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Level 1 Design and Visual Communication RAS 2023

92002 Develop product or spatial design ideas informed by the consideration of people

EXEMPLAR

Achievement

TOTAL 03

• Site Analysis - school grounds



I think this place should have some benches for the visitors who came to have a look at our school.



I saw many guys who sit on the stairs because they have no seats here. if we make some benches there it gives them a place to sit.



I notice that hostel boys don't have any seats on their ground so This place is for the hostel students who can sit on the benches after school.



I noticed that this grass is taking up a lot of space. instead of this we can make some benches on it and make grass smaller for decorations.



Many students get tired while waiting in the canteen line and they have no seats in this area. that's why we should make some benches around there because it's really necessary for boys



I saw that there were no seats next to the rugby fields. which is next to the hostel whenever the match happens there should be some seats for the bystanders.

• Research - existing outcomes with annotations



I would like to place this bench in that roundabout for the visitors who came to look our school it gives visitor a great experience for enjoying the view of our school.



This for the guys who sit on the stairs because there is no seats for the boys to sit this one is good and it has really cool thing that you can park your bicycle also and it gives you space to sit.



This bench is for hostel boys who can sit here after school and it has umbrella by which it can usable in some rainy days as well as sunny



This bench is compatible and it has a lot of space for the boys we can place this benches on their instead of that grasses because they taking a lot of spaces we can cut them smaller those grasses for decoration.



I am going for this seat because this is best seat for the boys who get tired in canteen line and their is not much seats as needed, they can sit here and eat, study ,play whatever they want.



This seats is best for the ground which is next to the rugby field there are no seats available it has lots of seats with some shelter to protect from rain which can use for rainy days or sunny.





What

I have chose this place for the students who has to wait in the canteen line and then they got no space to sit so student sit on that vent cover, they can sit here and eat their food and whatever they want to do

Who

Generally this place is for the students but teachers can also use this place for sitting like in winter it's so cold inside so they can take sunlight by sitting on the bench.

Constraints

Maybe that vent cover make a problem for my bench, it is taking a lot of space.

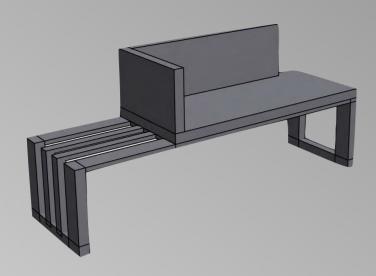
Opportunities

We can move it towards the wall by which we can get some more space and we can place more than one bench on that place.



• Initial ideas

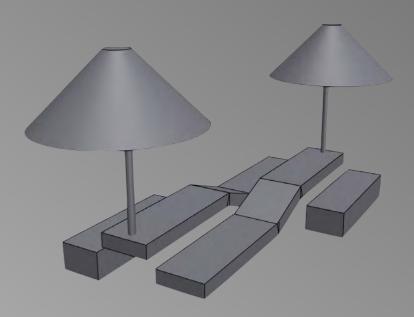




This design is really good as we can see it has a seat and a cycle stand as well but the problem is the bench is not much bigger, only 3 people can sit at a time. I think so I should make it in a long way



This design is really good in terms of saving space and seating at a time 7-9 people can sit here and and it has shelter as well it kinda looks like picnic bench which makes it good looking and more compatible as well.



This design is best and I personally like this as it has big seating area from dual sides which makes it cool and it has a shelter (umbrella) which can usable in rainy and sunny days. At a time more than 8 people can sit here which makes it compatible.



This design is not much fancy but it's very comfortable as compared to others as it has back support from behind which makes it comfortable and it has shelter as well for rainy days it can be use for fields and other areas where seats is not available

• Development - 4 Alternative ideas



Development

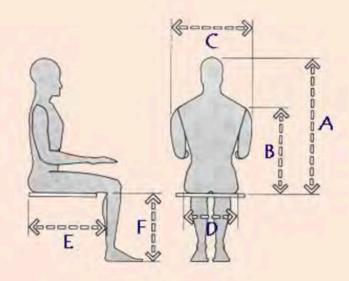
Anthropometry for seat design

Anthropometry is the branch of human sciences concerned with body measurements such as body size, shape and strength. This is used by ergonomists to ensure that products, such as seats, fit and suit as many users as possible. See the anthropometry topic for more information.

If you are designing a seat, you need to take the following measurements into account.

Anthropometric estimates for British adults aged 19-65 years (in mm, from Pheasant)				
Dimension	5th %ile	50th %ile	95th %ile	
A Sitting height	850	910	965	
	795	850	910	
B Cittle aboutder belob	540	595	645	
B Sitting shoulder height	505	555	610	
C Shoulder breadth	420	465	510	
C Shoulder breadth	355	385	435	
Lipo Konsonia	310	360	405	
D Hip breadth	310	370	435	
	440	495	550	
E Buttock-popliteal length	435	480	530	
E Denlihaal haiaht	395	440	490	
F Popliteal height	355	400	445	

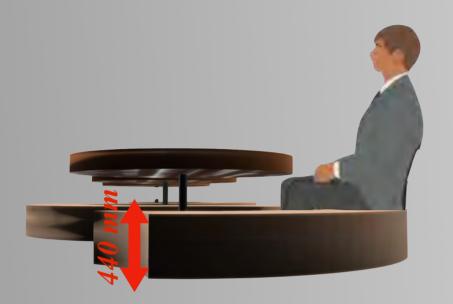




('Popliteal' refers to the part of the leg behind the knee.)

Ergonomics





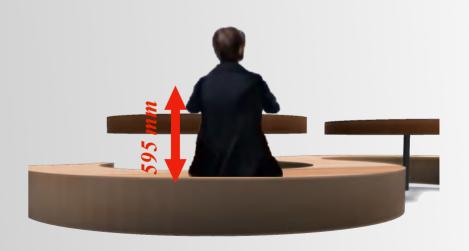
• Popliteal height



• Buttock - Popliteal length



Sitting height



Sitting shoulder height

Material choices

Oak, known for its durability and elegant appearance, is a solid choice for the chair, ensuring long-lasting use and a touch of sophistication.



Clearcoat

Oak Board

The steel support pillar underneath the table provides exceptional strength and stability, requiring minimal maintenance and contributing to a modern, customisable look.



Brushed Steel





Sanded
Cherry Board

Cherry, with its rich colour and easy workability, is a great fit for the table design, bringing aesthetic charm while maintaining strength for stability.

Together, these materials ensure a well-rounded and visually appealing furniture design that will serve you well for years to come.

• Feedback



- The way that all three tables share the same seat is a very unique design choice. It looks very appealing to the eye and it looks like there are many different ways you could sit and use this area. The choices of wood go very nice with the design chosen. As it is all wood I would like to see how long this would last before it has worn away.
- The wavy direction of the seat creates good flow. The symmetry of the design makes it pleasing to look at. The shape of the seat also makes it a versatile area for groups to seat themselves. I like the choice of wood, as the natural look of the grain contrasts nicely with the uniformity of the designs shape. I think variety in materials would be a good idea considering the life span of wood before it starts to age.
 - The design is very unique and interesting, the one large seat is a very fun feature and the tables let you interact with the people around you (something lacking in the current school seating). Overall great design.

• Final design



Achievement

Subject: Design and Visual Communication

Standard: 92002

Total score: 03

Grade score	Marker commentary
	This project involves designing seating for students near the school canteen. Both digital techniques and sketching have been used to show some initial ideas along with brief notes that refer to the users. The ideas show features that are aesthetic and functional. Further variations of the ideas have been tried and a decision made about which idea to choose.
А3	The project shows research into ergonomics as well as showing people sitting on the seat. However, no changes have been made to the design and it remains the same as the initial idea. The design is shown in context at the end and shows how people would use it. The final design visual looks the same as the original idea and does not show any more detail.
	To move to a higher grade, this submission would need to show a sequence of change that relates to improving the experience for people. Detail needs to be added, such as showing and refining the various parts that make up the product.

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Level 1 Design and Visual Communication RAS 2023

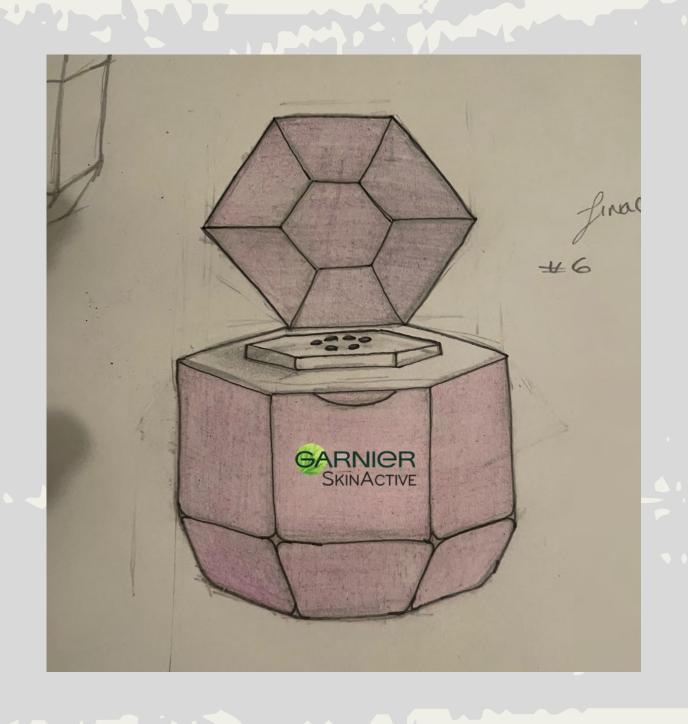
92002 Develop product or spatial design ideas informed by the consideration of people

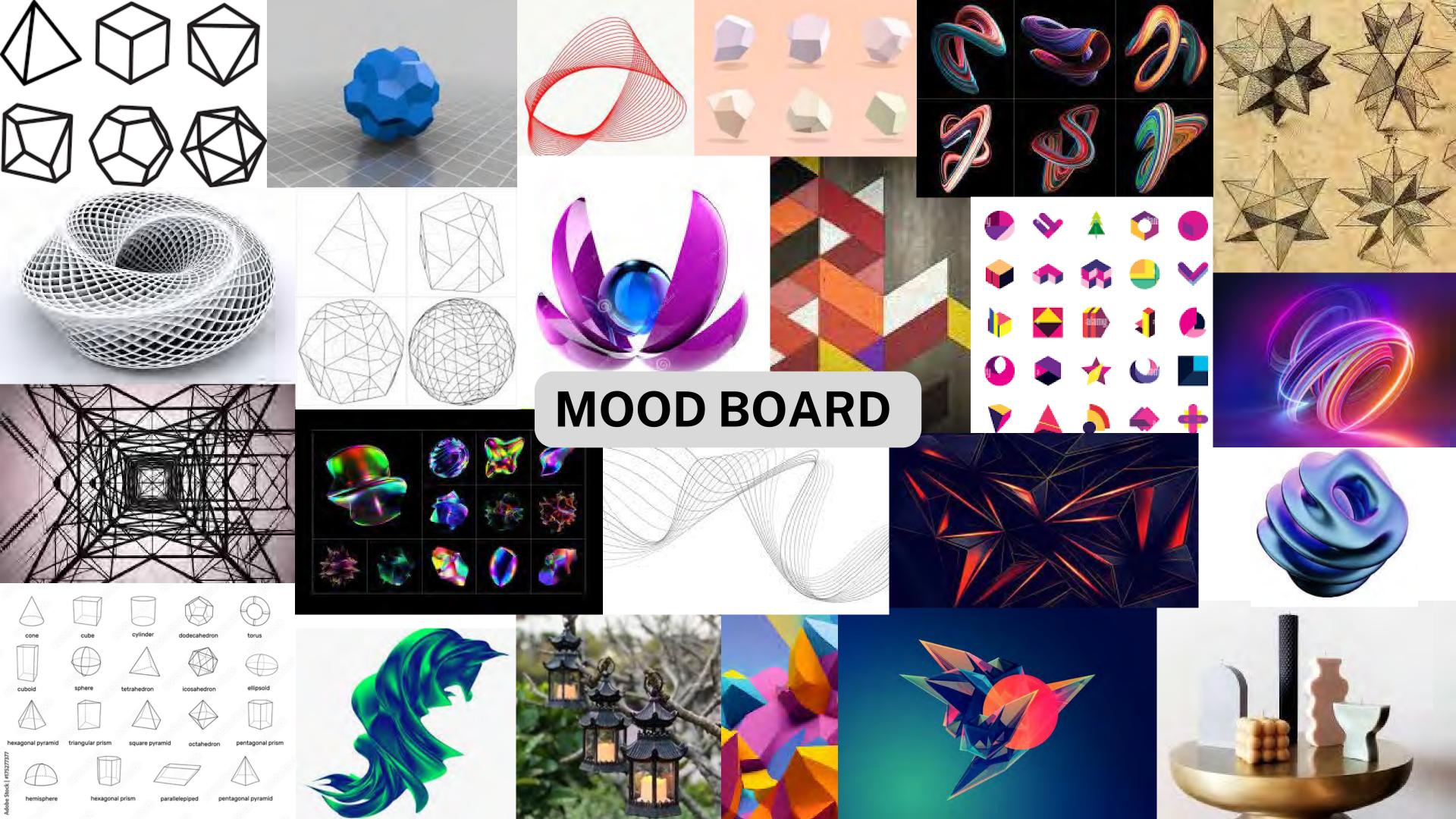
EXEMPLAR

Achievement

TOTAL 03

PRODUCT





DESIGN CONTEXT

Conceptual statement

I am going to be designing a container for Garnier's new product, makeup remover

Design brief

Garnier has contacted me with a request to design a container for a new makeup removing product. They are hoping to make it practical but with a simple but yet sophisticated and eye catching design. All while using sustainable materials.

Stake holder

This product will be intended for anyone above the age of 14 who uses makeup and cosmetics particularly teenagers.

The Four P's method

People

I need to speak with developers in the company. Teenagers and people who regularly use makeup and factories to ensure my design is possible. and distributers.

Places

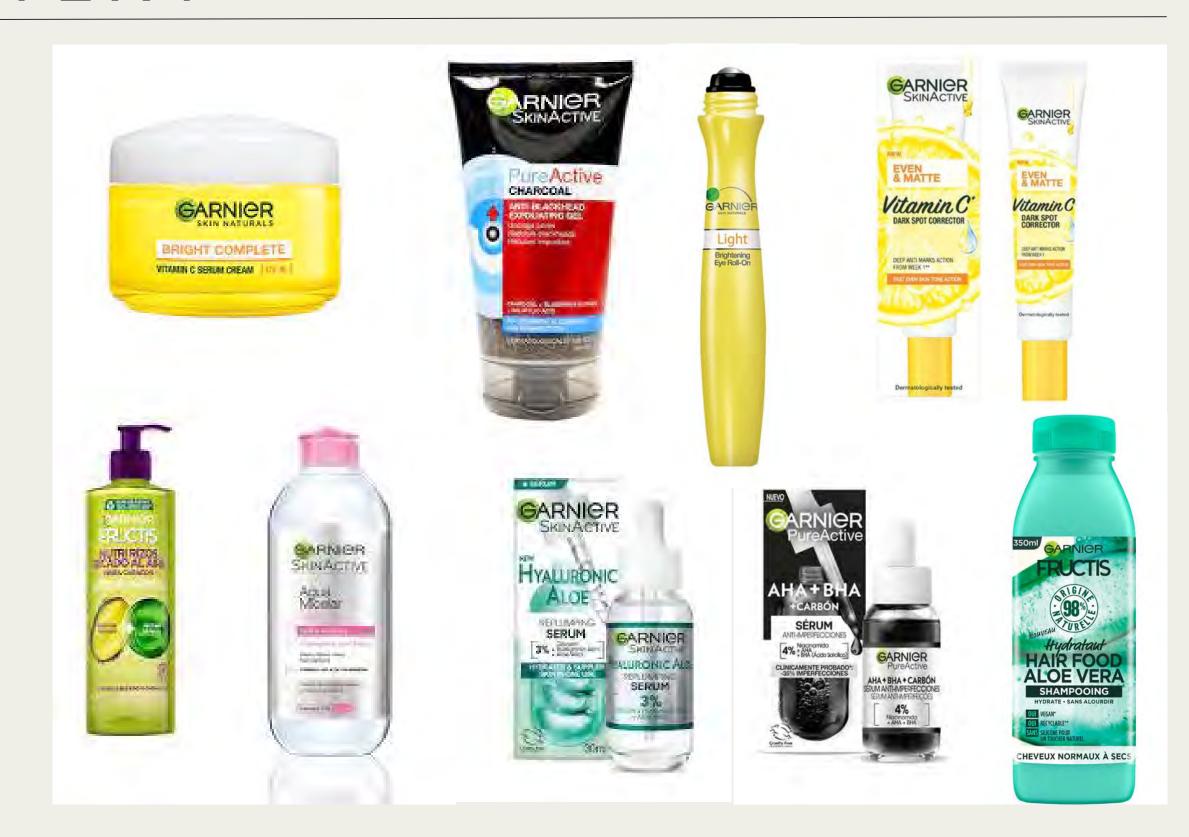
On a bathroom counter or vanity top.

Products

Other popular skin care company's packaging to find inspiration and previous designs

Processes

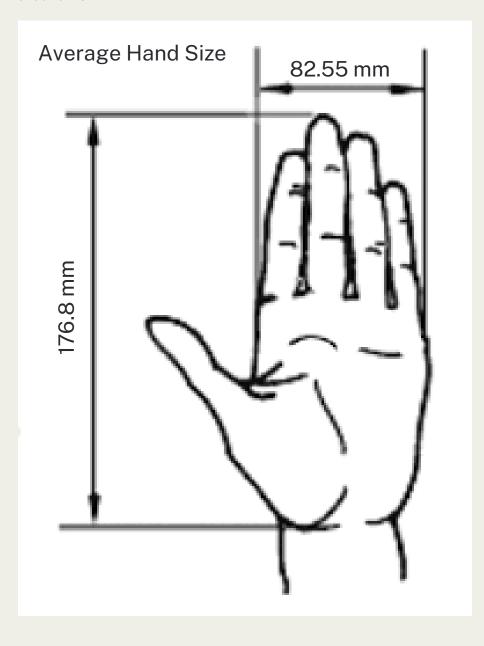
Bottle makers. Reusable plastic and glass to see and learn how it would be made.



HUMAN FACTORS

Anthropometric Data

The average length of a males hand is 183.9 mm with the average width being 87.5 mm and index finger averaging around 47.5. However the average length of a females hand is 169.7 mm with the average width being 77.6 mm and index finger averaging around 45.7.



Ergonomics

The product will be packaged in a small container around 300ml meaning it can be easily fit into overnight backs and toiletries packs. Yet large enough to contain a worthy amount of product.



Inclusive Design

The container will have easy access to the product making it inclusive for everyone. I will explore many different ways for the product to be distributed and many designs will include a form of texture which will allow a comfortable grip and suit the design.

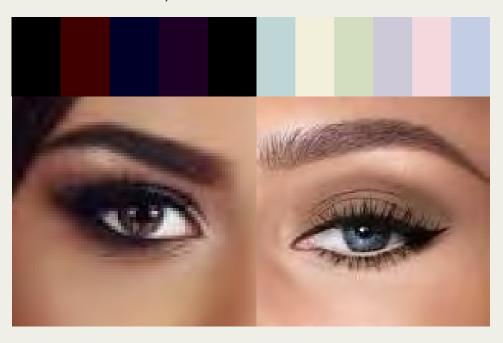


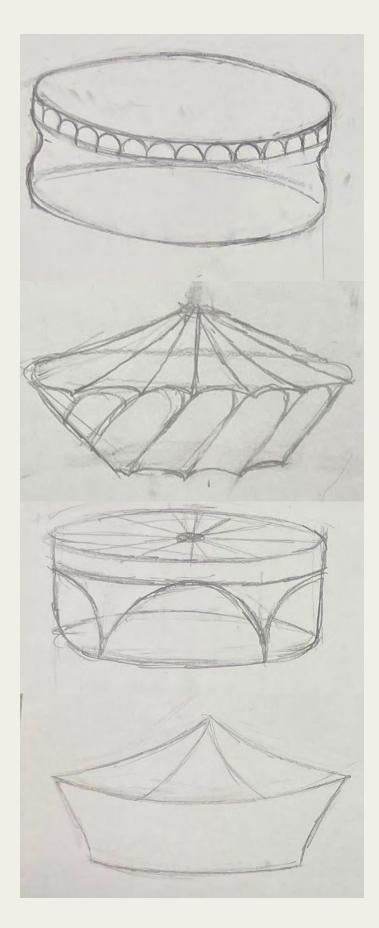
Stereotypes

There are many stereotypes for female teenagers. Many include "only wearing makeup because they're insecure," "to cake it on," "use makeup for the male attention," "that all girls wear makeup." The most common of those is that teenagers "cake on their makeup." However this stereotype is commonly incorrect. There are girls who do apply a large amount of makeup.

Many stereotypes typically in movies are then female teenagers like dark purples red black or baby pink and white. dark purple red and black generally apply to those with a rebellious character who are commonly expected to have heavy dark makeup. Girls portrayed to like pink and white are generally those of a clean girl aesthetic and are into more natural forms of makeup.

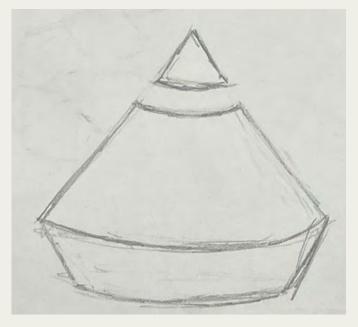
Logically heavy pigmented makeup such as dark shadows are more difficult to remove from your face. Lighter colours such as nudes browns and white are easier due to less amount of pigment in the shadows/makeup.





Cylinder bottle with indent on side to give sufficient grip and a subtle grainy texture around indent for good hold and less slip. Arch patterns on lip rim for sufficient grip with a width of the average finger dimension.

Geometric cylinder with bevelled edges to avoid sharp corners. The lid indents spaced evenly according to average hand dimensions to create comfortable tidy removal.

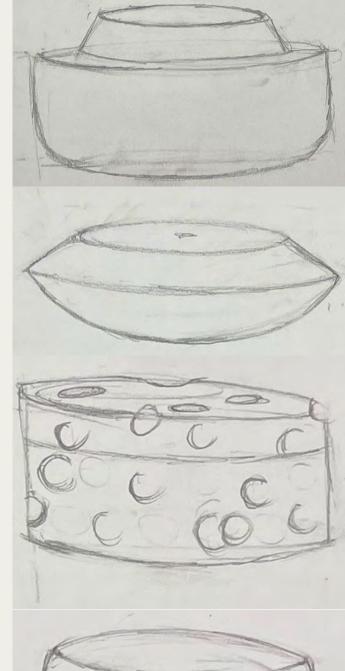


A simple rounded design to a point. With slightly rounded edges.

Around blocky shape with tapered base and slightly smaller lid with textured exterior to allow grip and a flat round lid.

Tapered cylinder design with slightly rounded bottom and flat base as well as top, textured with a sandy effect to allow maximum grip.

indents for holes in the position of where fingers would logically be placed to open and remove lid.

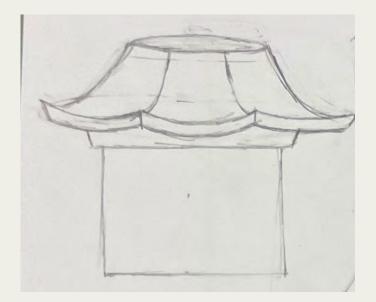


DESIGNIDEAS, a simple cylinder cheese design with

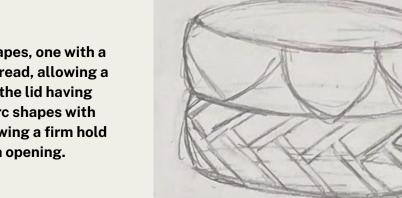
Classic cream container with edging and detailing over the lid. And cross hatched grip around lid to insure removal with ease.

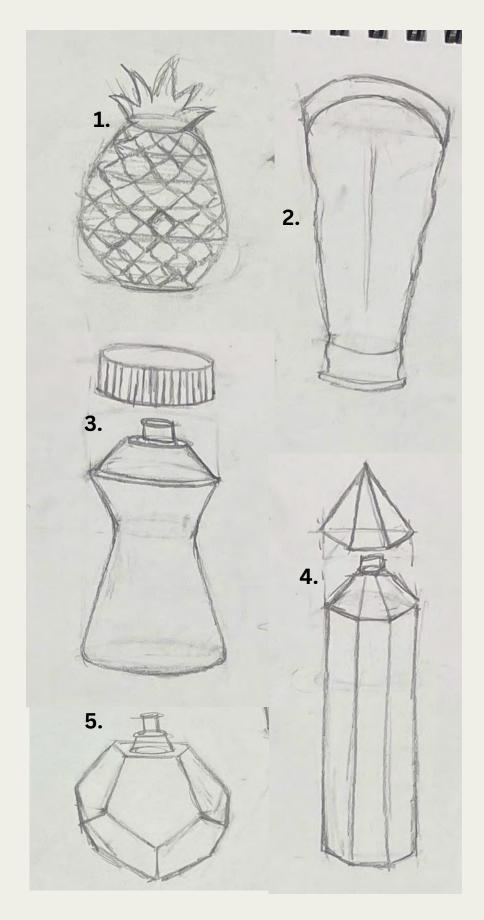
Round base with a slightly peaked and geometric lid. With a rounded point to avoid sharp edges.

simple cylinder with a Japanese roof style lid for a better grip when removing lid.



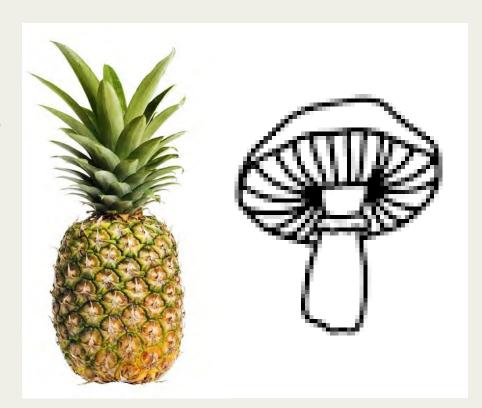
Two stacked tire shapes, one with a small bulge for the tread, allowing a comfortable grip, the lid having multiple peaked arc shapes with rounded edges, allowing a firm hold on the lid when opening.



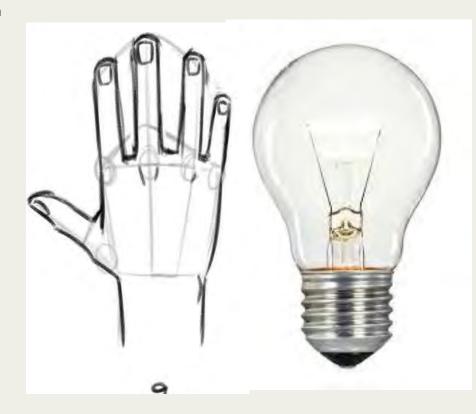


- 1. A pineapple inspired container with twist off stem and applicator. Indents to provide grip and detail.
- 2. Classic tube with rounded top and indents along either side for a more comfortable grip.
- 3. A bottle with a large pump and tapered middle for an easy grip and better hold.

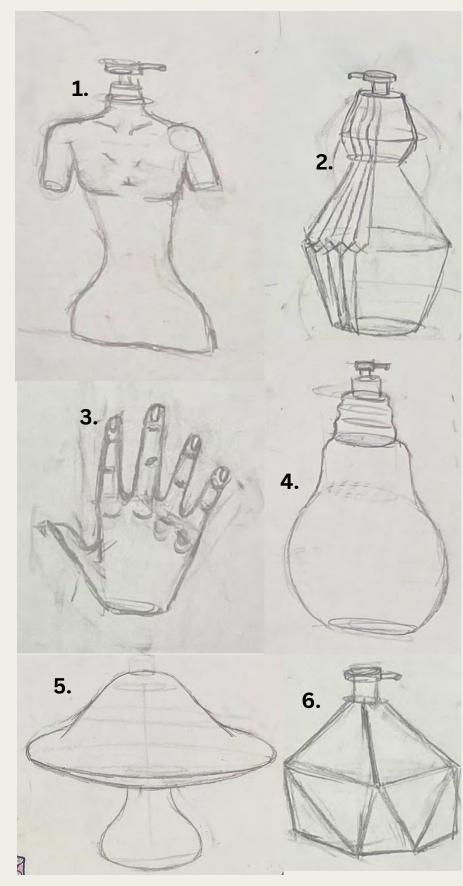
 The lid has vertical scoring around the cylinder for ultimate grip.
- 4. Tall hexagonal pump bottle with a pointed lid and a sandy texture throughout for grip strength. Bevelled edges and rounded corners for comfortability when holding.
- 5. A geometric shape including several pentagons to form the bottle shape. This has a thick pump mechanism for distributing the product.

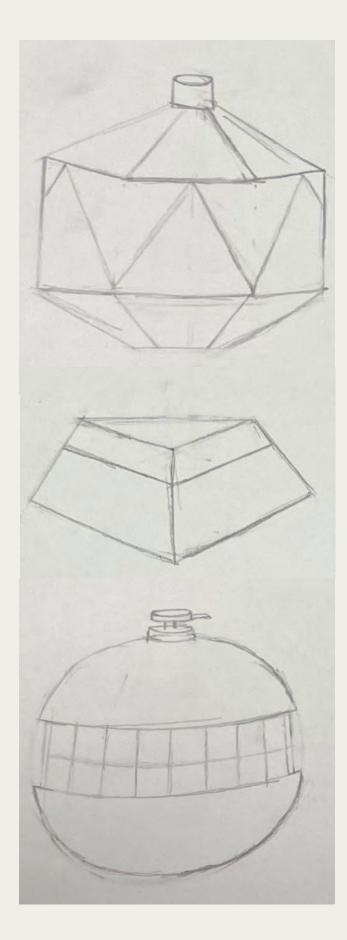


DESIGN IDEAS



- 1. A bottle inspired by the human anatomy with a pump coming out of the neck in the place of where you would locate the head.
- 2. A geometric shape with a tapered middle and a larger base. This has a pump for the distributor.
- 3. A hand inspired bottle with notching and detailing to create a somewhat cartoonish effect.
- 4. A lightbulb inspired design with a flat base for stability and a pump for distribution of the product.
- 5. An inverted mushroom inspired design with a twist off base for the lid and the product storage in the top.
- 6. A geometric shape with a hexagonal base and a pump lid for distribution.





a 3D hexagonal shape with a pointed top and flat bottom. Including triangular detailing and a wide pump distributor.

A tapered triangle design with

bevelled edges to avoid sharp

corners. A simple pull of lid with a lip and groove on the interior to hold shut when transporting and not in use.

A sphere design with an indented

circle and square embellishments.

With a flat base for stability when

standing and a pump distributor on

the peak of the sphere.



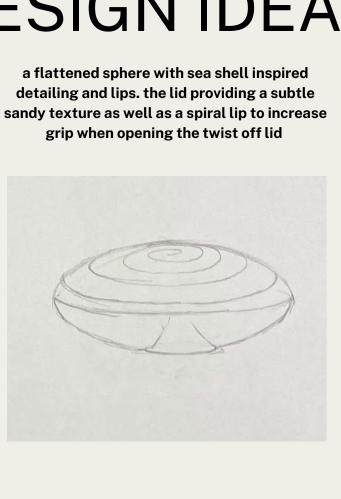
A round tapered cylinder shape with a pull off lid including a lip and indent to insure a secure fit when not being used.

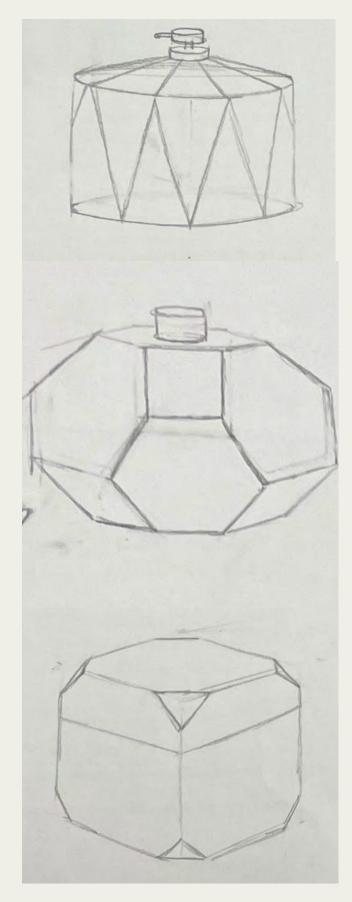
A short cylinder design with triangle embellishments, a peaked lid and a simplistic pump distributor.

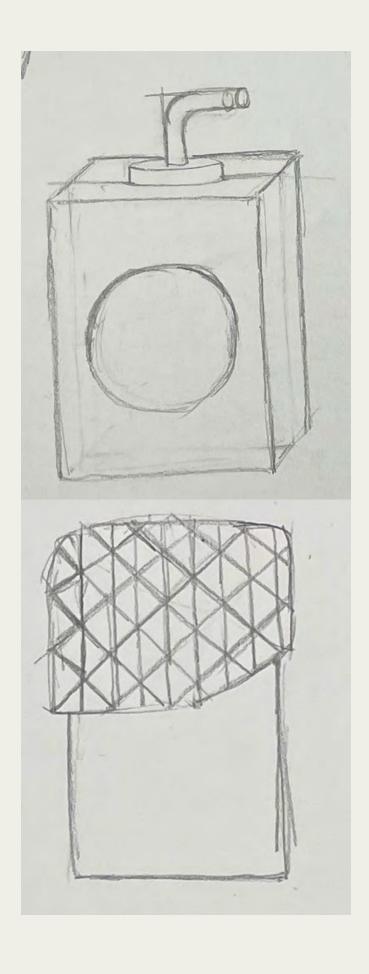
A geometric shape with hexagons and squares. Bevelled corners and a simple pump with a cylindrical cap.

DESIGN IDEAS

A small cube design with cut corners and bevelled edges to avoid sharp edges and to increase comfortability. A simple pull of lid with a lip and groove on the interior to hold shut when transporting and not in use.







A simplistic juice box remake.
With the straw enacting a pump which distributes the product. Rounded off corners and edges to allow comfortability.



A rectangular ice pop inspired design with rounded edges and corners for comfortable grip. A textured asymmetric lid with lip and divot on the interior to insure firm fit and allow the lid to be secure.







A spooky rabbit design with a flat base. This uses the head as the distributor/ pump with the nozzle strategically placed at the beck of this rabbit's head.

DESIGN IDEAS



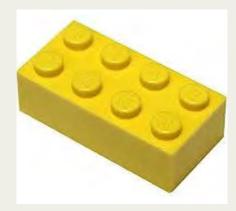
A strawberry inspired design with the twist off top and flat base. The seeds being a form of texture to the design to allow easy removal of the cap.

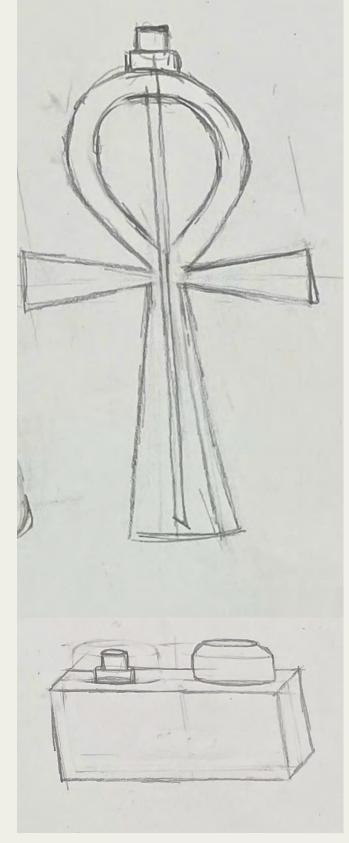


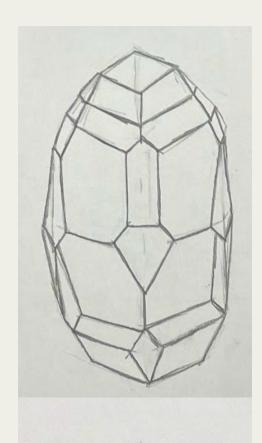
An Ankh cross inspired design. Is from Egyptian times and is considered to represent life. This design will have a pump lid with the tube going straight through the centre of an empty space meaning the tube cannot be removed.



A lego inspired design with bevelled corners and edges. An off centre wide pump design with a lego stud lid.

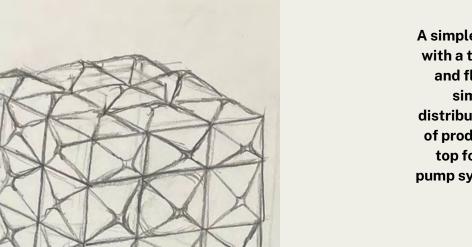




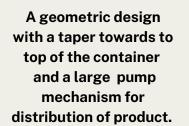


A gemstone design with a pull of lid and a hidden pump for distribution. soft edges and corners with a constistant sandy texture over the design for a subtle grip

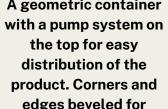




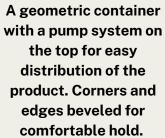
A simple curved design with a tapered middle and flared base. A simple pump distributor for removal of product And a flat top for removal of pump system if needed

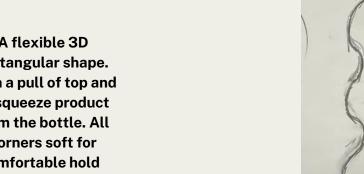


A geometric tube design made from flexible plastic for easy squeeze. Soft corners and edges providing a semi comfortable hold







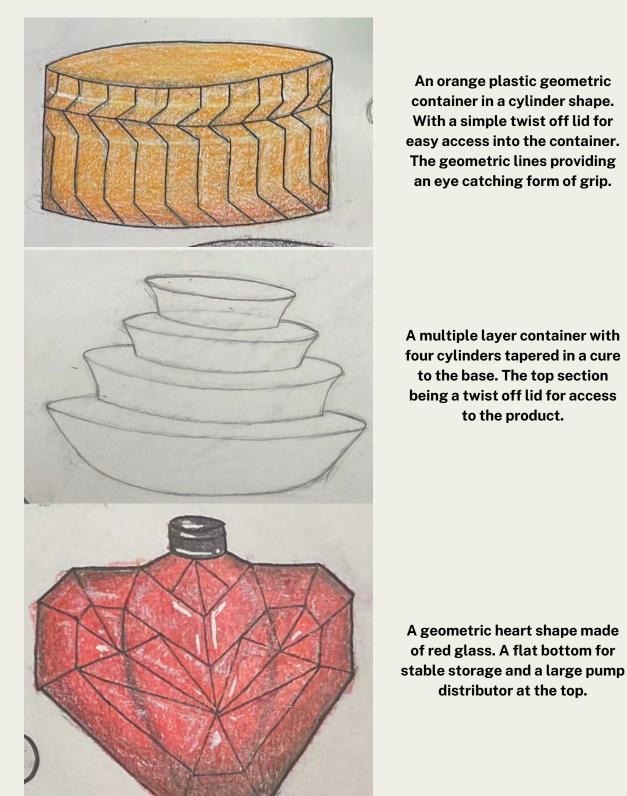




DESIGNIDEAS

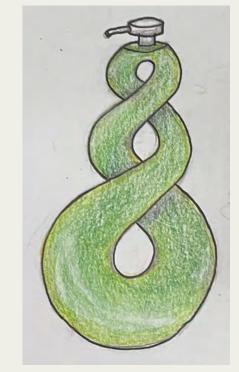
A simple design with a screw off lid and finger indents based on anthropometric data showing the adverage had sizes. Made from flexible plastic to squeeze easily for removal of product



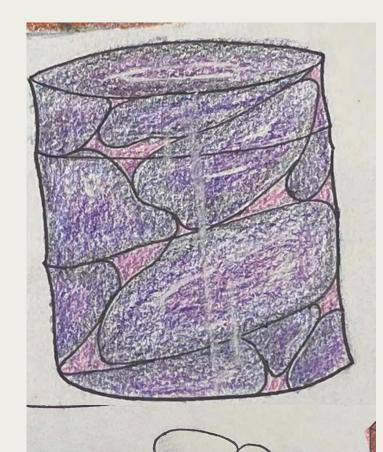


An orange plastic geometric container in a cylinder shape. With a simple twist off lid for easy access into the container. The geometric lines providing an eye catching form of grip.

A green plastic Maori design representing a specific greenstone carving. The distributor made out of a simple white plastic twist strategically through the bottle for distribution of the product.



A bubble pattern forming over the purple plastic. a tall cylindrical shape with a twist of lid. The lid being slightly tapered towards the centre allowing a comfortable hold when removing.



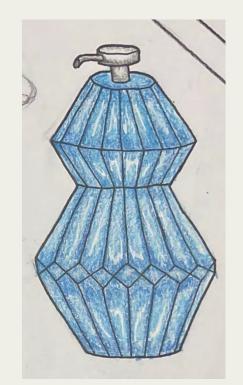
A multiple layer container with four cylinders tapered in a cure to the base. The top section being a twist off lid for access to the product.

A geometric heart shape made

of red glass. A flat bottom for

distributor at the top.

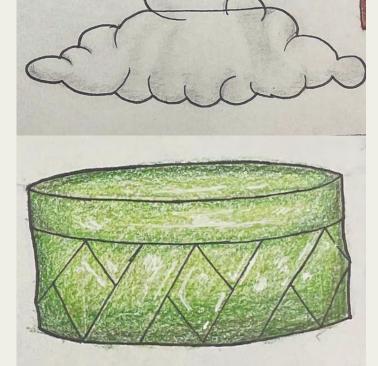
DESIGN IDEAS

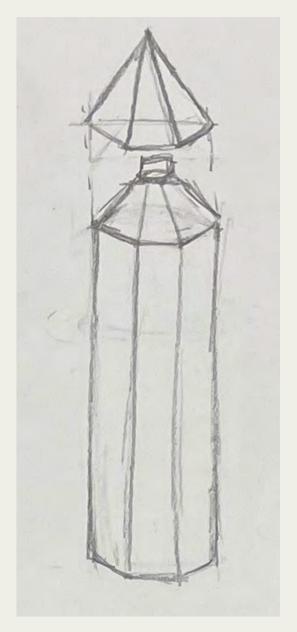


A geometric shape with a tapered middle and a larger base made of a semi clear plastic. With a pump for the distributor made out of a solid black plastic.

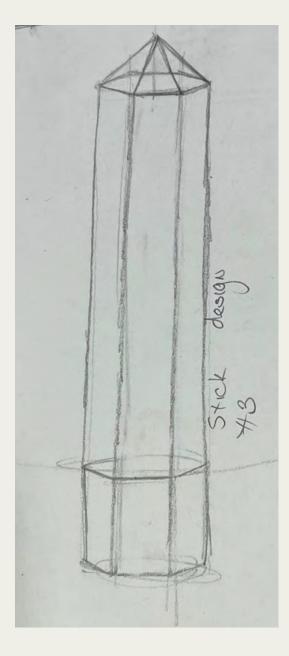
A simple white cloud design with a flat base for stable storage. An easy pull off lid with a lip and indent on the interior for a firm fit. A pump is included to distribute product with ease.

A wide cylinder with indented geometric detailing around the tub. A flat basing providing a stable stand and a twist of lid for product access.

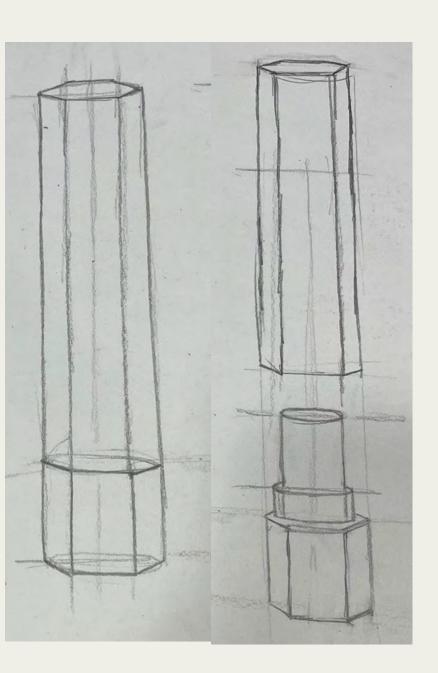




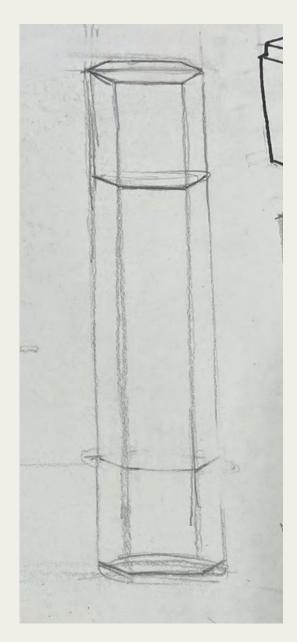
Tall hexagonal pump bottle with a pointed lid and a sandy texture throughout for grip strength. Bevelled edges and rounded corners for comfortability when holding.



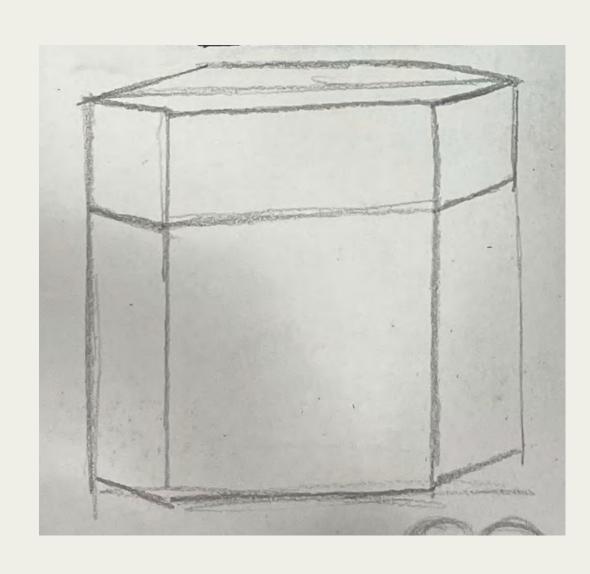
Changing the application style allows easier storage and more accessibility for people who may potentially struggle with removing the cap.

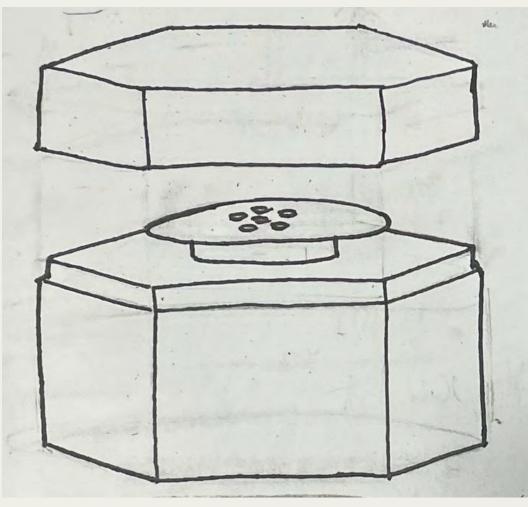


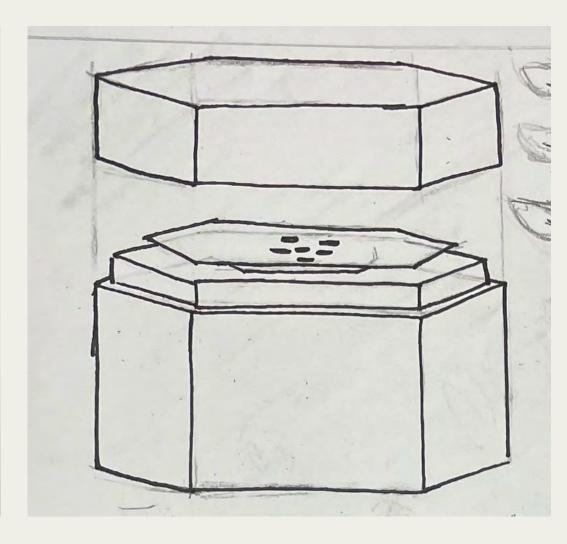
Removing the pointed top will allow more comfortable holding. Easier storage and a less accident prone. however the small design makes is susceptible to tipping over



Exploring the changes made with the chap-stick style tube but with a pump distributor.







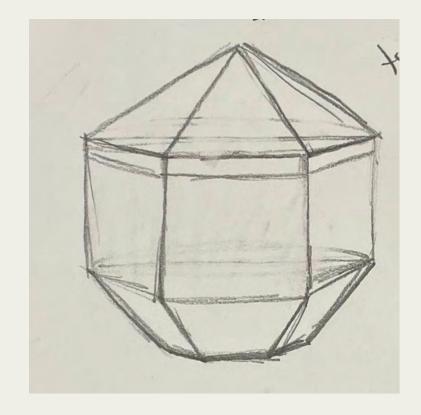
Keeping the hexagonal design and shortening it into a tub while keeping a texture exterior it allows easy access into the tub and allows more stability when on a counter/vanity top. however looking for a minimal mess application.

Using the stubby hexagon design and flat top with a pull off lid, it uses a pump mechanism with multiple holes to distribute the product in a more controlled manor.

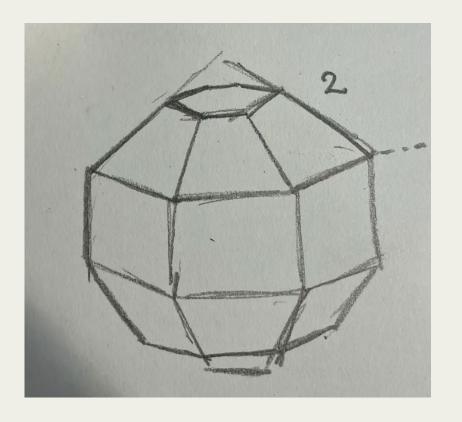
Using inspiration from the previous design there with be a hexagon base for the distributor allowing the design to flow. This way of distributing the product can be used by anyone.



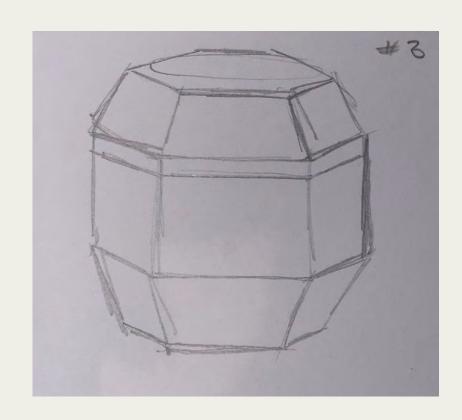
A 3D hexagonal shape with a pointed top and flat bottom. Including triangular detailing and a wide pump distributor. The geometric shapes providing a source of grip for the container.



Changing the design slightly to allow the shapes to flow better making it more pleasing to the eye and changing the distribution mechanism to a tub design making it easier for storage.

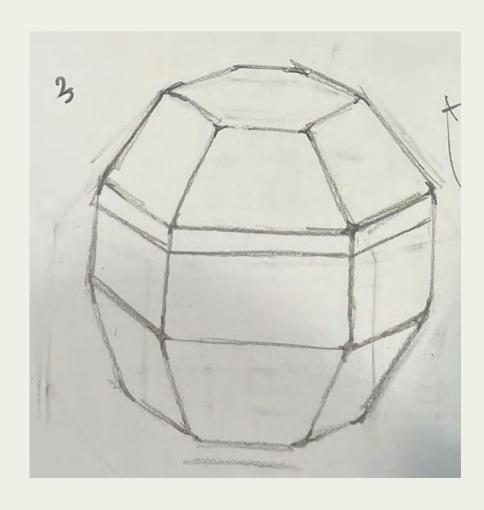


Making the top flat allowing it to be stacked below other products on a bathroom counter or vanity top and changing the location of the twist top for a more seamless effect, however the new location of the seam makes it difficult to open.

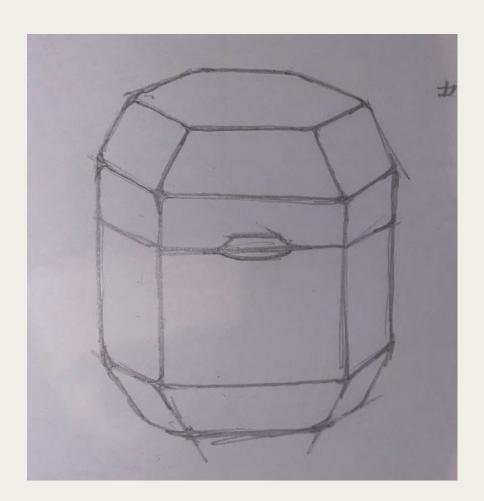


Moving the seem where the lid connects to the tub body allows ease when removing.

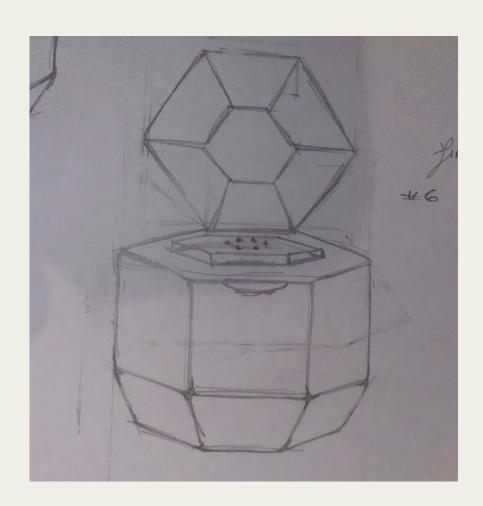
Making the design taller allows a more comfortable grip.



Adding a hinge on the back prevents misplacing it, however needs a notch for easy removal. Bevelling and rounding the corners allow more comfortability



Adding a notch in the centre of the front of the lid allows easy removal and makes it more convenient.

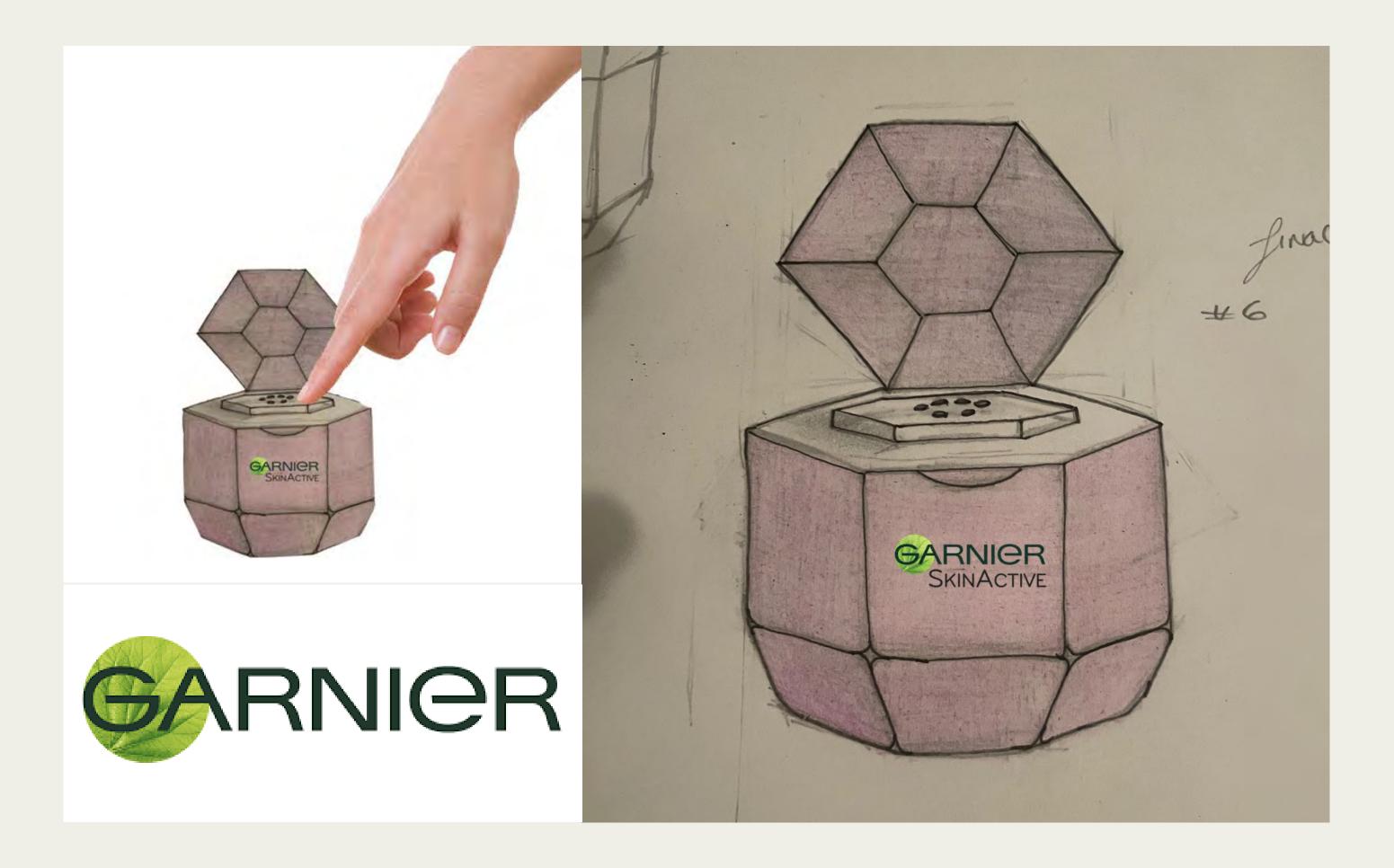


With all previous modifications and changing the tub to a pump system allows easy use for all and creates inclusivity.

FINAL DESIGN

A simple geometric shape with rounded corners and beveled edges. A wide base to allow a stable stand and minimum damage to the container. This design includes a flip up lid secured by a simple lip and indent on the inside of the lids. A simple hexagon platform the flow with the design and allow easy distribution. The container being made from a sturdy light purple plastic to allow easy storage, avoiding being squished during transporting, despite being intended for a bathroom counter and or vanity top. The interior of the container has a simple

The interior of the container has a simple white pump and a dark purple for the interior of the lid. The light purple allowing the logo to stand out showing proudly the companies logo.



Achievement

Subject: Design and Visual Communication

Standard: 92002

Total score: 03

Grade score	Marker commentary
А3	This submission is about designing a cosmetic container for a company. Many possible ideas are presented at the start with notes relating to the use of the product. Two ideas are chosen and developed further. The development of both ideas shows a sequence of visuals which show changes that relate to people using the product. One design is chosen to be the final design and visuals show some functional and aesthetic features and how they relate to the person using the product. This project is a high Achievement.
	To move to Merit, this submission would need to show more detail about the product. For example, showing the mechanism that allows the lid to flip up or showing details of what happens when you press the top hexagon. All visuals show the product from exactly the same viewpoint so it is unclear what all sides of the product look like.