affect the shape of the ship and the second layer added the length of the tail

I have also started to make the rear end of the ship by extruding with soft selection on then when i got to a point that i was happy i reduced the area of falloff on the soft selection so the base of the tail became more pointed.



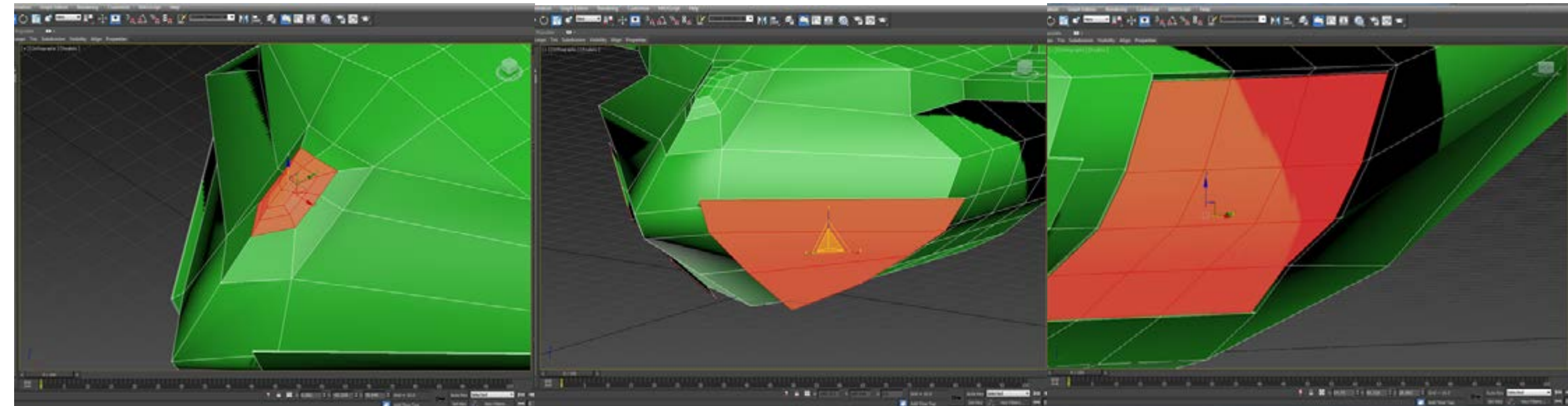
Here i have started to make the left wing.

Here i have shrunk the back end of the tail to make it more pointed and i have also started to make the end look like the rest of the tail has snapped of from an animal attack by creating jagged edges.

I did this by extruding at the point on the hull where i wanted the wing to start, angled it to just above a 90 degree angle and the extruded twice more with the second extrusion being considerably longer than the first.

I also made the wing more pointed to give it a 'wingy' look and i also rotated the wing assembly back a pit to give it a swept look.

I will start making the engine later.



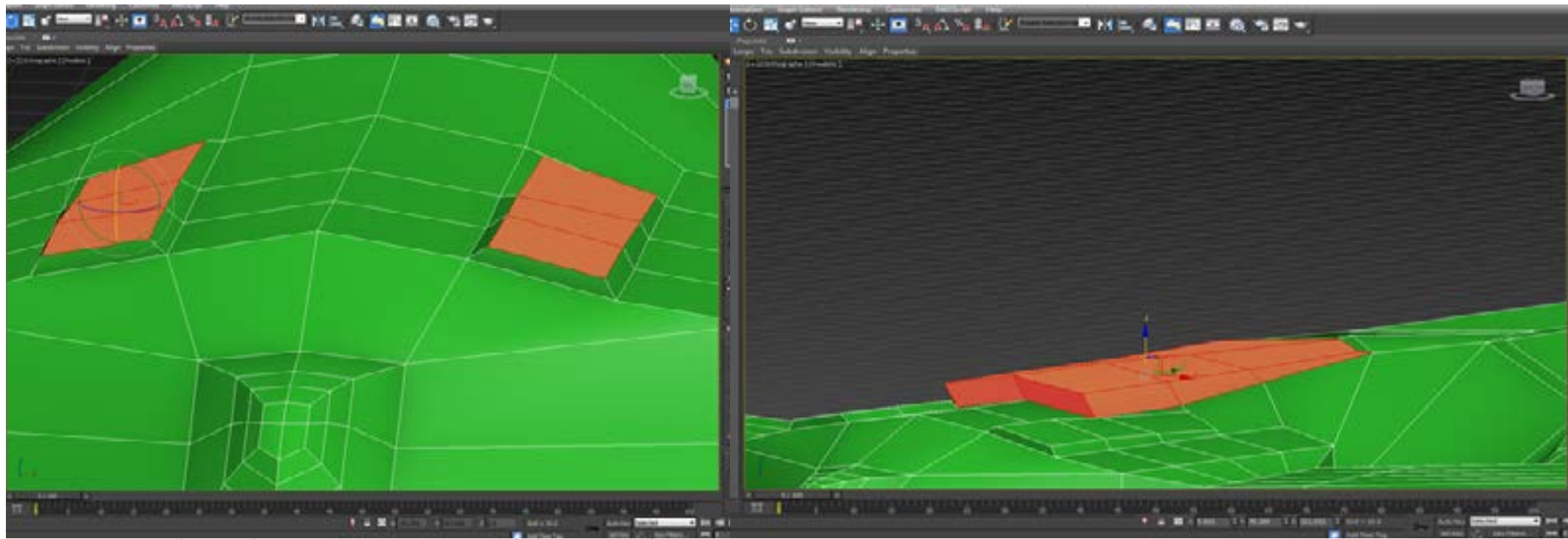
Here i am making the cockpit i did do this before the armour plates i just forgot to screenshot the process

Here i am creating the armour panel at the front of the ship i did this by selecting the polygons i wanted on both side by holding CTRL and clicking on the ones i wanted i then extruded twice but only made the extrusions very small so they were not far away from the craft, i then took the second extrusion and scaled it up by a couple of centimetres and repositioned it closer to the front of the aircraft

Here i am making the cargo doors to the aircraft i did this by selecting the polygons you see here on both sides of the model and beveling them into the model to give the doors a recessed look

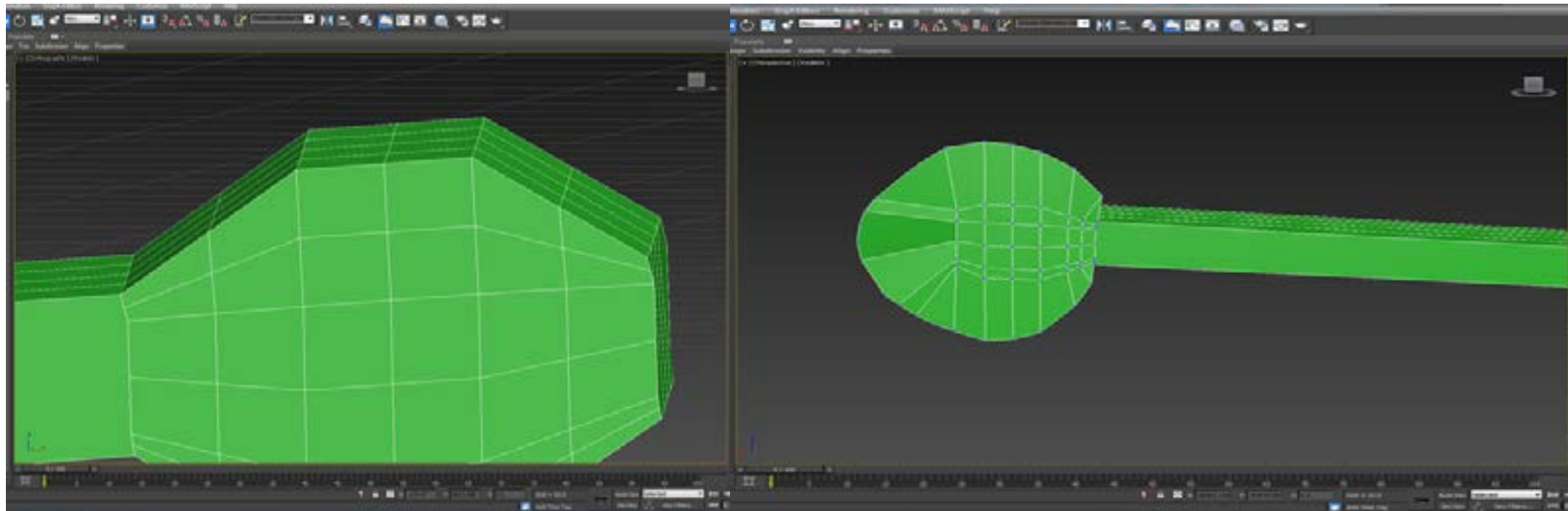
I make the cockpit by selecting a certain number of nodes in the pattern i chose on the front of the model and then i dragged them out a couple of centimetres, i then made some more polygons by adding more geometry by selecting the edges i wanted then connecting them to make new polygons after doing that i shrunk the select area and repeated the step before while dragging the shape out bits at a time, till i eventually got this look.

And that is what you see here.



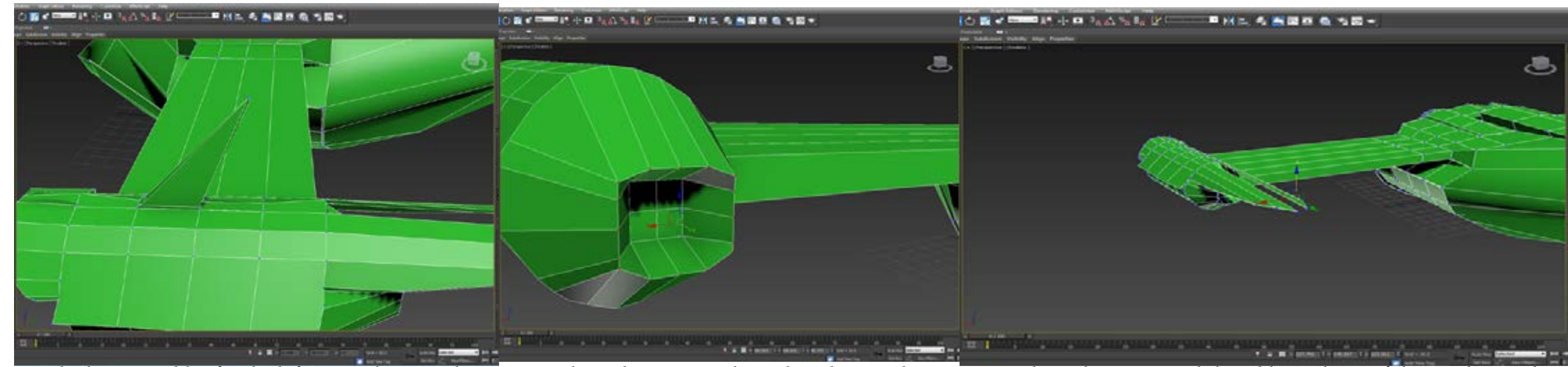
Here i am making the air ducts on top of the aircraft.

I did this simply by selecting the polygons i wanted, i dragged them out a little bit then i resized them by i few millimetres, then i angled the back of the ducts so they smoothly ran back into the fuselage of the aircraft



Here i have started to make the engine on the left wing, i have started by extruding the end of the wing 3 more times but made the extrusions small from then i proceeded to make them as round as possible by adding more geometry to help give a curve as you can see here i have only just started

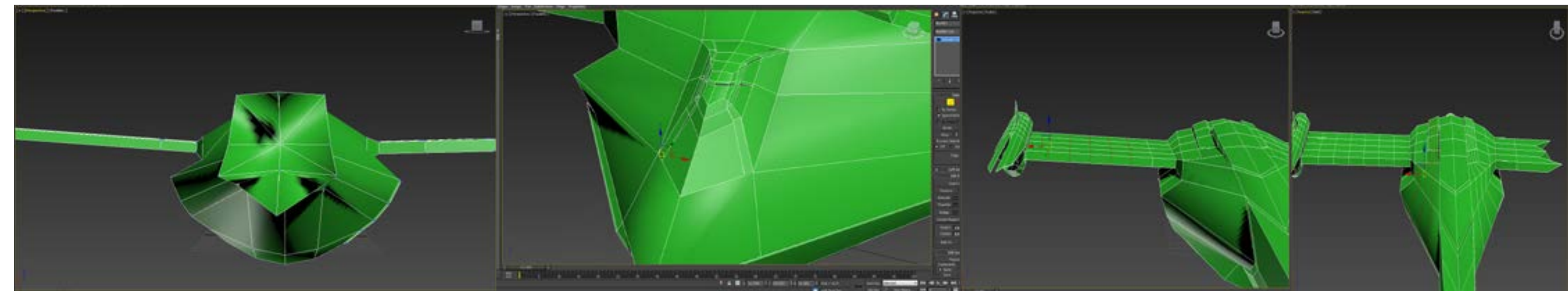
I have now finished rounding the engine shape as best as i can do without going mad



i made the top rudder for the left engine by extruding twice only by small amounts then lengthening the second extrusion a fair bit and angling the nodes to make out it pointed and slanted

i am making the engine exhaust by selecting the nodes on the second ring in and extruding them

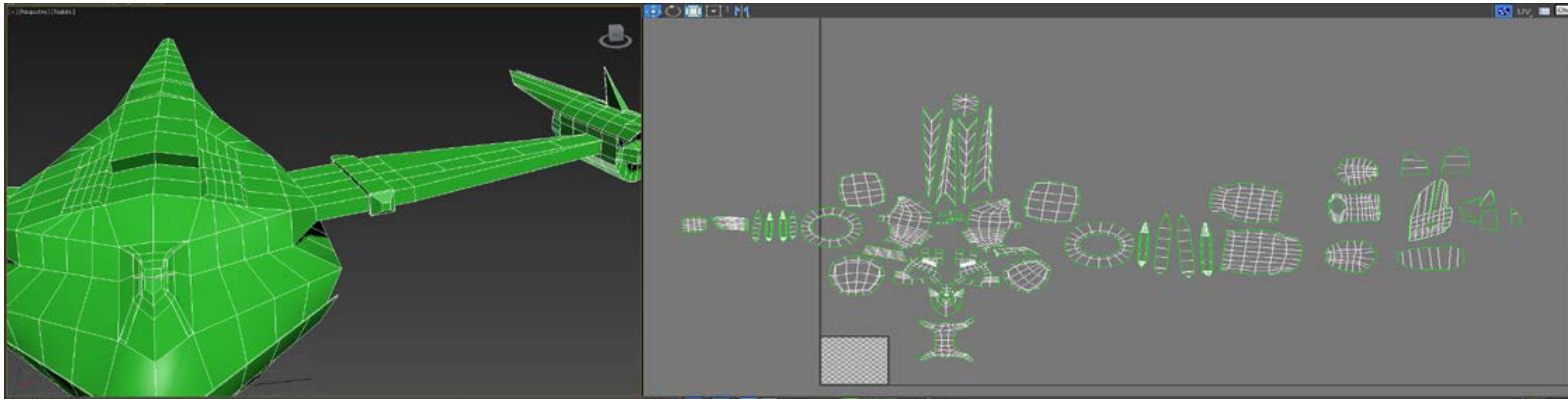
i am making the engine tails by adding a layer of shapes above the engine then extruding the rear ones out and pointing them off to give a streamlined look.



i have now edited the tail of the ship by shrinking it down more to be more like the original design and i have added more geometry to it, to make it easier to texture.

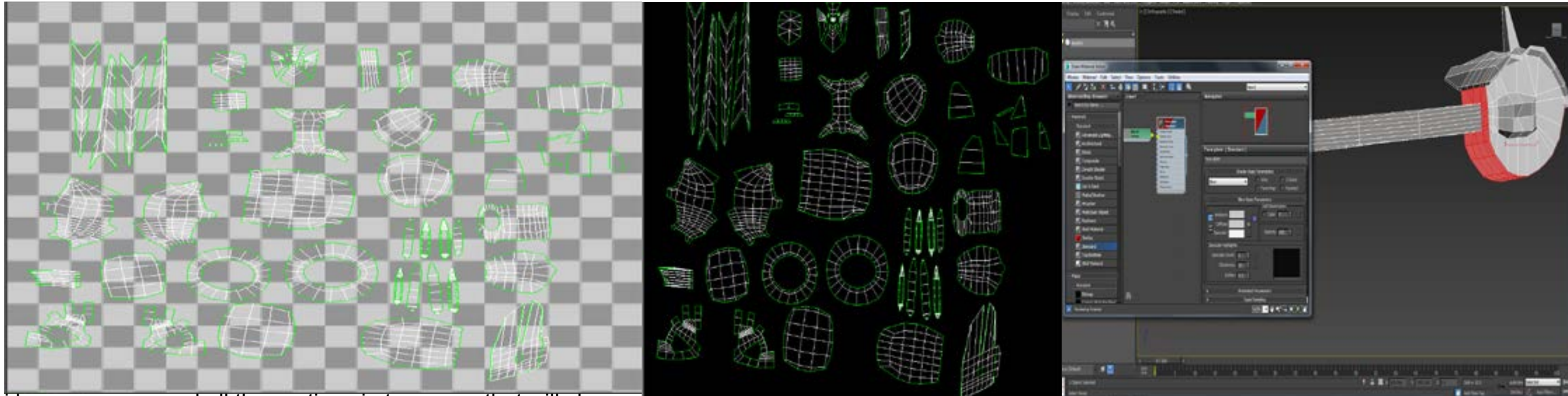
here i have made the roll-cage/window braces for the cockpit i did this by added more vertices and then connecting them together i also extruded them by 0.9 and smoothed the edges.

i have decided to add more geometry to the fuselage and wings to make them easier to texture.



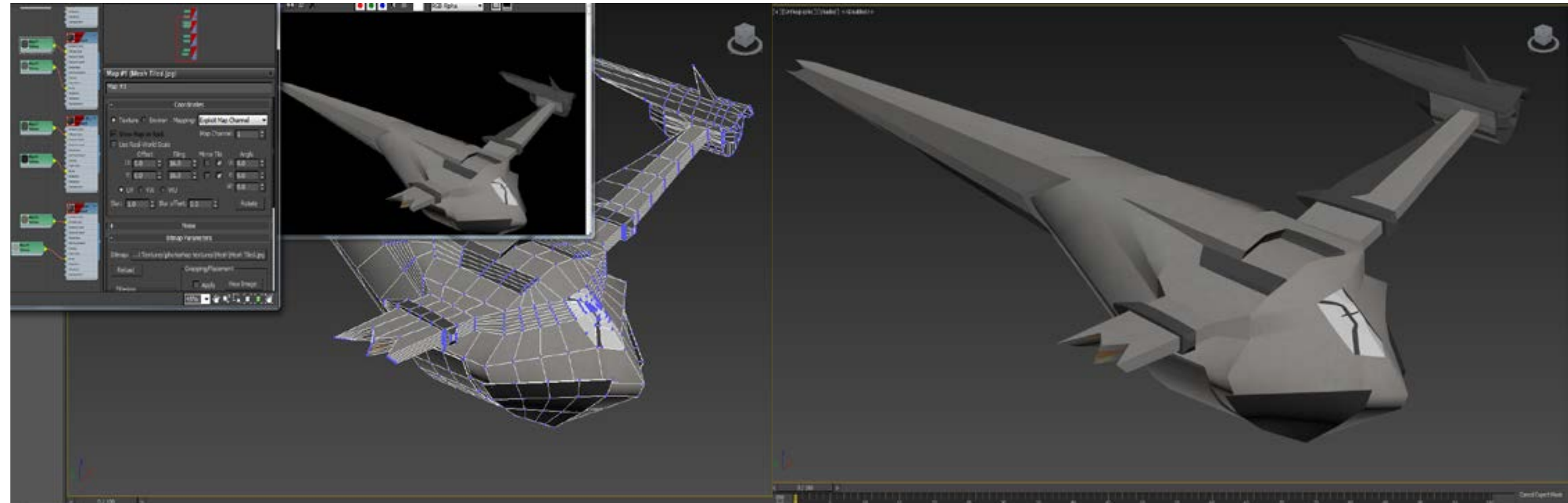
i have also added little light areas to the ship for where lights would be and also i have angled the wings more and shaped them to make them look more wingy.

i have separated and laid out all of my UV maps ready for texturing but first i am going to gather the maps that will have the same texture or colour and put them in to their own areas. i have had to redo the unwrapping due to the complexity of the model.



i have now grouped all the sections in to groups that will share the same set of textures i have also resized all of them so they fit nicely within the chequered box

i have now started to texture my model



and here is my final render

i have also placed my model in to my environment

