International GCSE Art and Design

Three-dimensional Design
Component 1
Total mark = 60

Pearson

	AO1 **Develop**	**AO2** **Refine**	**AO3** **Record**	**AO4** **Realise intentions**
Mark	15	14	15	16
Mark band	Level 5 Fully confident and assured ability	Level 5 Mostly confident and assured ability	Level 5 Fully confident and assured ability	Level 6 Just exceptional ability
			Total	60

Mark band:
Mark band 5 – Confident and assured ability

Key word descriptors from the taxonomy:
Advanced, comprehensive, perceptive, exciting, in-depth, fully resolved, risk-taking

International GCSE assessment grid – Examiners will use this assessment grid to assess all student work for both components and all titles

Assessment Objectives	Mark Band 1 LIMITED ABILITY *Insufficient knowledge, understanding and skills; minimal evidence or, and lack of structure in, the development and recording of ideas*			Mark Band 2 BASIC ABILITY *Some knowledge, understanding and skills demonstrated but they are simplistic and deliberate; some structure and repetition in the development and recording of ideas*			Mark Band 3 EMERGING COMPETENT ABILITY *Knowledge, understanding and skills are generally adequate but safe*			Mark Band 4 COMPETENT AND CONSISTENT ABILITY *Knowledge, understanding and skills are secure and cohesive throughout*			Mark Band 5 CONFIDENT AND ASSURED ABILITY *Knowledge, understanding and skills are effective and focused throughout*			Mark Band 6 EXCEPTIONAL ABILITY *Knowledge, understanding and skills are in-depth, perceptive and accomplished throughout*		
	Just	Mostly	Fully	Just	Mostly	Fully	Just	Mostly	Fully	Just	Mostly	Fully	Just	Mostly	Fully	Just	Mostly	Fully
AO1 Develop ideas through investigations, demonstrating critical understanding of sources	1	2	3	4	5	6	7	8	9	10	11	12	13	14	**15**	16	17	18
AO2 Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes	1	2	3	4	5	6	7	8	9	10	11	12	13	**14**	15	16	17	18
AO3 Record ideas, observations and insights relevant to intentions as work progresses	1	2	3	4	5	6	7	8	9	10	11	12	13	14	**15**	16	17	18
AO4 Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	**16**	17	18

AO1 descriptors:

- Mark Band 1: Development of ideas through investigations shows limited ability. The investigation process shows limited critical understanding of the context of own ideas and the sources that have informed them. Limited attempts are made to analyse and make connections.
- Mark Band 2: Development of ideas through investigations shows basic ability. The investigation process shows basic critical understanding of the context of own ideas and the sources that have informed them. Basic understanding of some issues when analysing and making connections.
- Mark Band 3: Development of ideas through investigations shows emerging competence. The investigation process shows emerging competent critical understanding of the context of own ideas and the sources that have informed them. Emerging competent consideration of issues shown when analysing and making connections.
- Mark Band 4: Development of ideas through investigations shows competent and consistent ability. The investigation process shows competent and consistent critical understanding of the context of own ideas and the sources that have informed them. Competent and consistent judgements shown when analysing and making connections.
- Mark Band 5: Development of ideas through investigations shows confident and assured ability. The investigation process shows confident and assured critical understanding of the context of own ideas and the sources that have informed them. Shows confident and assured understanding of complex issues, heightened analysis, informed connections.
- Mark Band 6: Development of ideas through investigations shows exceptional ability. The investigation process shows exceptional critical understanding of the context of own ideas and the sources that have informed them. Exceptional analysis and connections.

AO2 descriptors:

- Mark Band 1: Limited ability to refine work, driven by insight gained through explorations of ideas and reflection. Ideas are consolidated too early and not fully realised. Limited ability to explore ideas through a process of experimentation and review. Limited ability to select and experiment with media, materials, techniques and processes appropriate to personal intentions.
- Mark Band 2: Basic ability to refine work, driven by insights gained through exploration of ideas and reflection. Basic ability to explore ideas through a process of experimentation and review. Basic ability to select and experiment with media, materials, techniques and processes appropriate to personal intentions.
- Mark Band 3: Emerging competent ability to refine work, driven by insights gained through exploration of ideas and reflection. Emerging competent ability to explore ideas through a process of experimentation and review. Emerging competent ability to select and experiment with media, materials, techniques and processes appropriate to personal intentions.
- Mark Band 4: Competent and consistent ability to refine work, driven by insights gained through exploration of ideas and reflection. Competent and consistent ability to explore ideas through a process of experimentation and review. Competent and consistent ability to select and experiment with media, materials, techniques and processes appropriate to personal intentions.
- Mark Band 5: Confident and assured ability to refine work, driven by insights gained through exploration of ideas and reflection. Confident and assured and assured ability to explore ideas through a process of experimentation and review. Confident and assured ability to select and experiment with media, materials, techniques and processes appropriate to personal intentions.
- Mark Band 6: Exceptional ability to refine work, informed by insights gained through exploring and reflecting on ideas. Exceptional ability to explore ideas through a process of experimentation and review. Exceptional ability to select and experiment with media, materials, techniques and processes appropriate to personal intentions.

AO3 descriptors:

- Mark Band 1: Limited ability to record ideas, observations and insights related to personal work and the work of others through visual and other methods. Limited ability to record relevant to intentions. Limited use of skills and techniques while recording from observation, experience and ideas.
- Mark Band 2: Basic ability to record ideas, observations and insights related to personal work and the work of others through visual and other methods. Basic ability to record relevant to intentions. Basic use of skills and techniques while recording from observation, experience and ideas.
- Mark Band 3: Emerging competent ability to record ideas, observations and insights related to personal work and the work of others through visual and other methods. Emerging competent ability to record relevant to intentions. Emerging competent use of skills and techniques while recording from observation, experience and ideas.
- Mark Band 4: Competent and consistent ability to record ideas, observations and insights related to personal work and the work of others through visual and other methods. Competent and consistent ability to record relevant to intentions. Competent and consistent command of skills and techniques while recording from observation, experience and ideas.
- Mark Band 5: Confident and assured ability to record ideas, observations and insights related to personal work and the work of others through visual and other methods. Confident and assured ability to record relevant to intentions. Confident and assured use of skills and techniques while recording from observation, experience and ideas.
- Mark Band 6: Exceptional ability to record ideas, observations and insights related to personal work and the work of others through visual and other methods. Exceptional ability to record relevant to intentions. Exceptional use of skills and techniques while recording from observation, experience and ideas.

AO4 descriptors:

- Mark Band 1: Limited ability to produce a personal and meaningful response. Limited ability to realise intentions. Realisations demonstrate limited understanding of visual language through application of formal elements. Little appreciation of aesthetic consideration in personal style.
- Mark Band 2: Basic ability to produce a personal and meaningful response with a tendency to repeat ideas. Basic ability to realise intentions. Realisations demonstrate basic understanding of visual language through application of formal elements. A lack of technical competency frustrates personal style.
- Mark Band 3: Emerging competent ability to produce a personal and meaningful response. Emerging competent understanding to realise intentions. Realisations demonstrate emerging competent understanding of visual language through application of formal elements. Demonstrates methodical personal style.
- Mark Band 4: Competent and consistent ability to produce a personal and meaningful response. Competent and consistent ability to realise intentions. Realisations demonstrate competent and consistent understanding of visual language through application of formal elements. Demonstrates imaginative personal style.
- Mark Band 5: Confident and assured ability to produce a personal and meaningful response. Confident and assured ability to realise intentions. Realisations demonstrate confident and assured understanding of visual language through application of formal elements. Demonstrates independence and exciting personal style.
- Mark Band 6: Exceptional ability to produce a personal and meaningful response. Exceptional ability to realise intentions. Realisations demonstrate exceptional understanding of visual language through application of formal elements.

Recording of marks for all International GCSE work

Component	AO1 marks: indicate a mark out of 18	AO2 marks: indicate a mark out of 18	AO3 marks: indicate a mark out of 18	AO4 marks: indicate a mark out of 18	Total marks out of 72 for each component	
Component 1 Personal Portfolio	AO1 mark	AO2 mark	AO3 mark	AO4 mark	Total COMPONENT 1	
Component 2 Externally Set Assignment	AO1 mark	AO2 mark	AO3 mark	AO4 mark	Total COMPONENT 2	
					Total	

Pearson – International GCSE Art and Design Taxonomy

How to use the Taxonomy in conjunction with the Assessment Grid

Both components in this qualification are 100% externally assessed, however centres will find it helpful to use the taxonomy and assessment grid to provide feedback on student's progress.

- When assessing work for each component, examiners will make a holistic judgement using the descriptors in the taxonomy, to establish which performance band matches most closely the candidate's work.
- Candidate's work that falls between two performance bands must achieve all the keyword descriptors in the lower band and some in the band above. Where this happens, examiners will use their professional judgement to decide which performance band is most appropriate using a 'best-fit' approach.
- After a performance band has been established, the next stage is to use the assessment grid to decide a mark within the performance band. Read through *'Applying the Assessment Grid'* on page 41 of the specification prior to establishing a mark for each assessment objective and total mark.

Performance bands	BELOW INTERNATIONAL GCSE STANDARD (0)	LIMITED	LIMITED / BASIC	BASIC	BASIC/EMERGING COMPETENT	EMERGING COMPETENT	EMERGING COMPETENT / COMPETENT & CONSISTENT	COMPETENT & CONSISTENT	COMPETENT & CONSISTENT/ CONFIDENT & ASSURED	CONFIDENT & ASSURED	CONFIDENT & ASSURED / EXCEPTIONAL	EXCEPTIONAL
Consider the keyword descriptors to the right carefully. Has the candidate achieved all, most or some of the descriptors?	No rewardable material	Unstructured Clumsy Disjointed Minimal Rudimentary	The candidate has achieved all of the keyword descriptors in the lower band and some of those above.	Deliberate Methodical Superficial Partial Unresolved Simplistic	The candidate has achieved all of the keyword descriptors in the lower band and some of those above.	Reflective Predictable Broadening Repetitive Intentional Adequate	The candidate has achieved all of the keyword descriptors in the lower band and some of those above.	Informed Purposeful Diverse Sustained Skilful Effective	The candidate has achieved all of the keyword descriptors in the lower band and some of those above.	Advanced Comprehensive Perceptive Exciting In-depth Fully resolved Risk-taking	The candidate has achieved all of the keyword descriptors in the lower band and some of those above.	Highly skilled Inspired Intuitive Sophisticated Insightful Powerful Daring Unexpected Outstanding
	0 marks	**1 – 12 marks**	**13 14 15 marks**	**16 – 24 marks**	**25 26 27 marks**	**28 – 36 marks**	**37 38 39 marks**	**40 – 48 Marks**	**49 50 51 marks**	**52 – 60 marks**	**61 62 63 marks**	**64 – 72 marks**

*Please note that as of November 2023, the Level 1 key word descriptor 'Crude' has been changed to 'Rudimentary'

the disillusionment of growing up

IGCSE 3D design : component I

Artist's statement

Picture this: You're a child, running through fields of wildflowers, chasing after butterflies and laughing without a care in the world. You believe that anything is possible, that the world is a magical place full of wonder and adventure. But slowly and surely, the veil begins to lift. You start to see the world for what it truly is — a complex and often harsh place, full of challenges and disappointments.

My work alludes to the universal experience of watching the world lose its enchanting luster as the carefree days of childhood fade away. Through my work, I hope to capture the disillusionment of growing up, and the disenchanting contrast between the world as I saw it as a child, and the world we gaze upon now.

Visual mindmap

THE DISILLUSIONMENT OF GROWING UP

IGCSE ART : 3D design component I

artist's statement

Picture this. You're a child, running through fields of wildflowers, chasing after butterflies and laughing without a care in the world. You believe that anything is possible, that the world is a magical place full of wonder and adventure. But then, slowly and surely, the veil begins to lift. You start to see the world for what it truly is — a complex and often harsh place, full of challenges and disappointments.

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OBSERVATIONAL PHOTOS

📍 victoria park, HK

→ bright, vibrant and saturated colours
→ presence of light —

the world, from the eyes of a child.

📍 USA, 2018

a photo taken at the same location, nearly a year after, at nightfall.

"expectation" – friendship lasts forever.

OBSERVATIONAL DRAWINGS

📍 Victoria Park, Hong Kong

medium: gouache paint

Stress and fatigue, feelings that were blissfully absent from our childhood days, begin to loom over us like sweeping shadows as we grow older. The expectation, or illusion, that the world is a carefree and vibrant place, gradually falls apart.

observational photos: the world through the eyes of people who have long since buried their inner child.

medium: pencil

medium: gouache paint

→ a large visual contrast between light and dark + the imagery of a staircase
→ the loss of light as one grows up

a myriad of news articles on crimes and corruption
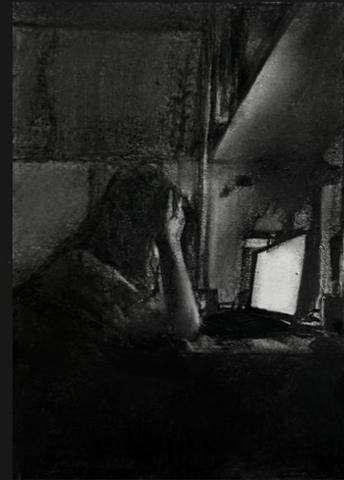
→ darkness, shadows
→ muted tones and desaturated, dim colours
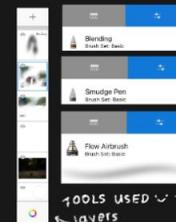
medium: fine-liner pen

"reality" – nothing is truly constant.

PHOTOMONTAGE EXPERIMENT

software used : Autodesk Sketchbook

the blurry, fog-like effect emulates the slowly fading memories of a better time. The illusion fades away, taking with it the colourful days of youth.

TOOLS USED ✓
→ layers

The photo evokes a sense of claustrophobia and the feeling of being forced into a mould that does not fit

flinching away from the harsh, glaring flashlight

the impossible wish of returning to one's childhood, playing among the bushes.

PRIMARY OBSERVATIONS (continued)
📍 Mt Museum, Hong Kong

observational photo

observational drawing

POSITIVE / NEGATIVE SPACE
- In the photo, the pillars look as though they are bars of a prison cell, evoking a sense of entrapment.
- This mirrors how the simple, carefree and lush childhood world is locked out of reach. Gaze yearningly as we might, it is impossible to return to those simpler times.

medium: digital art
software: Procreate
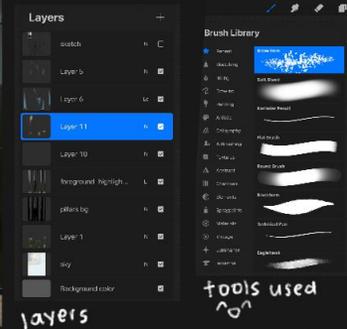
Layers / tools used

ARTWORK RESEARCH: Marsk Watchtower
📍 Wadden Sea National Park, Denmark.

designed by architecture studio BIG (Bjarke Ingels Group)

The Marsk Watchtower features a striking spiral staircase that leads visitors to a viewing platform at the top, providing a panoramic view of the surrounding marshland.

KEY FEATURES:
→ Spiral staircase — inspired by the human DNA
→ weathering steel — (corten steel)
  Sense of warmth & texture + allows the tower to blend in with the landscape. durable & sustainable.

UP / DOWN

My study/transcription
medium: digital 3D modelling
software: 3D Shapr
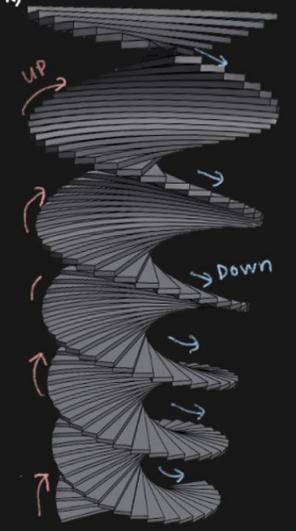
- The spiral form and the railings made me think of the dizzying path of growing up. It could be a way to portray the process of growing up with the use of space.

ARTIST RESEARCH: Aya Takano

Aya Takano is a contemporary a Japanese artist known for her whimsical and dreamlike artworks. Her work often feature childlike figures in fantastical settings, and often explores themes of femininity, childhood, Japanese social culture and the human condition.

ANALYSIS
- bold use of colour — utilises different saturations in her art.

(work from "The Jelly Civilization Chronicle")

- black + dark colours: somber, dull mood.
- crow: symbol of death...
- cloudy & hazy brushstrokes: dreamlike quality.

DARKER THEMES — linked to adulthood
environmental degradation, social isolation, suicide and exploitation.

- playful & fantastical imagery + theme of youth
- emphasis on the female form, femininity
- fine, delicate lines (outlines) → lightness
- superflat movement + surrealist influence

Aya Takano's work offered me intriguing insight into both the dreamlike "childhood" world and the dark, murky realm of reality.

ARTWORK TRANSCRIPTION
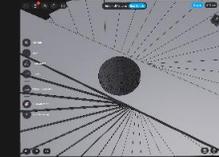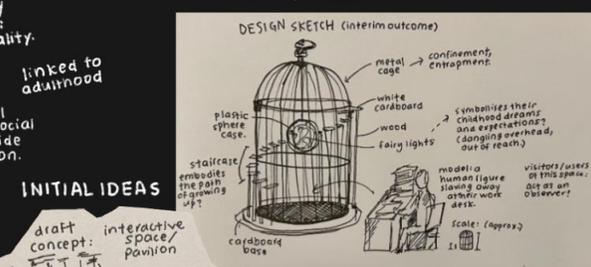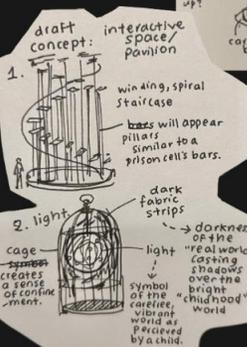medium: gouache paint

applying her style into my work

INTERIM OUTCOME / MOCK-UP: Design sketch

DESIGN SKETCH (interim outcome)
- metal cage → confinement, entrapment.
- white cardboard
- plastic sphere case.
- wood
- fairy lights
- symbolises their childhood dreams and expectations (dangling overhead, out of reach)
- staircase
- model a human figure slaving away at their work desk.
- staircase embodies the path of growing up?
- visitors/users of this space: act as an observer?
- cardboard base
- Scale: (approx)

INITIAL IDEAS
draft concept:
1. interactive space / pavilion
- winding, spiral staircase
- bars will appear similar to a prison cell's bars.

2. light
- cage creates a sense of confinement.
- dark fabric strips
- darkness of the "real world" casting shadows over the bright "childhood" world
- light
- symbol of the carefree, vibrant world as perceived by a child.

Post-mock up evaluation
FLAWS TO REFLECT ON / REFINE:
1. [design] the stairs are not accessible, users cannot interact nor experience the path formed.
2. [construction] using wood glue and, later, Blu-Tack, fails to hold the structure up in a stable way. >_<
3. [design] the design seems rather plain? it doesn't really convey the theme effectively...

INTERIM OUTCOME

MEDIA EXPERIMENTATION:
Abstract mark making

tool I have created

other works made improvisationally with the tool.

Abstract mark making is the creation of non-figurative and non-representational markings on any surface. Through this media experimentation, I could freely explore the expressive potential of line, shape, color and texture, without the constraint of needing to represent certain objects,

my composition, made listening to different music soundtracks.

Viewed from the Spire — Stina Nordensten
Set sail to nowhere — The Soul's Release
In the end — Charlotte Gainsbourg
Khoiba — Pathetic
In a manner of speaking — Nouvelle Vague
Dog on wheels — Belle & Sebastian
Desert — Emilie Simon
Little Cripple — Lux
Higa — Björk

medium: acrylic paint, soft pastel, charcoal

medium : ink and watercolor

ADDITIONAL RESEARCH:
selection of materials
key qualities to consider
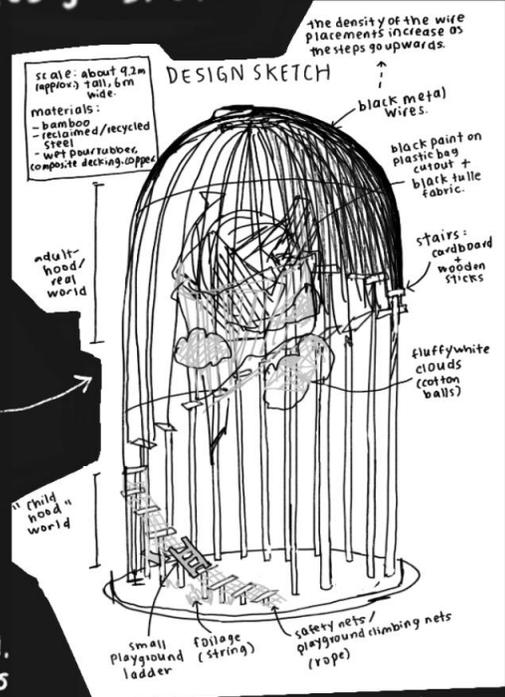
1. Durability
2. Slip resistance, safety
3. Maintenance
4. Sustainability
5. cost
6. visuals (texture, colour)

Bamboo ✓ | wet pour rubber ✓
Reclaimed steel ✓ | composite decking ✓
copper ✓ | wood X | cork X

materials used:
- fabric
- string
- cotton
- acrylic paint
- metal wire

throughout the process of creating a 3D outcome, I was given the opportunity to work with materials I have rarely explored before, such as different types of fabrics.

final outcome: design sketch

the density of the wire placements increase as the steps go upwards.

DESIGN SKETCH

scale: about 9.2m (approx.) tall, 6m wide.
materials:
- bamboo
- reclaimed/recycled steel
- wet pour rubber, composite decking, copper

black metal wires.

black paint on plastic bag cutout + black tulle fabric.

adulthood/real world

stairs: cardboard + wooden sticks

fluffy white clouds (cotton balls)

"child hood" world

small playground ladder | foilage (string) | safety nets/ playground climbing nets (rope)

Evaluation page

EVALUATION ON MARK MAKING

3D outcome inspired by 2D piece

└ just as the abstract mark-making experimentation allowed me to explore elements of two-dimensional art, creating a 3D outcome allowed me to explore space, rhythm and other such elements.

MEDIA EXPERIMENTATION II.
Light and different materials

(DRAFT) concept drawings

design concept

creates a sense of entrapment & claustrophobia

light.

from an elevated view, the light becomes obscured by the layers of dark fabric (or similar materials).

from the bottom view, the light illuminates everything and shines brightly.

metal wires

visually slightly blinding.

the cage dome slowly begins to loom over the person (viewer) as they ascend the staircase.

bottom view of the central light.

wood | cardboard base

IDEA DEVELOPMENT 💡

After experimenting with abstract mark-making, I realised that I need not confine myself to only using certain materials and adhering to one style or one colour scheme, as I had diligently done so before. As I took my first step out of my comfort zone in the media experimentation, I decided to revisit my past works and research to seek deeper inspiration.

black acrylic paint on plastic bag

soft black fabric

tulle fabric

✓ adjustable opacity
✓ unique textures
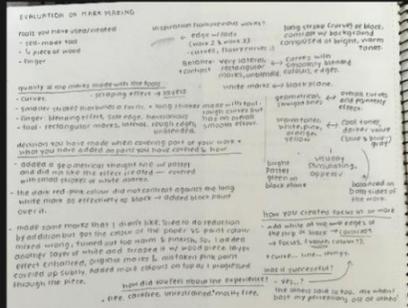✓ can stretch to a limited extent, might tear.

✓ soft uniform texture
✓ stretchy

✓ prominent, uniform texture
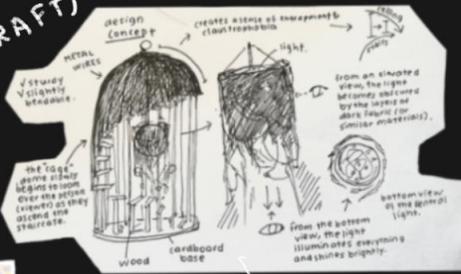✓ cannot really be stretched

rather similar.

In the end, I decided to use all three due to their unique textures and forms, which may create interesting visual effects.

This media experiment gave me a much-needed look into how different materials can create different effects under light.

edges tend to fold more sharply.

observational photos
the world, through the eyes of a child.

the dark realities and unwanted truths of the world, unveiled as one grows older

childlike awe and curiosity

the impossible wish of returning to one's childhood, playing in the bushes.

claustro-phobic feeling induced by the sinister, jagged branches and the too-small hole.

the positive space and the darkness of the pillars look akin to the bars of a prison cell.

staring out tiredly but yearningly → inability to return to fond childhood days.

2 Hongkongers lose HK$10
cryptocurrency, mainland s
Pair swindled in separate deception cases, with b
trick victims in both cases

Hong Kong judge signals she may n
who killed newborn daughter
Judge calls case a very sorry and tragic one', tells cours
probation for accused who admitted to

Hong Kong

common characteristics:
→ bright, vibrant & saturated colours
→ bright smiles ^^
→ natural elements — foliage and trees
→ presence of ⊹light⊹

common characteristics:
→ dark, desaturated & muted colours
→ shadows and darkness
→ slumped, slouched postures
→ subjects of the photos take up little positive space → ironic sense of smallness, insecurity & dread.

observational drawings
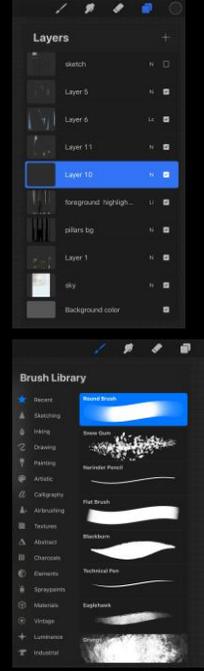
This photo depicts a child playing football in a park, a simple and carefree action and a part of his little world.

In this photo, a figure is slumped and gazing out at the tranquil but unreachable scenery. The positive and negative space of the columns creates a visual effect that the figure is trapped behind bars.

The photo conveys a sense of entrapment and futile yearning for the past.
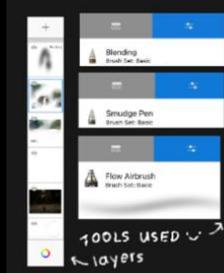
Medium : digital art
Software : Procreate

Medium : gouache paint

observational drawings + photomontage

Visual outcome : photomontage
Software used : Autodesk Sketchbook

TOOLS USED →
layers

The photo portrays a person huddled inside a too-small hole in the bushes. The sinister, jutting textures of the branches creates a claustrophobic and harsh atmosphere. This shows that unlike in one's childhood, playing among the bushes, growing up has forcefully opened their eyes to the darker truths of the world.
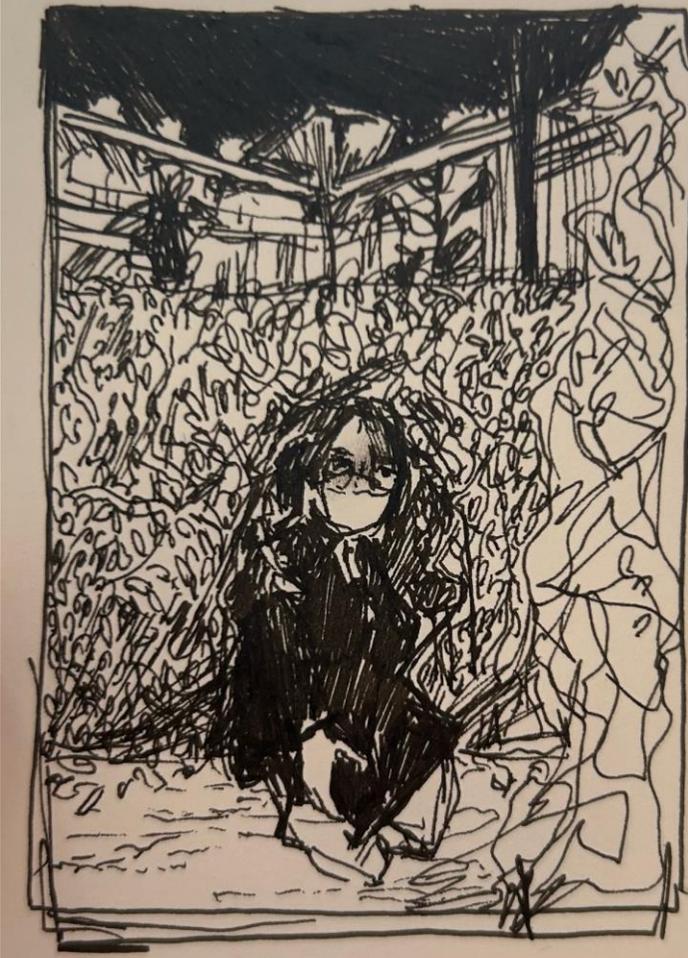
These two photos were taken in the same location. It shows what the person thought growing up would be like, versus the unspoken but often true face of growing up.

A fog-like, blurry effect is created with the use of digital tools, creating a dreamlike, hazy sensation that shows the person's perceptions and how it clashes with their childhood expectations.

observational drawings

Medium: pencil

In this photo, there is a stark contrast between light and dark, and I focused on this by using pencil, a monotone medium. It depicts a stressed and tired person grasping her head in her hands.

There is also a stark contrast between light and dark in this photo, as well as between the vibrant orange colour and the dull grey and black. This photo shows a figure on the stairs with her back turned against the darkness, seemingly unawared.

Medium: poster colour, acrylic paint

artist research: Aya Takano

Aya Takano is a contemporary a Japanese artist known for her whimsical and dreamlike artworks. Her work often feature childlike figures in fantastical settings, and often explores themes of femininity, childhood, Japanese social culture and the human condition.

Artist's work – transcription
Medium: gouache paint

Application of artist's style
Medium: gouache paint

- femeninity
- vulnerability

black + dark colours: somber, dull mood.

crow: symbol of death...

cloudy & hazy brushstrokes: dreamlike quality.

DARKER THEMES   linked to adulthood

environmental degradation, social isolation, suicide and exploitation.

ANALYSIS
- bold use of colour – utilises different saturations in her art.
- playful & fantastical imagery + theme of youth
- emphasis on the female form femeninity
- fine, delicate lines (outlines) → lightness
- superflat movement + surrealist influence

Source: http://www.dreamidea machine.com/?p=24109

# artwork research: Marsk watchtower

(architecture)

📍 Wadden Sea National Park, Denmark.

Designed by architecture studio BIG (Bjarke Ingels Group)

The Marsk Watchtower features a striking spiral staircase that leads visitors to a viewing platform at the top, providing a panoramic view of the surrounding marshland.

25m tall

Software used: Shapr3D

Source: https://www.archdaily.com/966611/marsk-tower-big
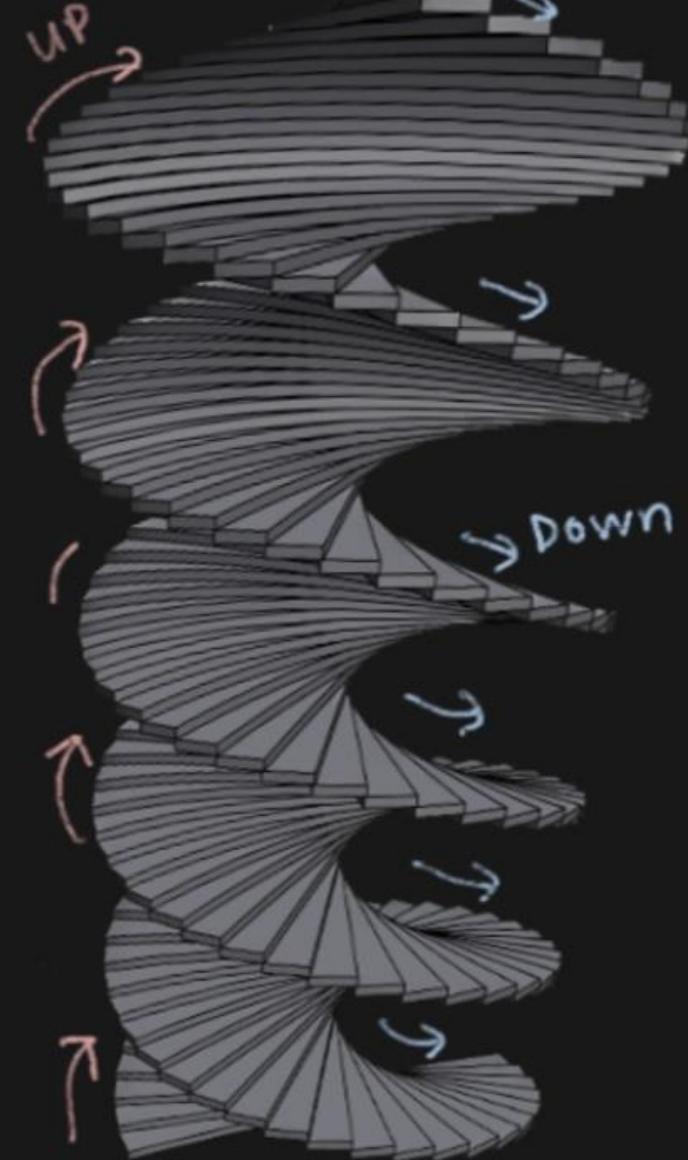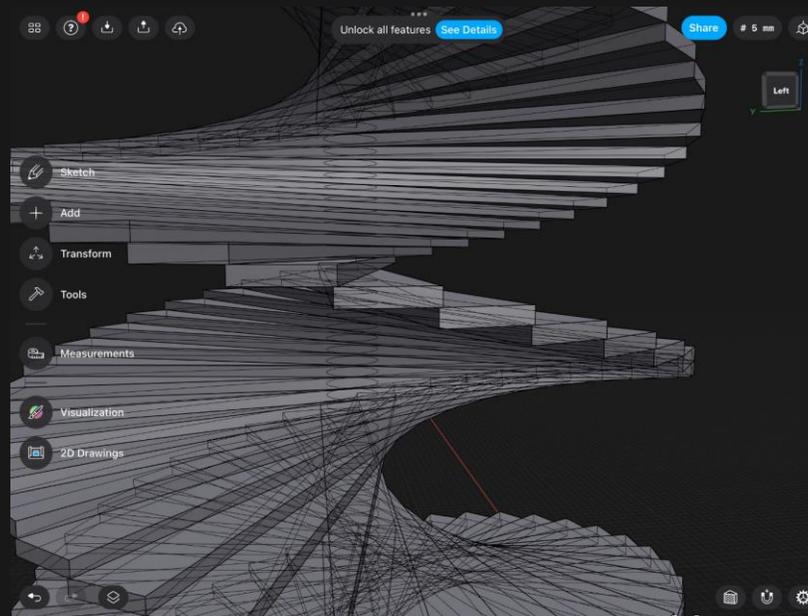
- spiral form of the watchtower
- the stairs that leads viewers to the top
- the fences lining the edges

• creates a controlled upwards path. The upwards path is also not a straight and direct path, but a winding and curved one. These elements inspired me on how I would create a pavilion or architectural structure that imitates the path and sensation of growing up.

UP

Down

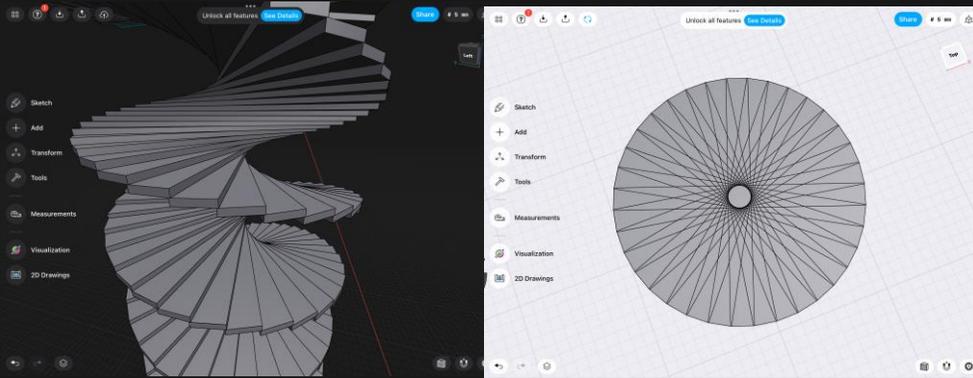My artwork study (transcription) : 3D modelling
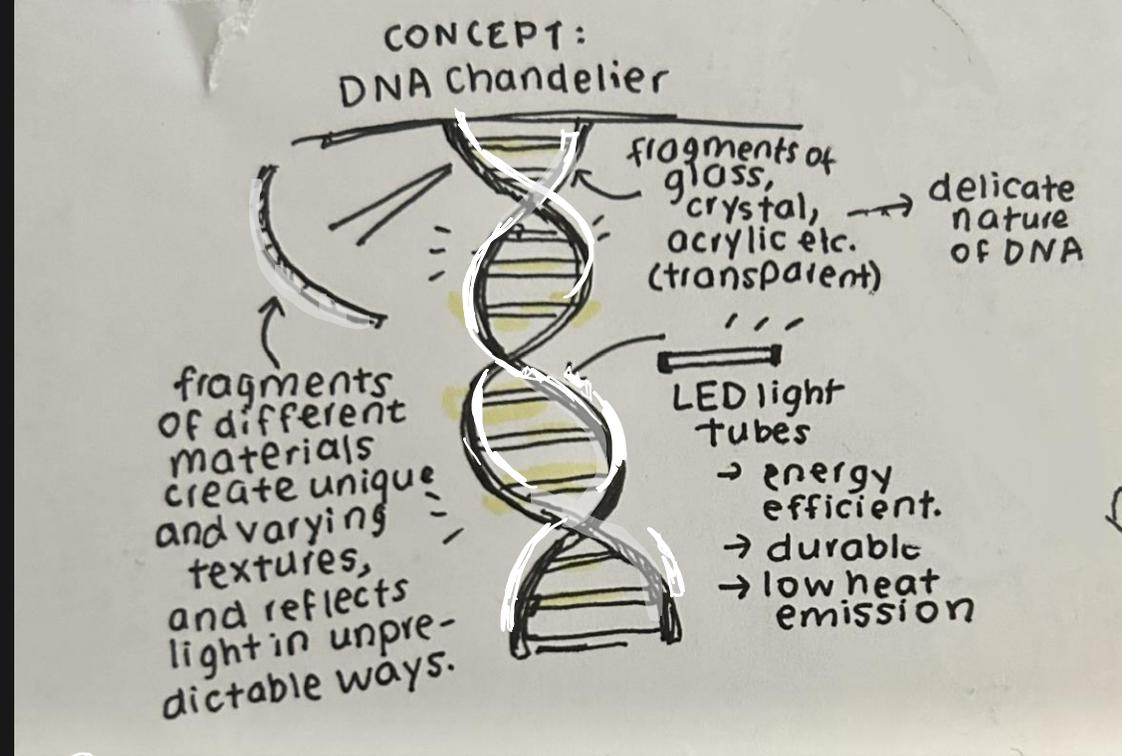
artwork research
(continued)
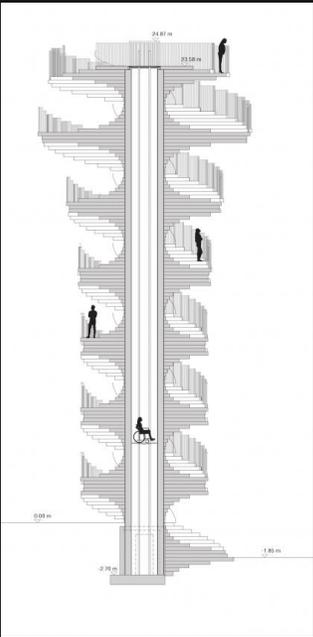
KEY FEATURES:
→ Spiral staircase – inspired by the human DNA
→ weathering steel — (corten steel)
sense of warmth & texture + allows the tower to blend in with the landscape. durable & sustainable.

CONCEPT: DNA Chandelier

fragments of glass, crystal, acrylic etc. (transparent) → delicate nature of DNA

fragments of different materials create unique and varying textures, and reflects light in unpredictable ways.

LED light tubes
→ energy efficient.
→ durable
→ low heat emission

Source:
https://arquitecturaviva.com/works/torre-marsk-en-hjemstedvej

Artwork study (transcription) : 3D modelling

- The interconnected strands of the DNA will be fitted as LED light tubes
- The double helix cords will be made of a variety of materials, such as upcycled scrap fragments of glass, crystal, or acrylic joined together.
  - As the joined fragments are unique and have varying textures, light will be reflected in an unpredictable and intriguing ways.
  - The transparent and delicate nature of these materials also reflect the delicate nature of the DNA strand.

Personal response

As the Marsk Watchtower is a recreation of sorts of the human DNA strand, I challenged myself to come up with a design under this inspiration. My idea, the DNA Chandelier (or the Ch(DNA)lier), would consist of a chandelier that is designed to represent the delicate structure of DNA.
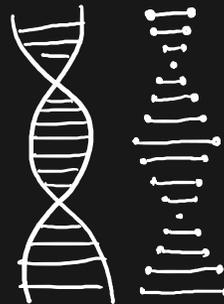
The DNA Chandelier could be displayed in many different settings, such as art galleries, science centers, or public spaces. It could also be designed to evolve over time, with new fragments and LED tubes added and fused to the installation to reflect new discoveries in genetic research.
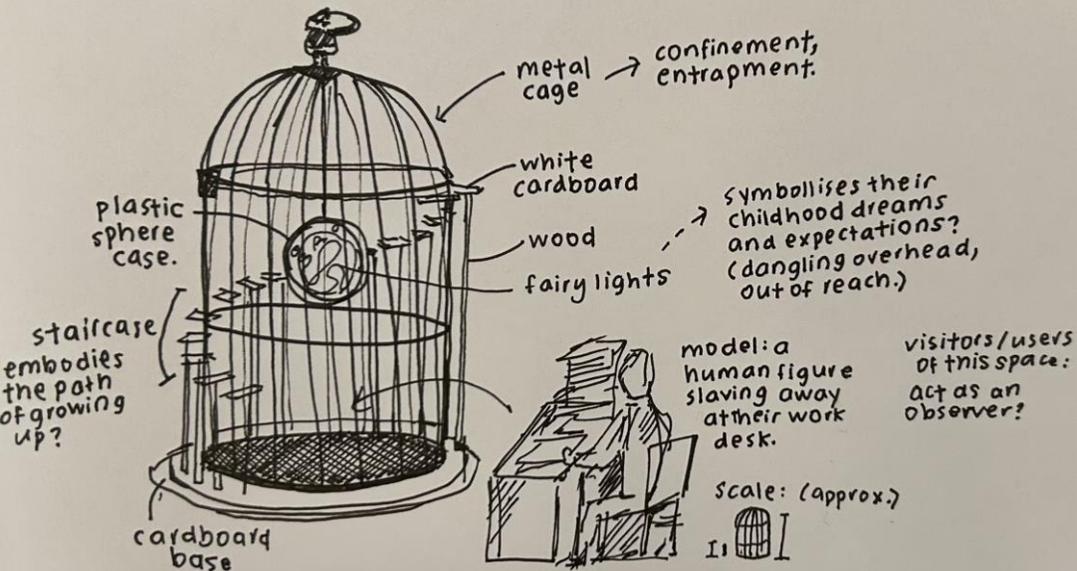
Interim outcome

Early design concepts

I drew inspiration from:

CONCEPT: DNA Chandelier
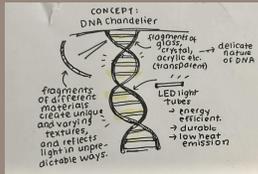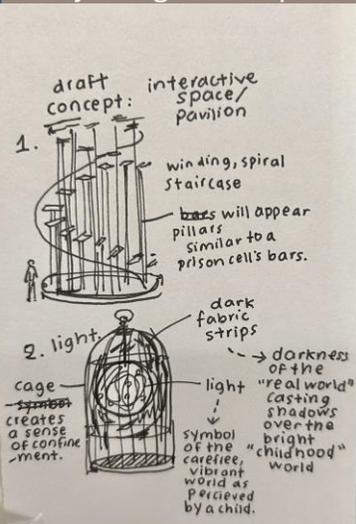
For my interim outcome, I came up with a symbolic pavilion design that creates a strong sense of entrapment, and alludes to the arduous life and worldview of a working adult – completely different from what one might have expected as a child.

Draft concept: interactive space / pavilion

1.
- winding, spiral staircase
- bars will appear pillars similar to a prison cell's bars.

2. light
- cage creates a sense of confinement.
- dark fabric strips → darkness of the "real world" casting shadows over the bright "childhood" world
- light → symbol of the carefree, vibrant world as percieved by a child.

DESIGN SKETCH (interim outcome)

- metal cage → confinement, entrapment.
- white cardboard
- wood } Symbollises their childhood dreams and expectations? (dangling overhead, out of reach.)
- fairy lights
- plastic sphere case.
- staircase embodies the path of growing up?
- model: a human figure slaving away at their work desk.
- visitors/users of this space: act as an observer?
- cardboard base
- scale: (approx.)

Interim outcome: close-ups + evaluation and reflection

Truthfully, at the time when I was working on my mock-up, I felt very lost and was not able to incorporate elements from my previous preparatory work. I had vague ideas, but did not develop them properly before heading straight into building my interim outcome, so I had hit some mental walls in the middle of creating it. Thus, I learnt a lesson on the huge importance of planning out my artworks and outcomes, and developing my ideas carefully. This lesson will definitely stay with me throughout the rest of my artistic journey.

parts I like
- ✓ the concept of a hanging overhead light
- ✓ the form of a cage to evoke feelings of entrapment
- ✓ using stairs to show the process of growing up
- ✓ the columns of the stairs acting like prison bars

parts to change/ improve/refine
- ✗ building technique: using wood glue, Blu-Tack, transparent plastic strip and tape just to hold up the wooden columns is INEFFECTIVE and INEFFICIENT.
  - ↳ solution: hot glue gun
- ✗ using a readymade cage: the bars of the cage already creates the sensation of entrapment, it overshadows my whole idea of using stair columns to do so. Also, I should try my hand at creating it myself.
- ✗ having the statue of a worker at his desk.
- ✗ the stairs: they are not accessible and are more of a decorative side piece, but I want it to be functional and interactive.

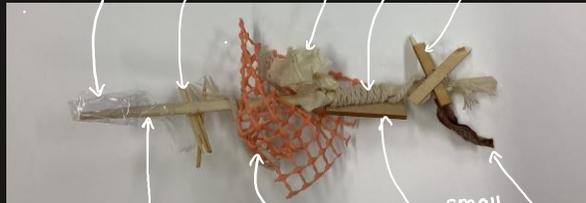# Media experimentation I: abstract mark making

OUTCOME (made improvisationally, listening to music)

Tool used (self-made)

materials:
- scrap plastic
- toothpicks
- crumpled up masking tape
- string
- thin wooden slabs
- chopstick
- plastic net cut-out
- small wooden slab
- dried nut shell

materials used :
- fabric
- string
- cotton
- acrylic paint
- metal wire

3D outcome inspired by 2D piece

↳ just as the abstract mark-making experimentation allowed me to explore elements of two-dimensional art, creating a 3D outcome allowed me to explore space, rhythm and other such elements.
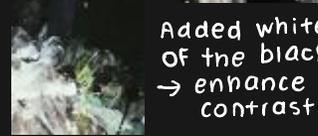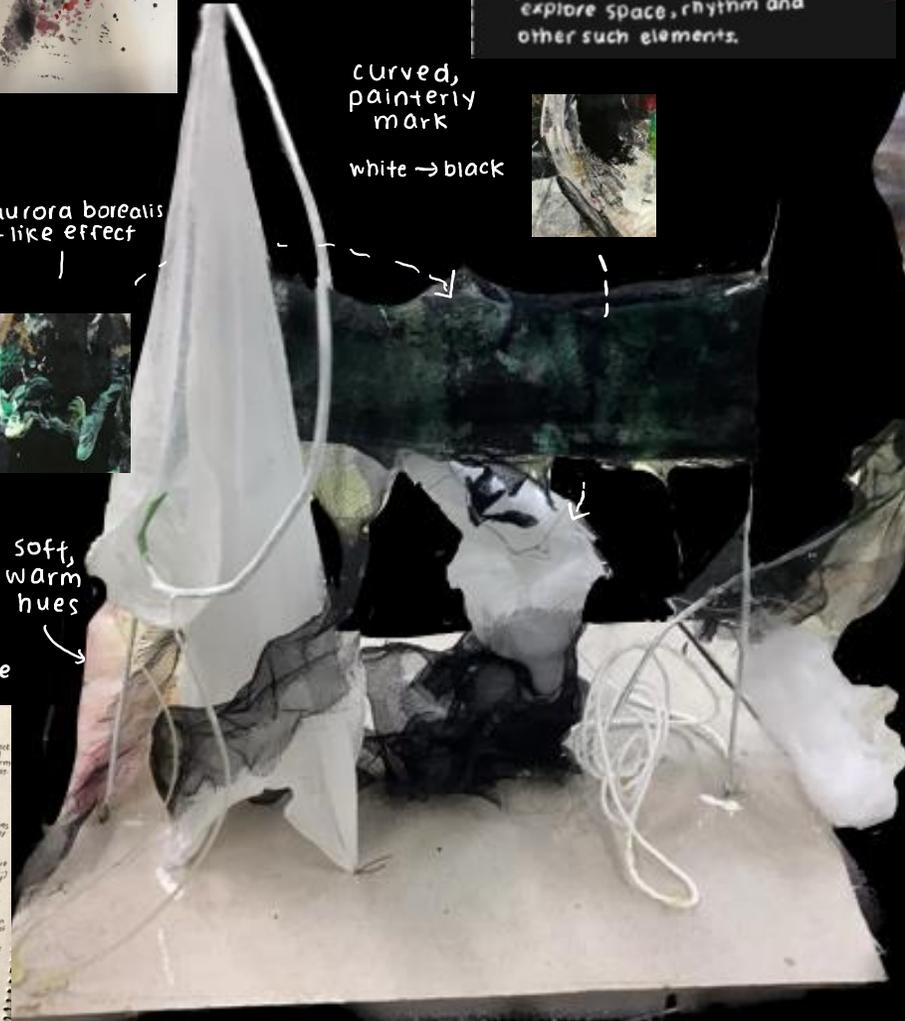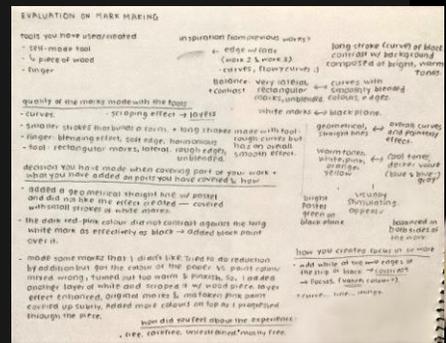
Abstract mark making is the creation of non-figurative and non-representational markings on any surface. Through this media experimentation, I could freely explore the expressive potential of line, shape, color and texture, without the constraint of needing to represent certain objects,

Through this experimentation, I have learnt how to create focus in my compositions through balance, contrast and manipulating various visual elements like texture, colour and rhythm.

aurora borealis - like effect

curved, painterly mark

white → black

black marks on white plane // white marks on black plane
- stark VISUAL CONTRAST

SCRAPING texture

Added white marks at the edges of the black plane in the centre → enhance contrast

soft, warm hues

evaluation page

warm & cool colours ↓ balance ✓

geometrical straight lines & painterly dabs of paint ↓ balance ✓

EVALUATION ON MARK MAKING

medium: acrylic paint, soft pastel, charcoal
→ rich textures and many different colours & hues.

Drafts : idea development

Visual brainstorming + elements to incorporate

CONCEPT:
DNA Chandelier

The presence of nature in my observations of "childhood"

I can apply the mark-making techniques I learnt from my media experimentation.

While making a 3D outcome, I experimented with all sorts of new materials such as cotton, string, different fabrics and metal wires.
- flexible and expressive

The presence of light in my observations of "childhood"

My DNA Chandelier design: concept of using a sculptural overhanging light

Thus, the parts of my final work representing childhood should be brightly illuminated.

- meticulously consider the construction materials I would use in my final piece
- how I can select sustainable and fitting materials.

I can apply a similar concept and method as my mock-up.

design concept

creates a sense of entrapment & claustrophobia

METAL WIRES

ceiling → I ← stairs

light.

from an elevated view, the light becomes obscured by the layers of dark fabric (or similar materials).

√ sturdy
√ slightly bendable.

the "cage" dome slowly begins to loom over the person (viewer) as they ascend the staircase.

bottom view of the central light.

wood   cardboard base

from the bottom view, the light illuminates everything and shines brightly.

In my observational photos and secondary research, play facilities like swings and monkey bars are seen. They are strong motifs of childhood, which I can include.

- using different saturations, colours and shapes to present a whimsical, playful space as well as a dark and somber one.
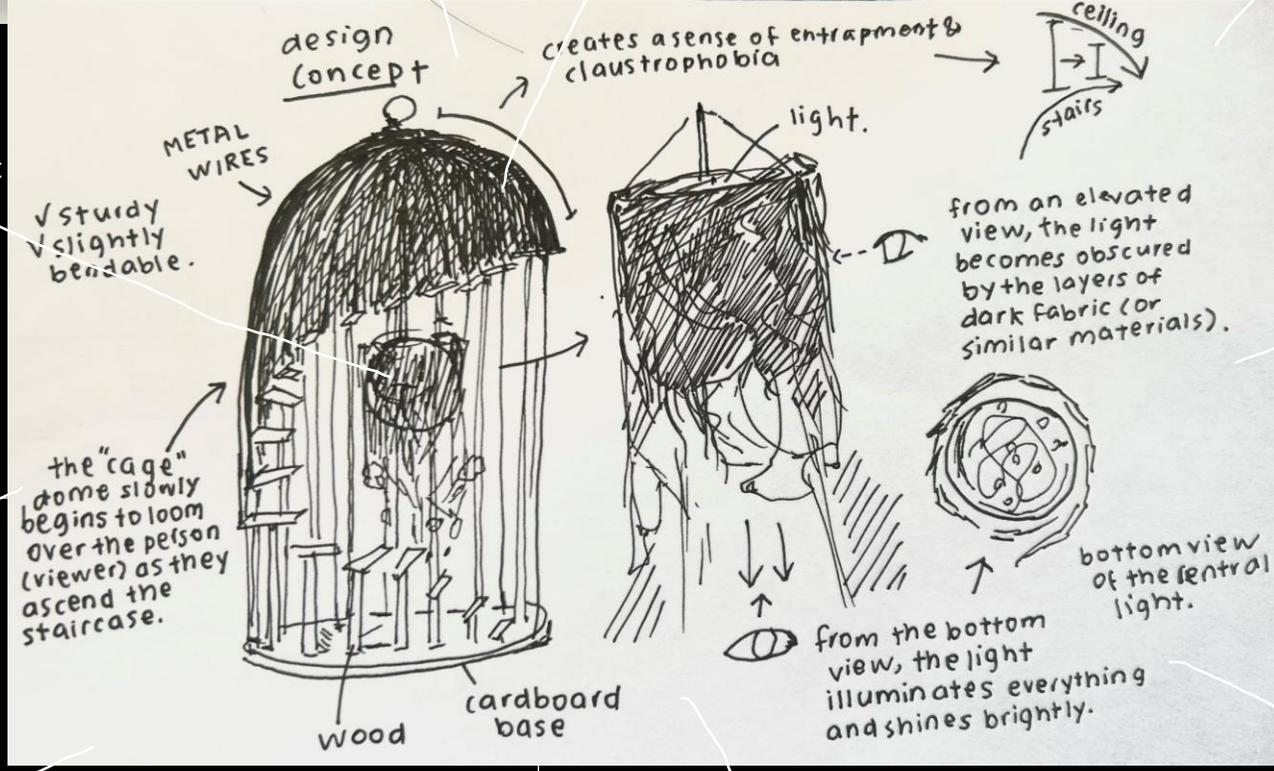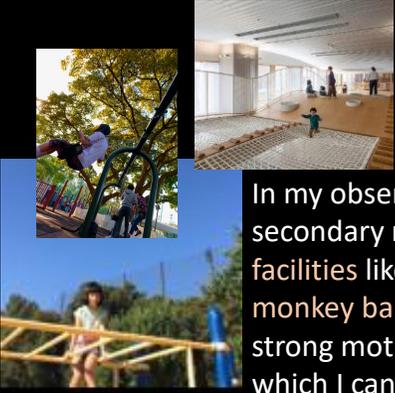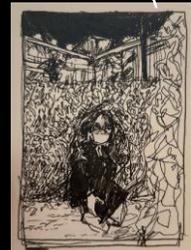- the round shapes of the clouds in her art style.

- claustrophobic feeling

As I used ink pen, I focused on line forms which gave me the idea of using dense but thin lines to form a cage.

blurry, fog-like effect: add more layers to my work?

Media experimentation II : Light and different materials

black acrylic paint on plastic bag
(inspired by abstract mark-making)

soft black fabric
(inspired by my process of creating a 3D outcome in mark-making)

tulle fabric

In the end, I decided to incorporate all three materials due to their unique textures and forms, which may create novel and interesting visual effects. Through setting up this media experiment and obtaining individual results, I got a much-needed look into how different materials can create different intriguing visual effects under light.

✓ adjustable opacity
✓ unique textures
✗ can stretch to a limited extent, might tear.
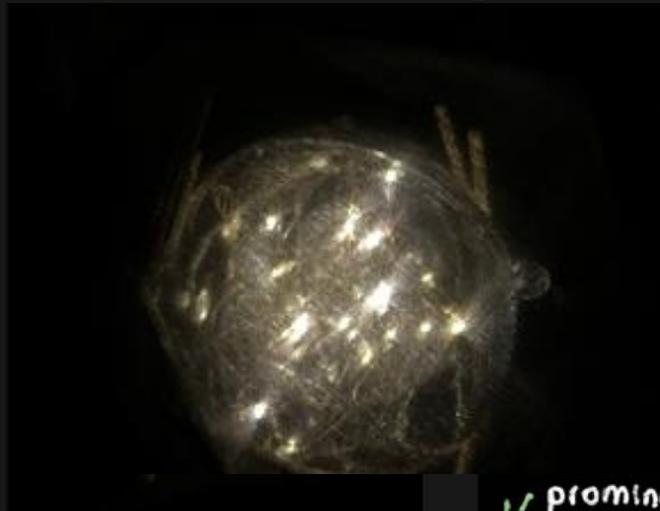
✓ soft uniform texture
✓ stretchy

rather similar.

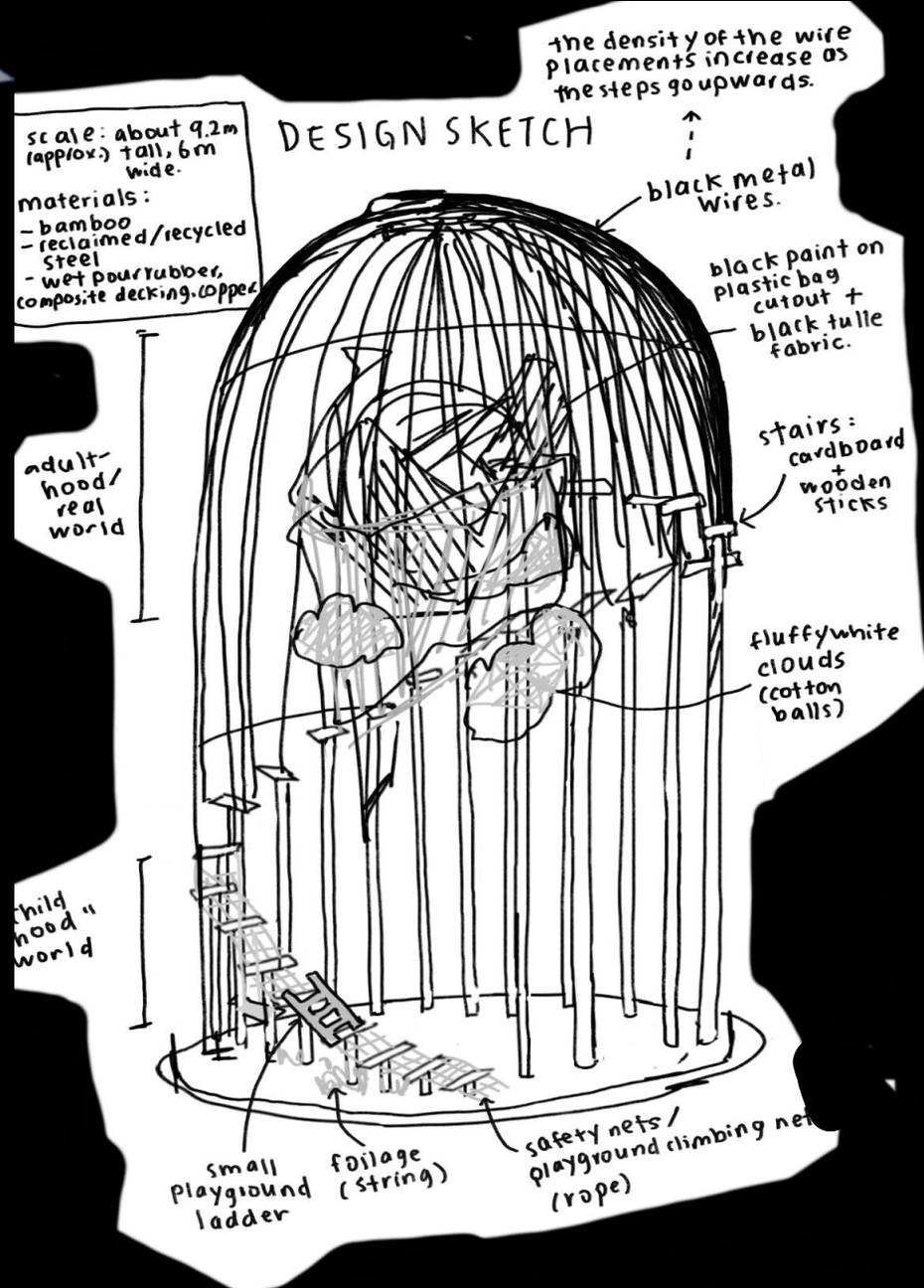✓ prominent, uniform texture
✗ cannot really be stretched

light.

edges tend to fold more sharply.

the density of the wire placements increase as the steps go upwards.

DESIGN SKETCH

scale: about 9.2m (approx.) tall, 6m wide.

materials:
- bamboo
- reclaimed/recycled steel
- wet pour rubber, composite decking, copper

black metal wires.

black paint on plastic bag cutout + black tulle fabric.

stairs: cardboard + wooden sticks

adulthood/real world

fluffy white clouds (cotton balls)

childhood "world

small playground ladder

foilage (string)

safety nets/ playground climbing net (rope)

What materials should my design be made of?

For the support columns of stairs:

WOOD ✗
- susceptible to decay and rot
- high maintenance
- environmental concerns: deforestation/ harmful chemical treatment

BAMBOO ○
- fast-growing
- renewable
- sustainable
- strong & durable
- low maintenance.

For the cage dome

VIRGIN STEEL ✓
- not environmentally sustainable
- higher quality

RECLAIMED STEEL ○
- more sustainable
- weathered appearance over time — add texture and character to my design.

For the light

- as I have experimented in my media experiment, I have decided to use tulle fabric, plastic sheet and black cloth.

For the stairs

childhood
wet pour rubber
→ soft
→ often seen in playgrounds

growing up
composite decking
→ durable
→ low-maintenance
→ eco-friendly

more hard & unrelenting

adulthood
reclaimed metal
→ eco-friendly
→ loud, jarring noises when stepped on → echo under cage dome.

What should be the correct scale of the stairs?

about 16.5~20cm tall.

The pavillion's route is meant to be experienced individually
→ X wide steps

Final outcome

My final outcome is a pavilion that features an upwards spiral staircase, a dark cage-like dome, and a central light piece. It can be placed beside abandoned schools or playgrounds, highlighting the melancholic and desolate feeling of the pavilion.

Throughout the installation, visitors are encouraged to confront their own feelings of disillusionment and reflect on their own experiences of growing up.

The spiral staircase represents the journey of growing up, with its winding twists and turns.

The soft, white, inviting clouds form a contrast against the sinister, ripped and dark fabrics.

The upwards motion / rhythm of the staircase is balanced by the downwards, looming sensation of the cage dome.

The cage-like shape of the pavilion that becomes denser as the stairs ascend, evokes claustrophobic feelings of being trapped or confined, restricting the visitor's movements.

Software used : Autodesk Sketchbook

Final work : close-ups

the beginning :
WARM CHILDHOOD DAYS

The use of pastel bright colours, the safety climbing nets, the swing and the little ladder / monkey bars are all strongly reminiscent of our childhood days, creating a welcoming, gentle atmosphere.

The subtle presence of grass and flowers adds an organic touch to the pavilion's section depicting childhood.

THE DULLING OF LIFE:

As the viewer ascends the staircase, the once vibrant colours slowly become murky and grey. The material of the staircase becomes harder, and the textures become less smooth, showing the change in worldview .

Final work : close-ups
(continued)

THE BROKEN PROMISE OF LIGHT
From the bottom view, the bright light illuminates everything in a soft glow, but unbeknownst to the viewer, as they ascend the stairs, the light grows dimmer and becomes blocked by swaths of black, evoking a feeling of disillusionment.

The cage dome casts a dark shadow and restricts the space and movement of visitors.

THE DEAD END
The absence of a platform or destination at the end of the staircase is intended to symbolize the disillusionment that arises when growing up. When visitors reach the end of the stairs, they are met with a sense of disappointment and futility, as there is no platform or destination to be reached.

SPACE
The positive and negative space creates a prison bar – like effect, accentuating the feeling of confinement.