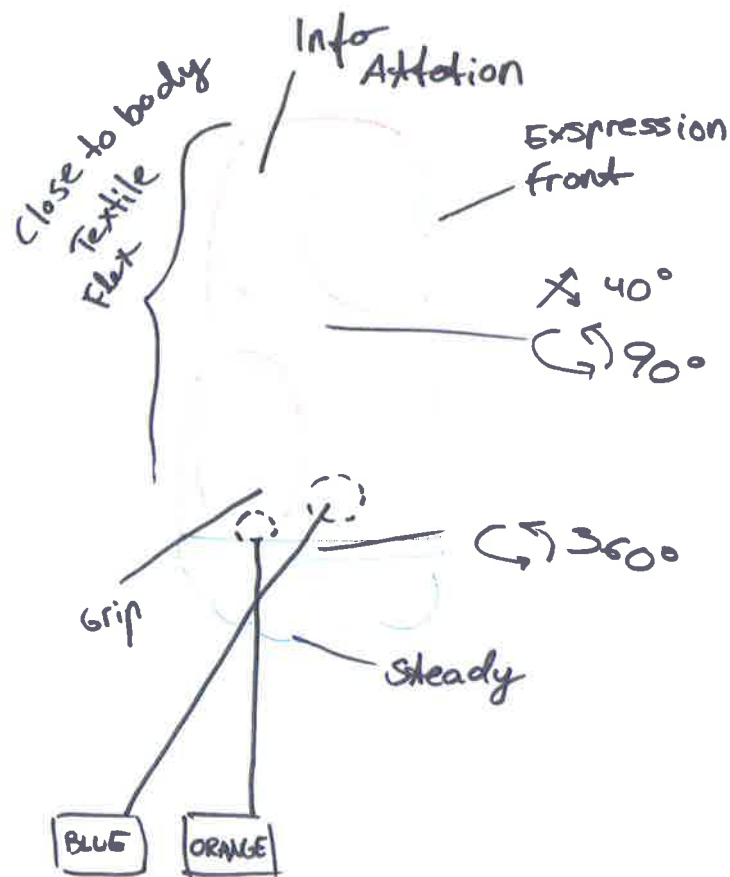


SKETCH BOOK



We have collected many of our sketches through out the diploma, we wanted to keep them for flicking through, here you can have a look.

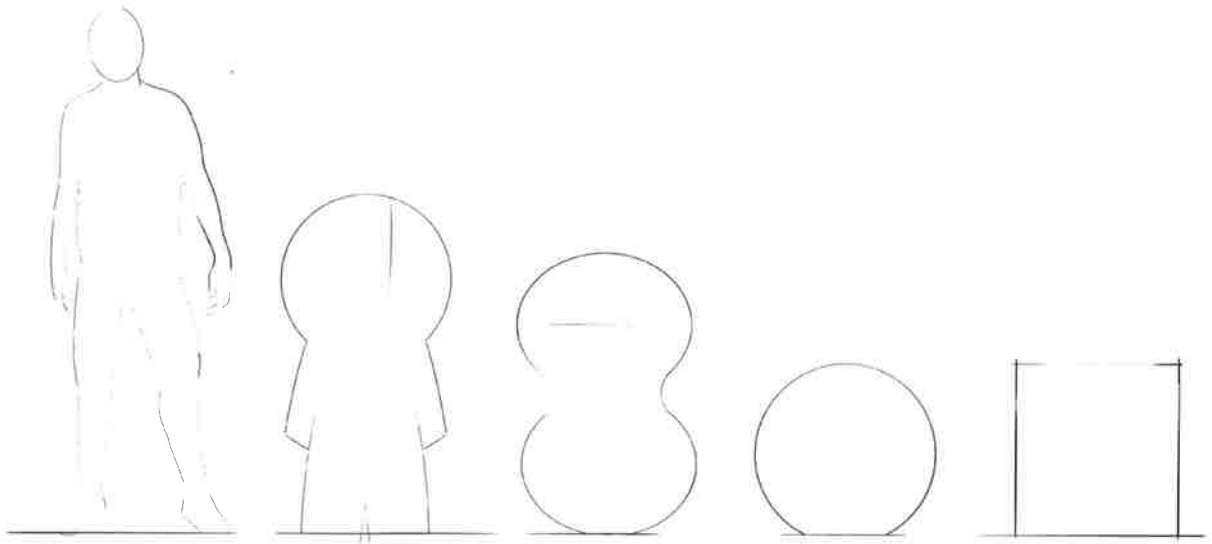
DIPLOMA PROJECT

TEA SKOG & ASLAK SØDAL

PRODUCT & TANGIBLE INTERACTION DESIGN

EARLY EXPLORATIONS

SHAPE & FUNCTIONS



COMMUNICATION TOOL
SOCIAL OBJECT

SYNLIGHET



← PLASTIK - HVIT
GLATT

← LÆRER - APP - ELEV



LYS PULSERING



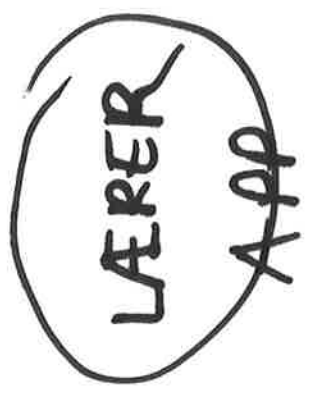
BEFARBARHEIT
FORM



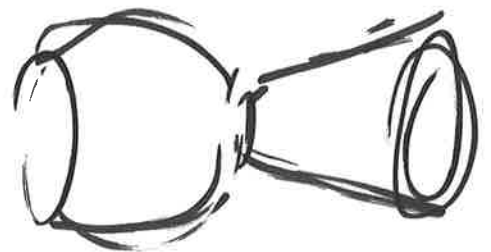
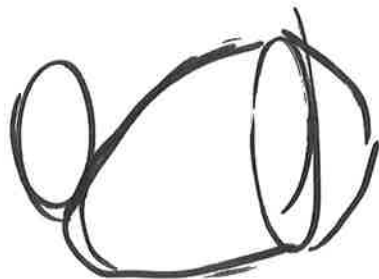
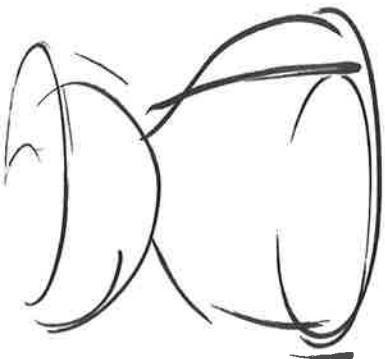
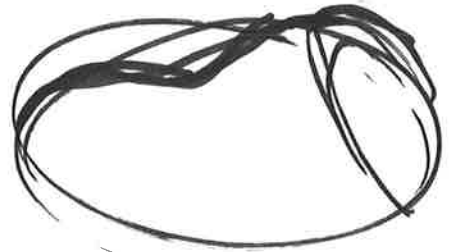
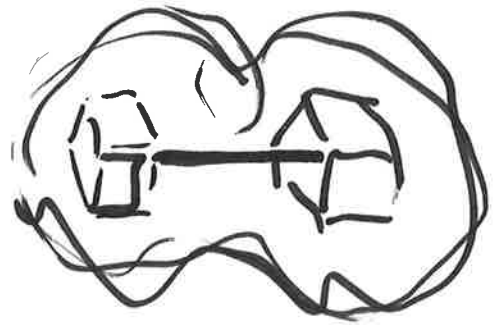
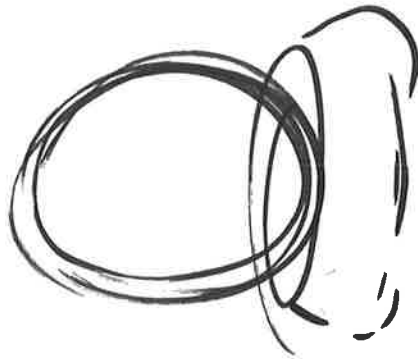
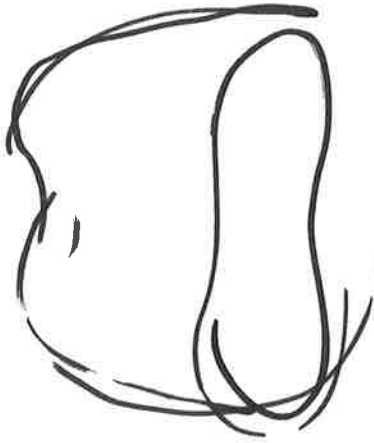
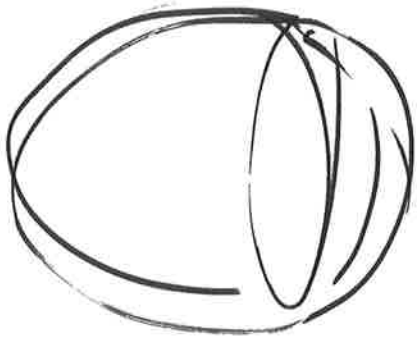
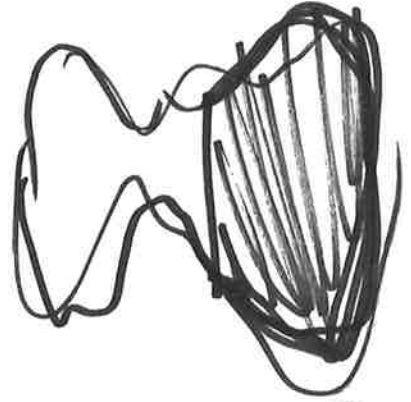
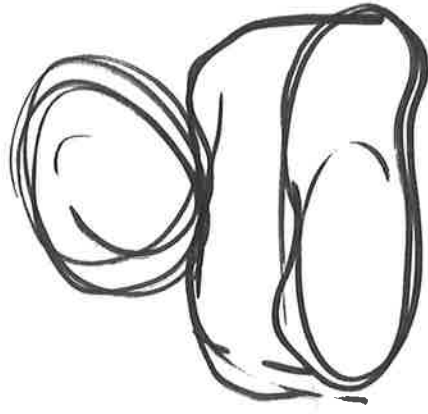
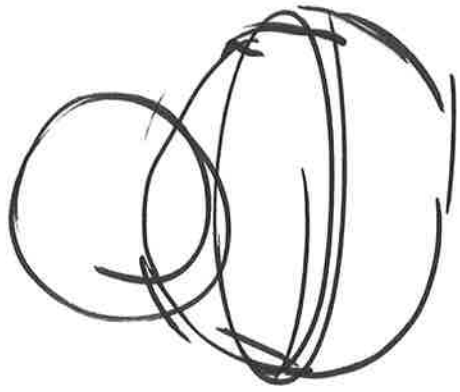
← KJØNN?
← ALDER?
← PRIS?

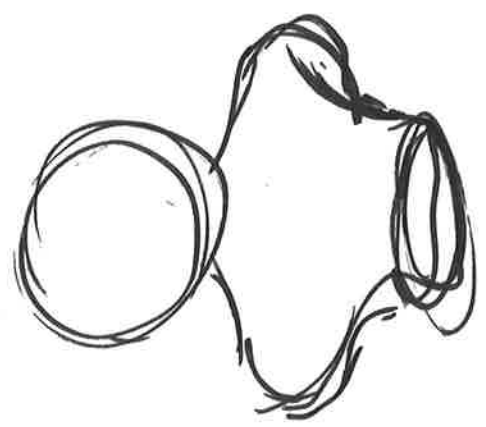
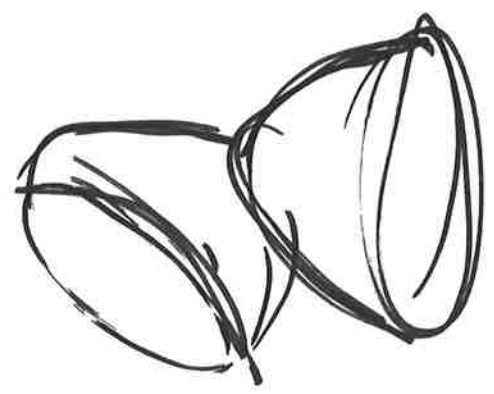
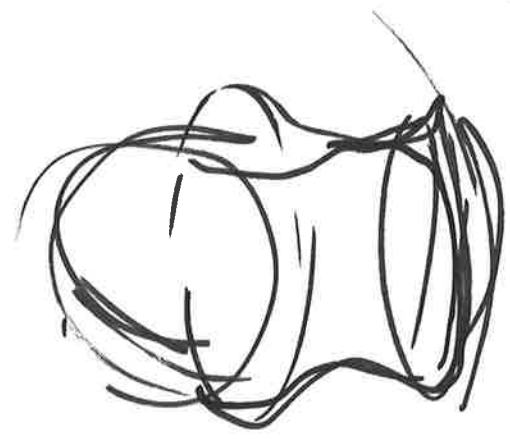
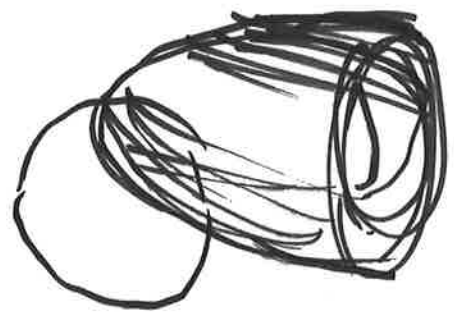
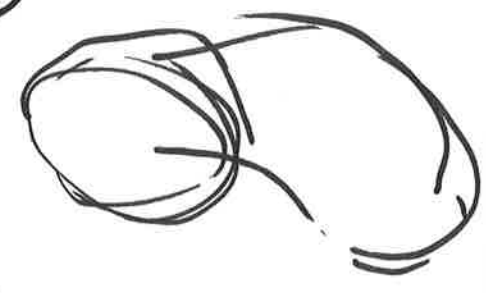
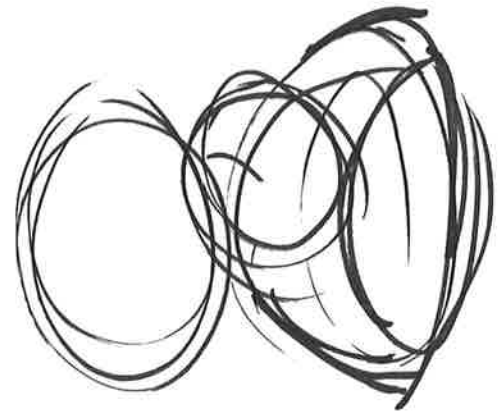
UTTRYKKE
FØLELSER

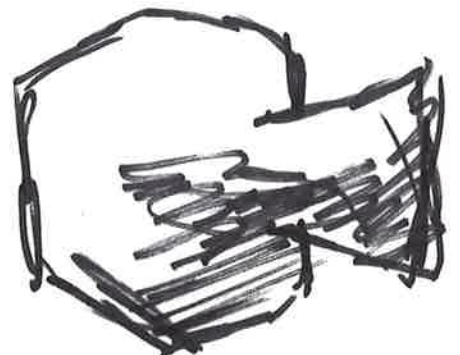
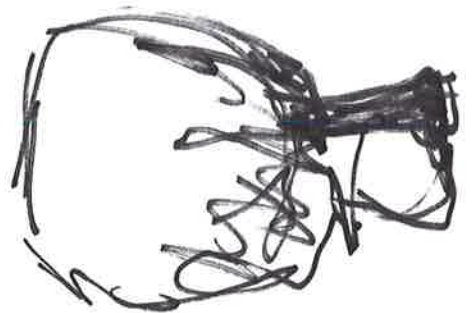
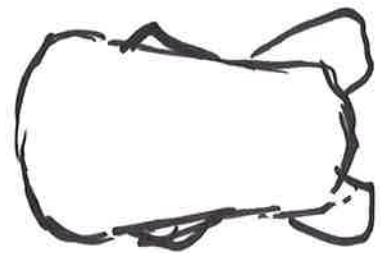
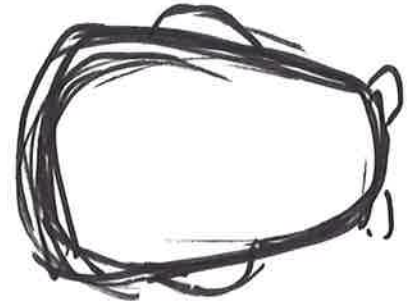
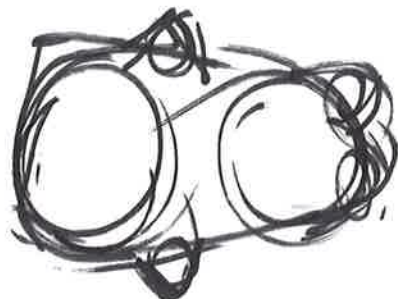
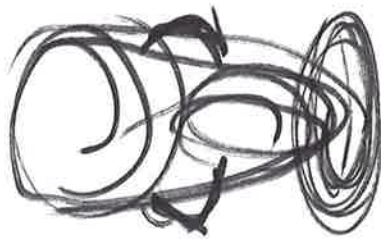
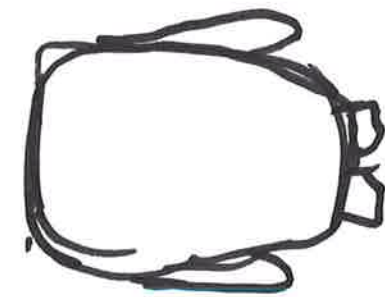
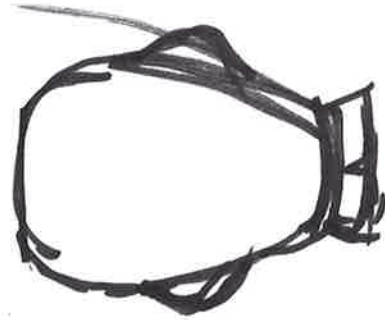
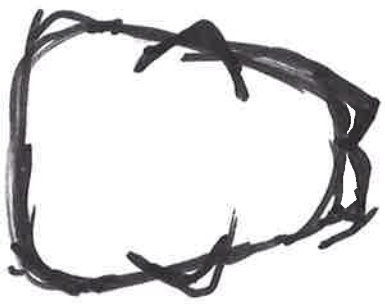
DELTAGELSE

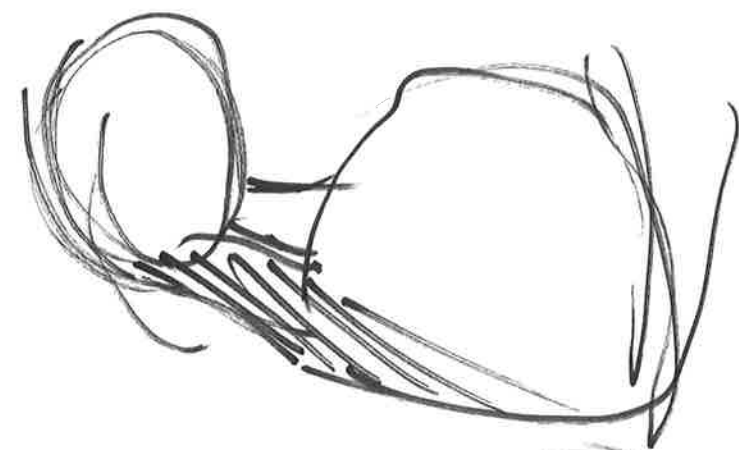


"IKKE LEK BATTERI
KAN LEKE" LADING!

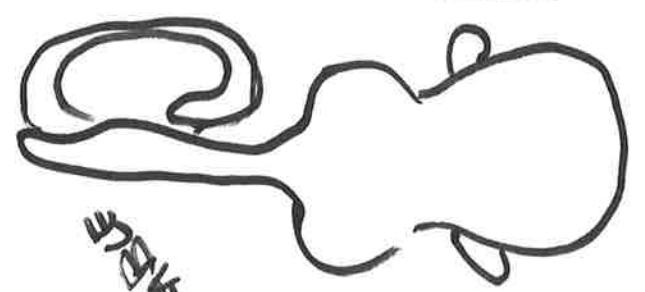






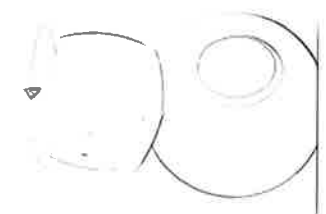
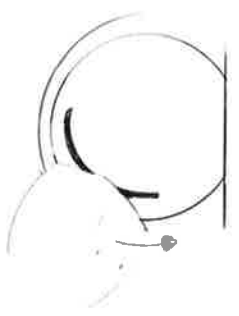
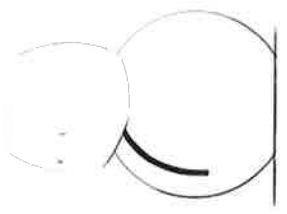
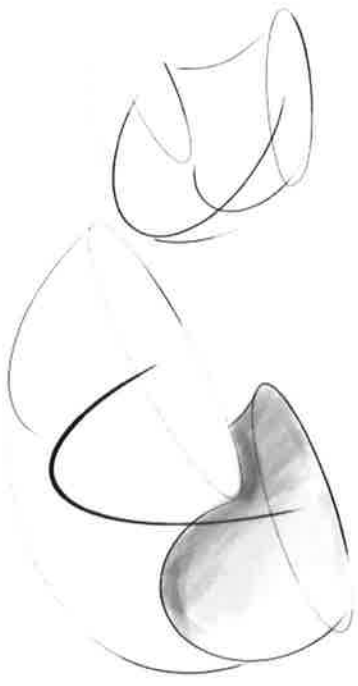


Hold point

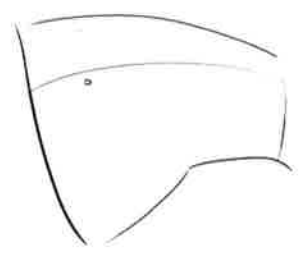
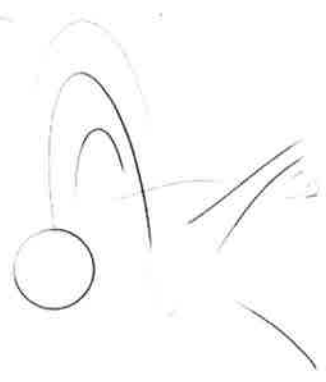
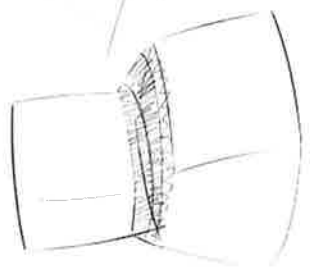


SHOE - DRAWING





SNU 3/5 bort

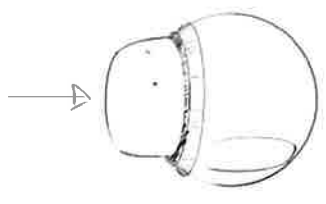


AKTIV



PASSIV

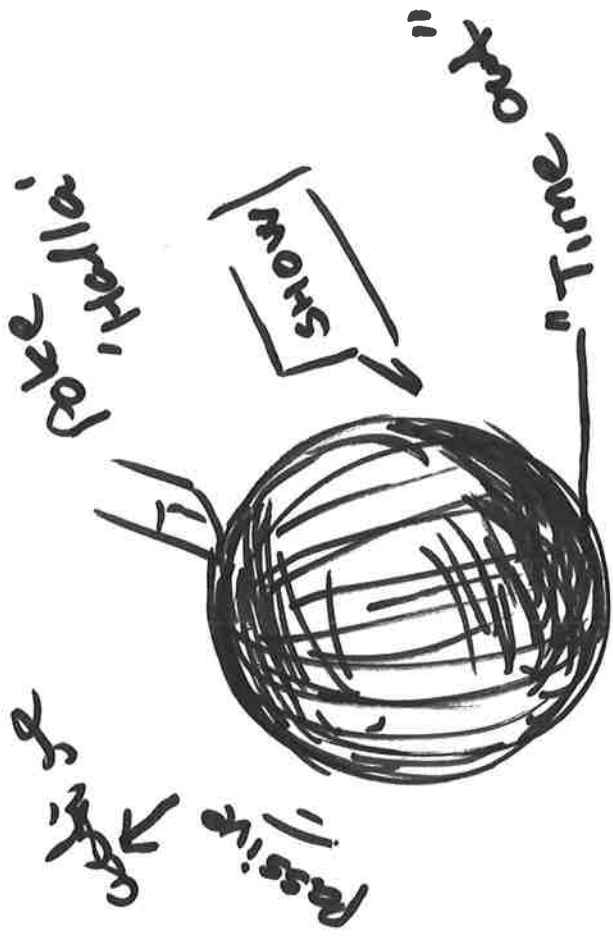
ART. 011111E



Trekke inn



Trekke seg sammen



'penthouse'

(Soft combined with clear message.)

Soft motions



How will you carry it?

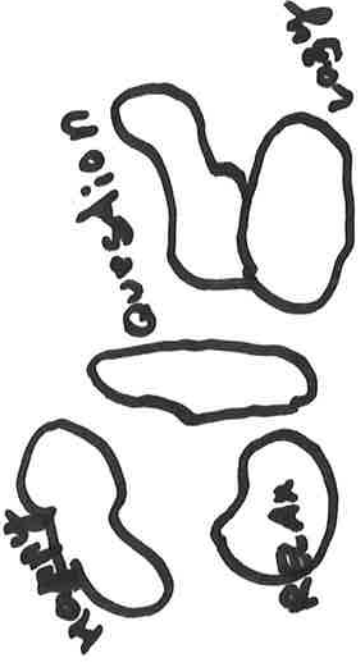
GRIP



MOVEMENT
'alive'



?



question

Humor line



WITHOUT GOING
EMOTIONS - NOT HUMAN

WHAT IS NEEDED?

WHAT EXPRESSIONS DO YOU SEE?

SIZE!

self walking

'person'ie walking / intrusive

'expensive' consuming?

space consuming?

or object? 2. shift? 2. 'intrusive'?

or 'object' 2. 'intrusive'?

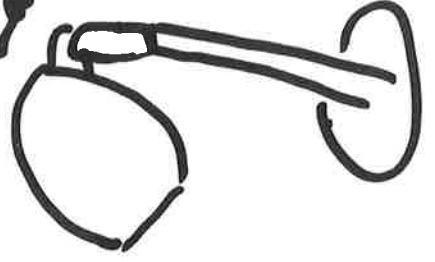
or 'object' 2. 'intrusive'?

or 'object' 2. 'intrusive'?

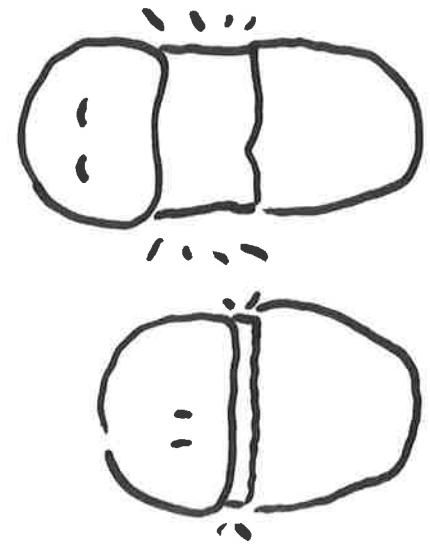
carry!?



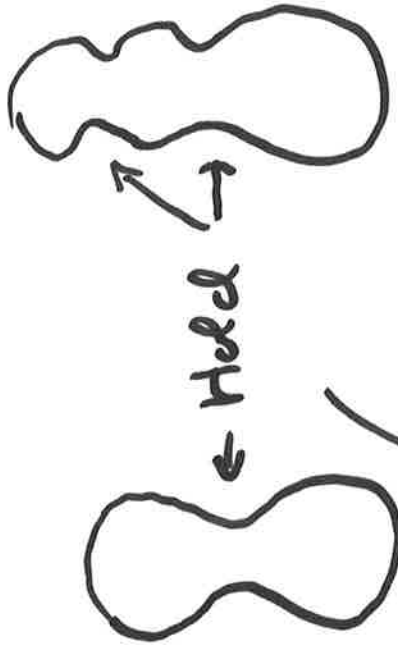
Lamps
moods



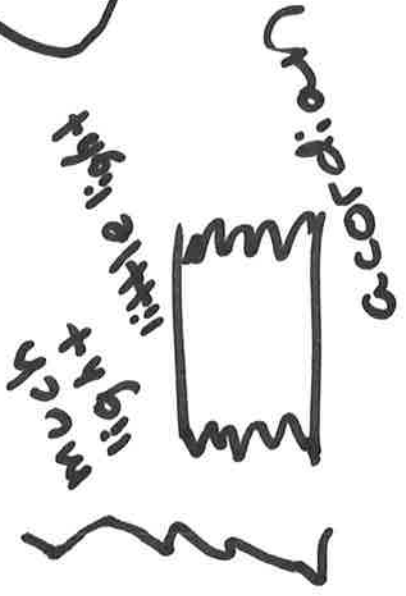
Blur video
sound



Tunnel light

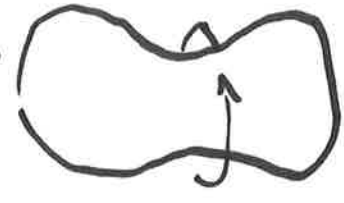
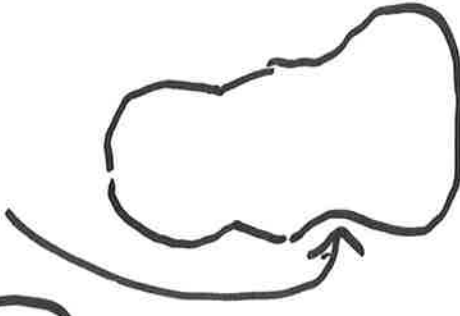
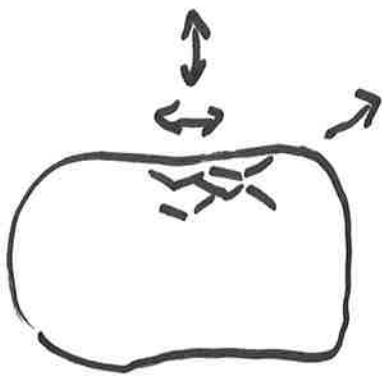


← Hold →



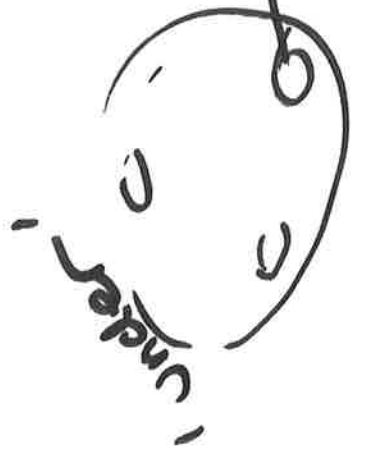
much light
little light

accretion



Contact
! button !

tiny flat surface?
diagonal shape?



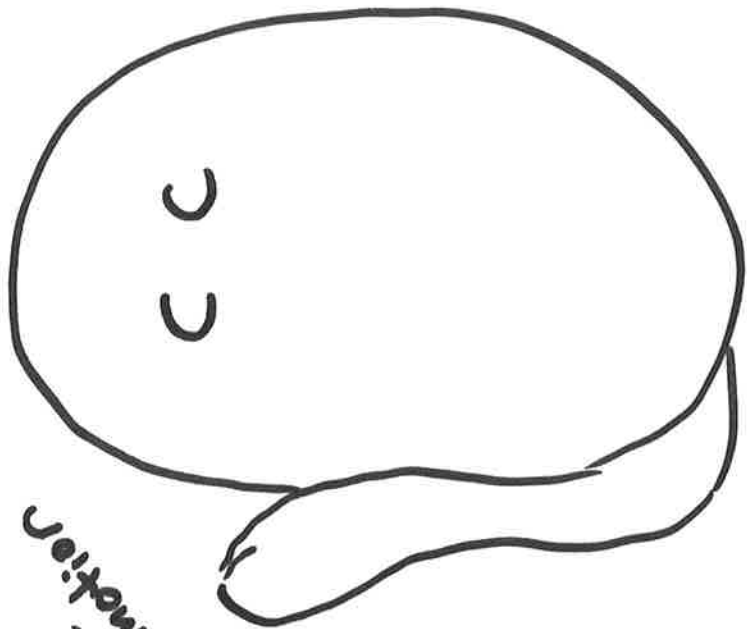
under!

small feet
to move?

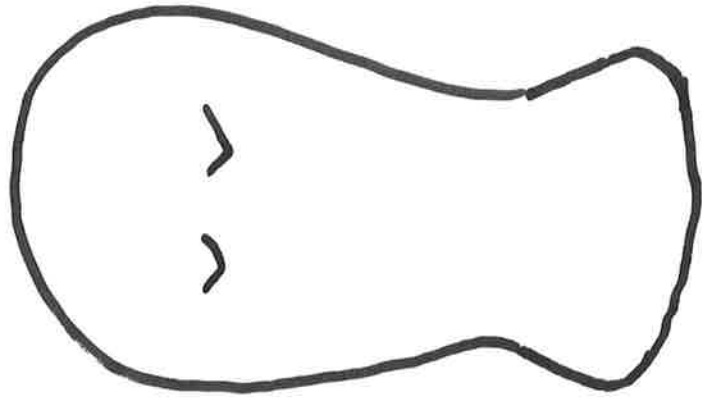


speakers
all around

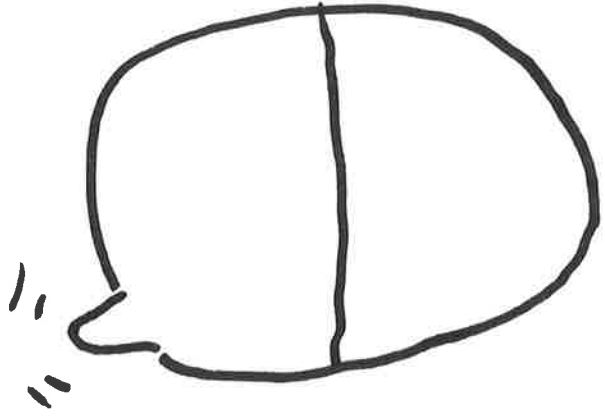




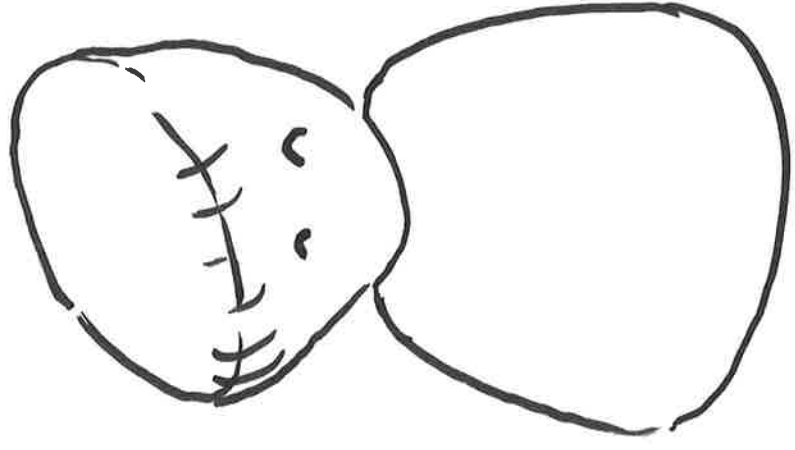
take motion



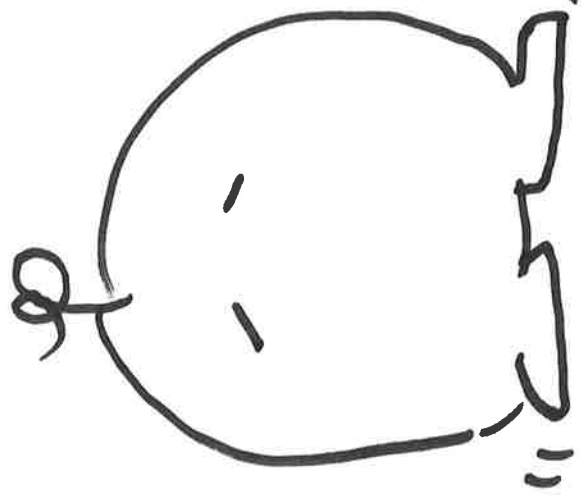
soft hard



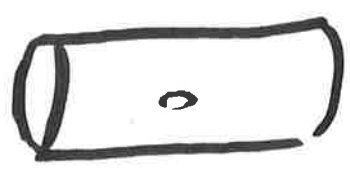
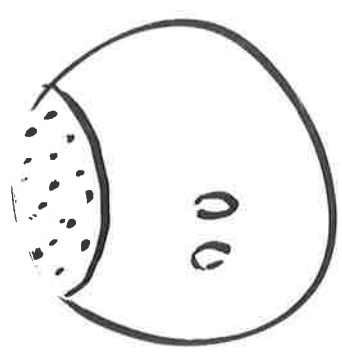
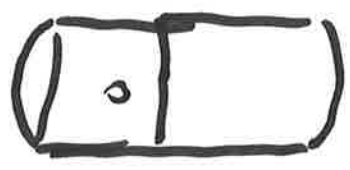
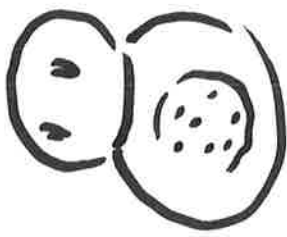
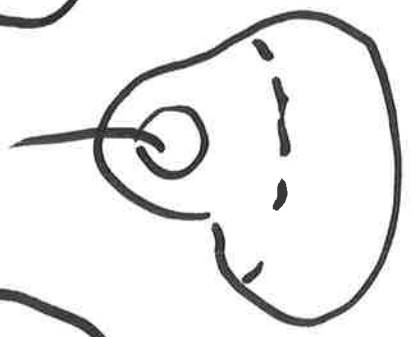
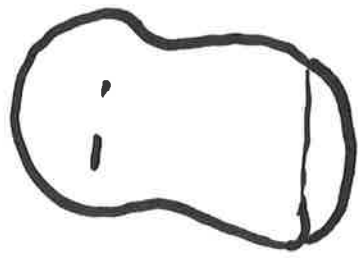
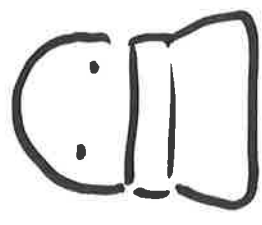
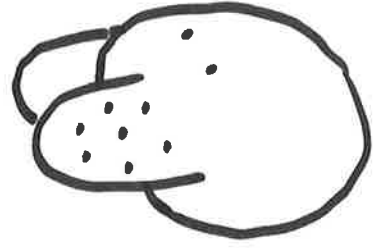
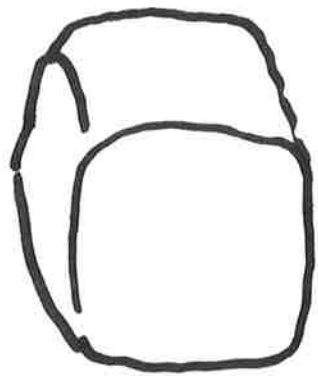
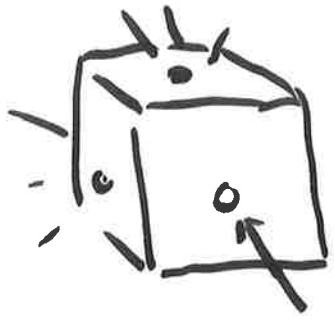
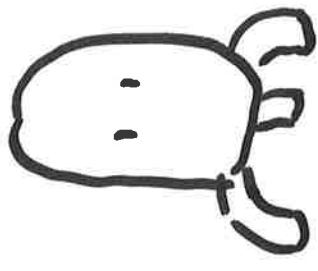
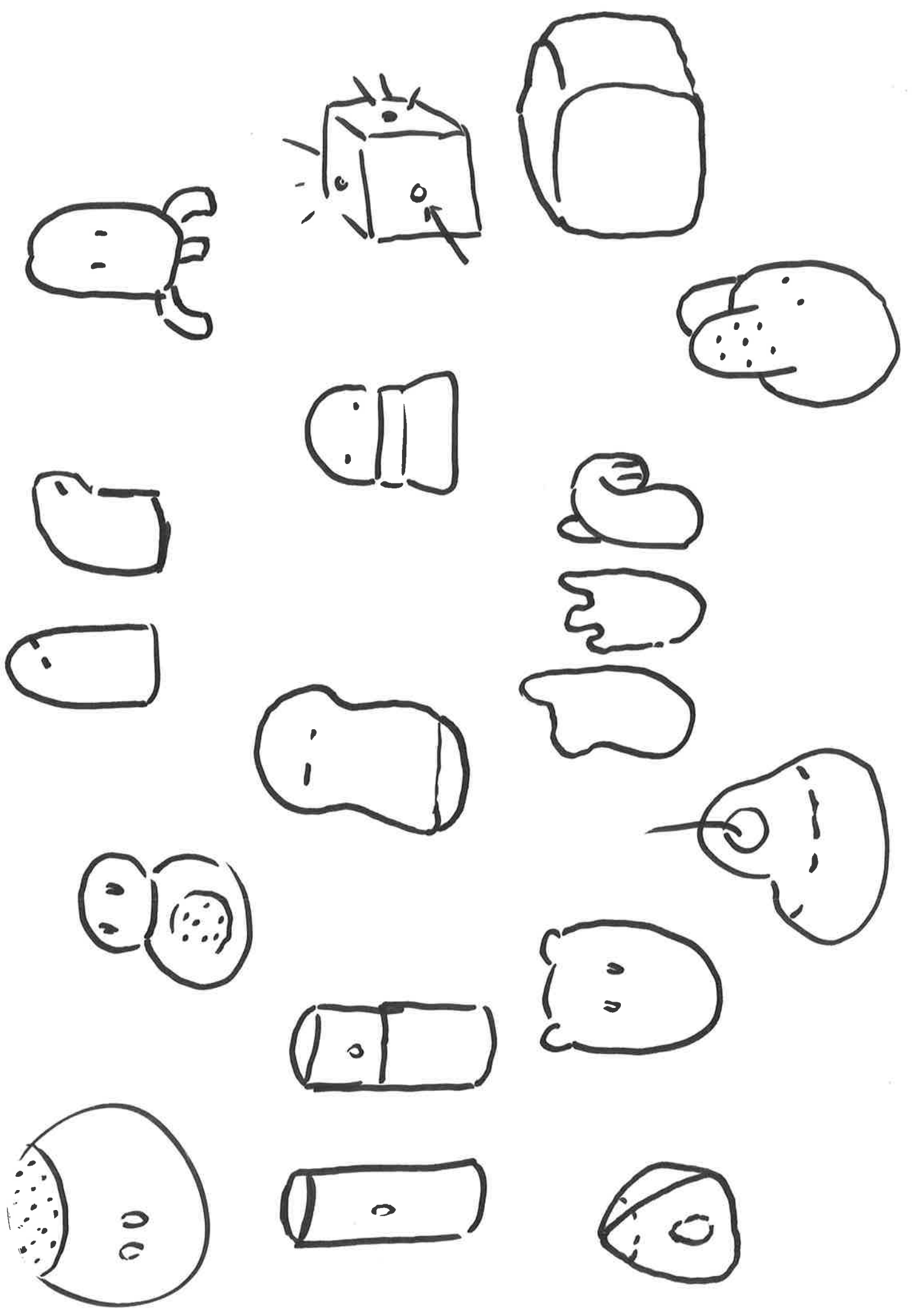
spin head motion

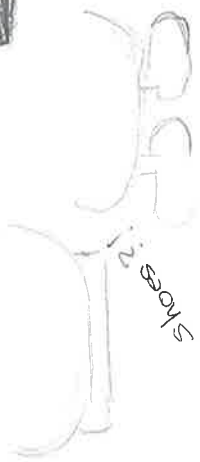
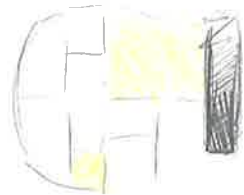
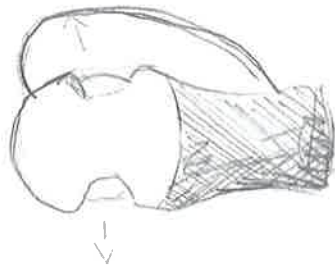
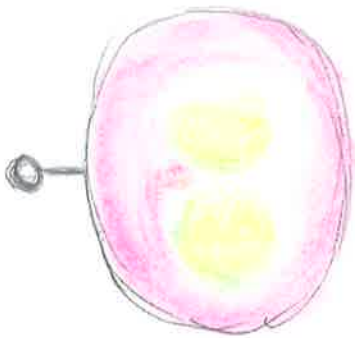
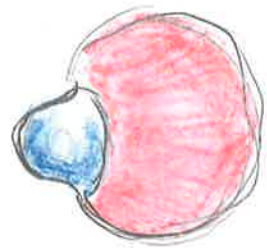


round can wiggle

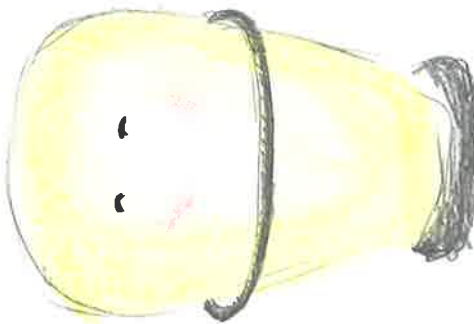


vib. motion

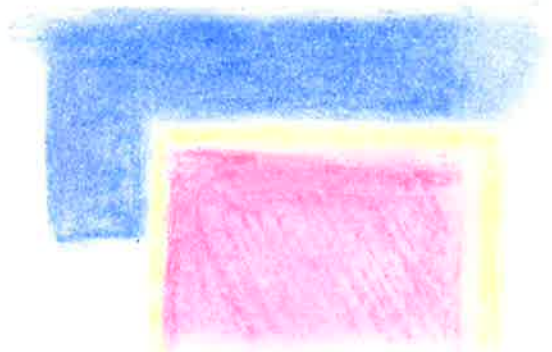
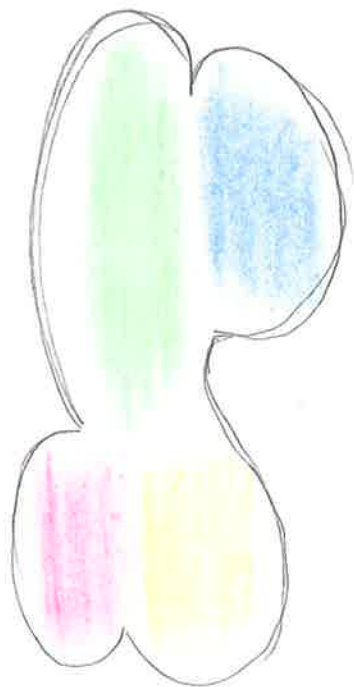
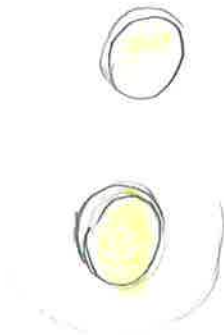


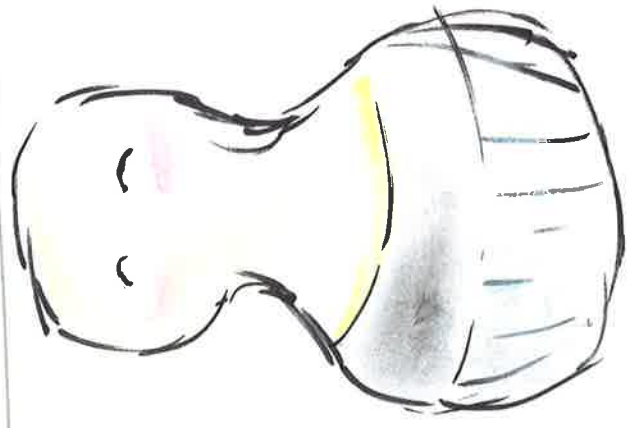
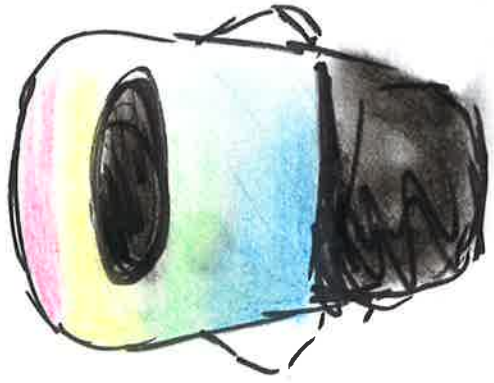
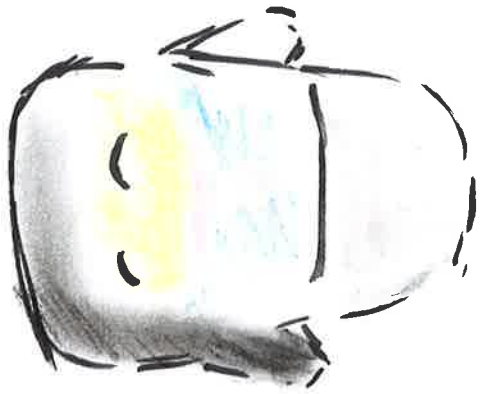


Shops 12



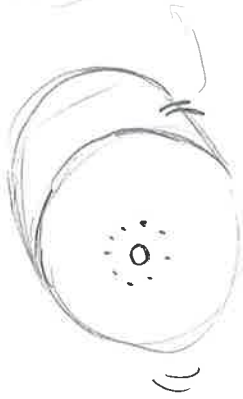
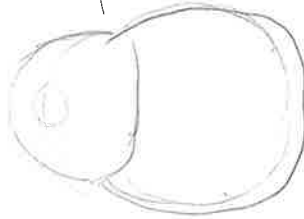
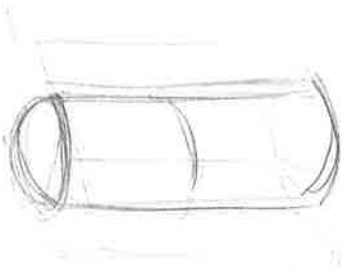
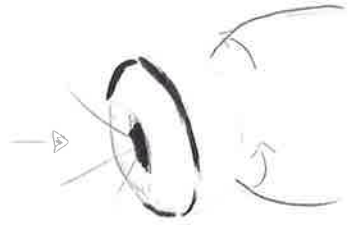
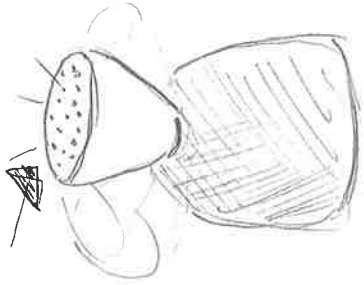
lightness
thick
Glossiness



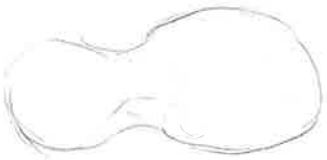
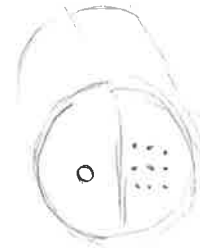
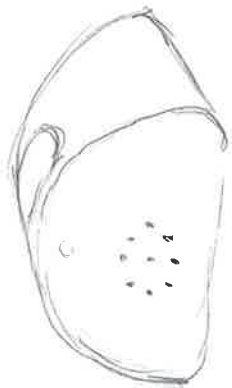




wiggle



motion



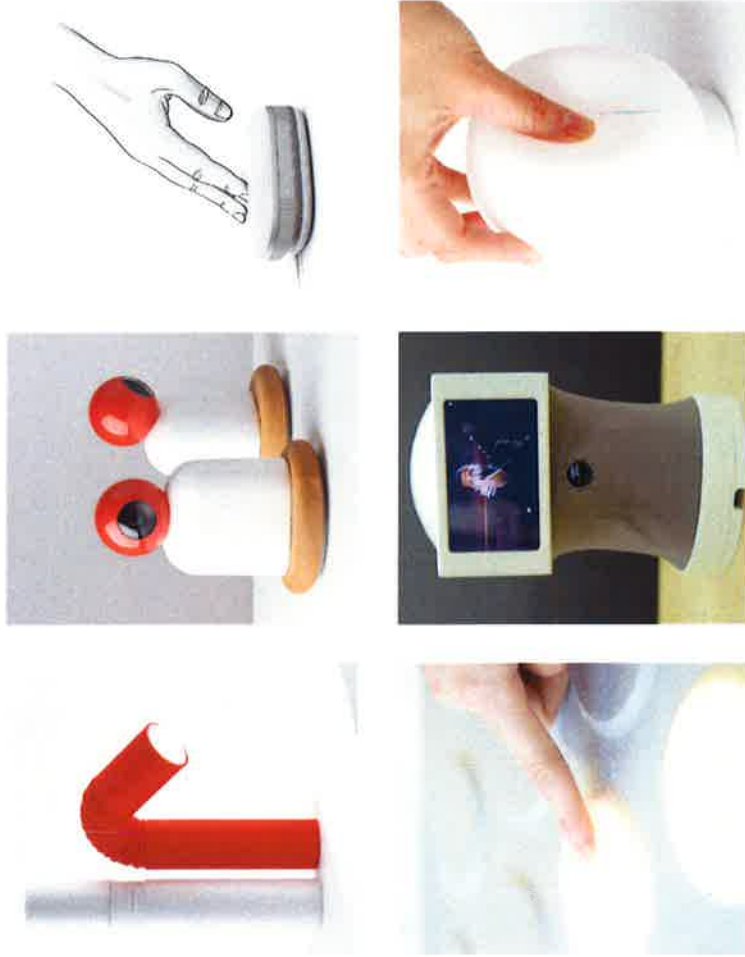
EARLY CONCEPTS

MOOD BOARDS AND SKETCHES

PHASE 1.

TORSO

- Fewer options of reactions
- Relax to humans



Soft and slow

*

FIGUR

- different type of motions
- looks like more functions
- than it has
- different type of motions
- looks like more functions
- than it has

- light strength

- character

steps



materials

Screen?

indications



PIECES

- A deck for home
- different function different shapes
- smaller bits to bring
- different function different shapes



"speakers" / "P+MS"



- * technical advanced
- * basic parts
- * more restrictions needed

*

NON FIGUAR

unfamiliar shape
descriptive?
less is more?

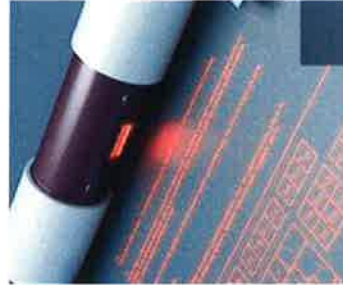
relationality?
representation
intuitive?



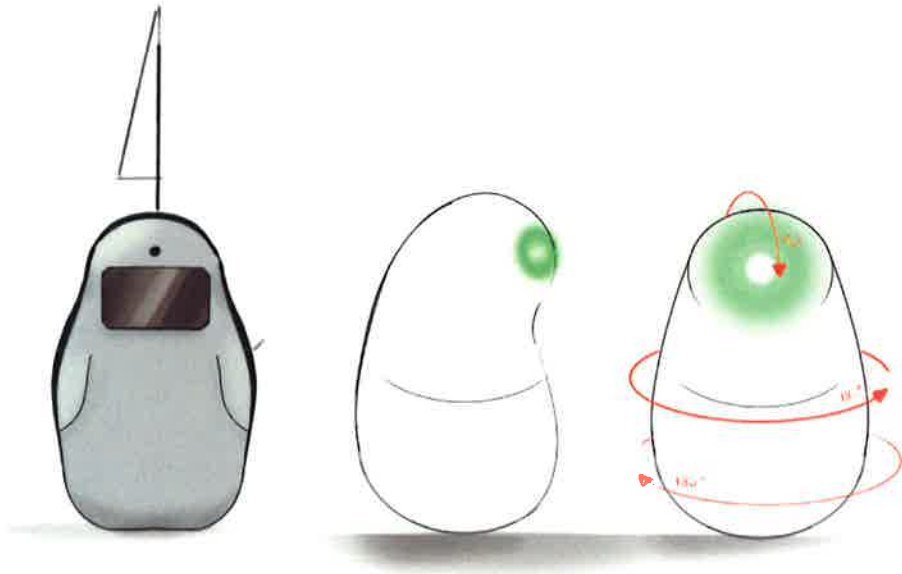
expressions

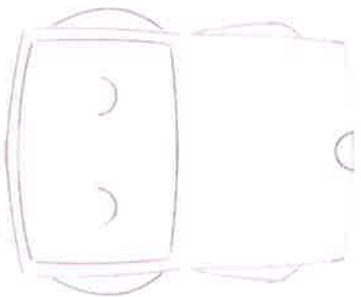
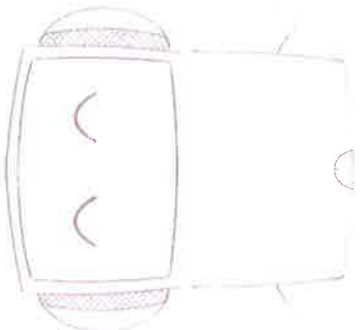
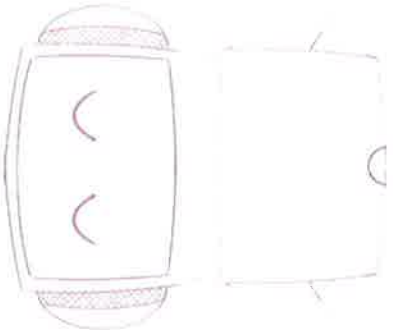
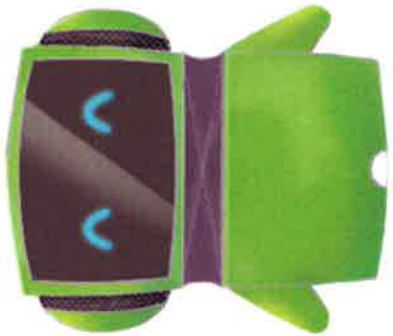
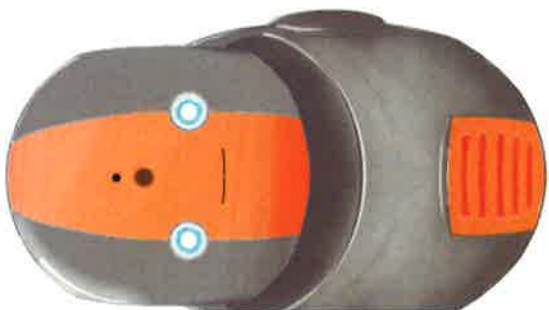
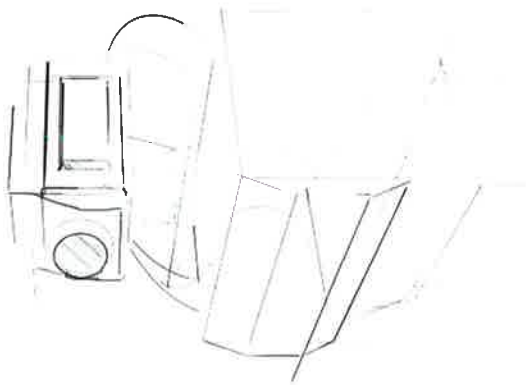
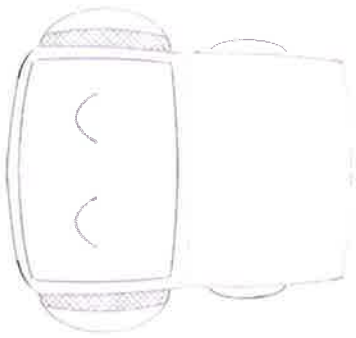
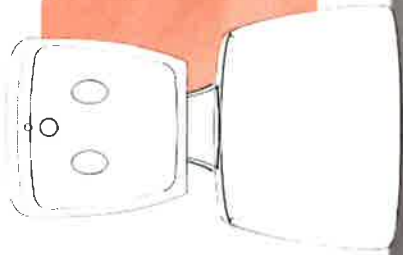
RADICAL

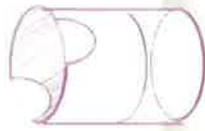
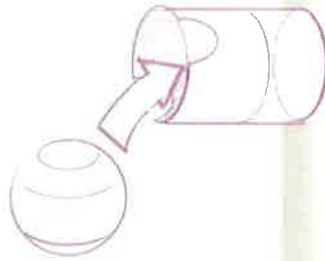
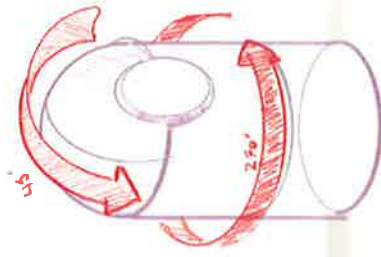
Artificiality
- significant
- external
- motoric
- control



- expensive
- over done after needs



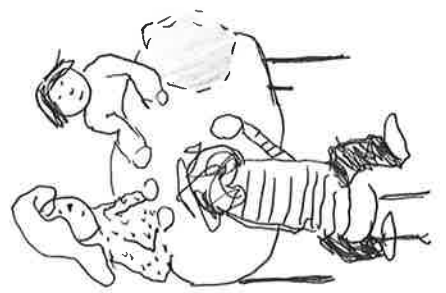
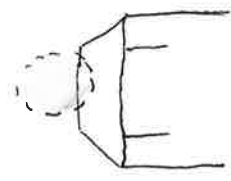
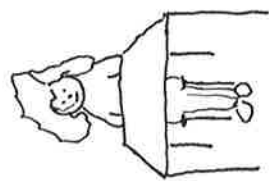




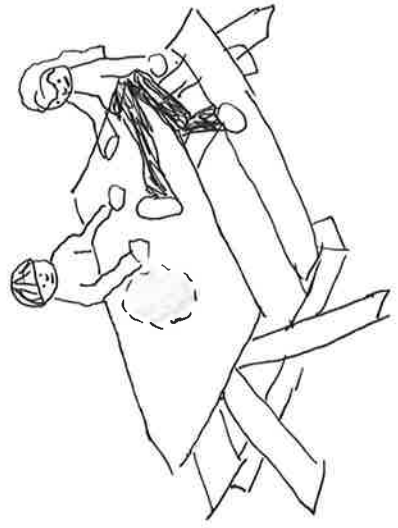
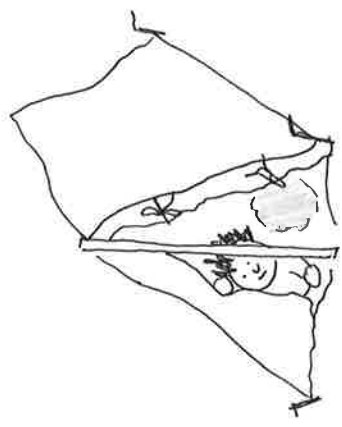
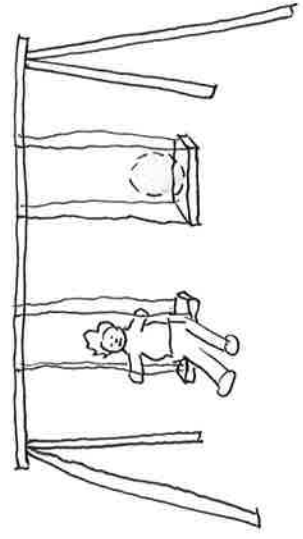
MEETING SCHOOLS

INTERVIEWS AND OBSERVATION NOTES

In education



In social life



7 EMOTIONS

• ENJOYMENT

• DISGUST

• FEAR

• ANGER

• SADNESS

• SURPRISE

• NEUTRAL

"Bridge between technology and relations"

"The stronger the emotional connection with the avatar as a representation of the child, the better outcomes can be expected from its use in terms of social connections"

"The level of autonomy the user has to define the level of participation in classroom teaching"

"placed in cubboard not used"

"Forgot to charge it"

"hard to see the issue, less easy to take in use"

"Student want to bring it out, not okay it is expensive and we don't want to break it"

"A tote bag to carry it would have been great"

"Fragil - it needs to be handled with care"

"it is missing hands!"

"a bit chunky, so it's different from a phone, they do bring the AVI where they would bring the person on a phone"

"Technology can shorten the way to get help and lower increase in worsen own health"

Teknoeliek HER

A&J + N.I (mobility - move yourself)

A&J (personality - audging 'Humor' Introvert)

A&J (Important to show "health" in situation so people then know how to include)

USER TO EXPRESS EMOTIONS

SECONDARY USER TO INTERACT MORE

dukte ma de GIDDE a gijne !!

A&J (Feedback and informative interacting in AVI)

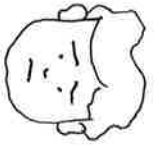
Teachers (Easy to bring to wanted situation)

A&J Teachers (See the child)

"The intended use made possible" - Tea



Surprise



Sadness



Joy



Contempt



Disgust



Fear



Anger

Spørsmål 18.01.17

Fra mail: Jeg har akkurat avtalt møte med to lærere i Bærum på torsdag. Ett klokken 10 på Jong skole, og ett klokken 12 på Mølladammen skole. De har begge slitt med å få AV1 til å fungere, så jeg vet ikke hvor mye innsikt vi kommer til å få, men tenker det (for vår del i alle fall) er verdt en prat. Sleng dere gjerne på om dere ønsker.

Bruk:

Hvordan oppmerksomhet tar den? Mye? Lite? Aktiv? Inaktiv?

Hvor mye er den i bruk i løpet av en dag?

Hvordan styrer klassen/du lading og bruk av AV1?

Hvordan er det med om klassen bruker ulike klasserom i løpet av dagen?

Er det med i friminutter?

Ordensmann sirkulasjon på ansvar?

Plassering på egen pult? Kateter? Hylle? Hvor står den?

Elevs tilknytning til den?

Bygges det forhold/bånd til den?

Ser du den (barnet) den representerer?

Hva synes du om utseende? Beskriv den?



Lærers behov:

Noe du ønsker? en påminnelse?

Hvordan ladningen utføres?

- charge - skal den være lade?
- Kan gå ut til KUV utleie.
- 2 mnd. leie I KE akkurat - for mye adm.n!

- hørne bryn - personifisering

- teknisk løsning og ikke på plass.

- skil. veldig upersonlig "formven"

- nimp

- kunne ha vært hos fjell pers. "syguter under armene"

- alt passer ikke til alt og alle

- individuelle situasjoner - syddommer.

fra ulike rom. men ingen reaksjoner.

"vurde segorganist" start: det små.

- selvsagt valg av - aktuelle timer? ikke flyttes

deks.

- kanskje en naturlig ansvar for verner. men kanskje

AV1 bra eller skurr på, da synes det.

ikke annet en på pult i klasse rom, "ikke kan du"

Face Time - funker ikke i det hele tatt

nei være på hele tiden!!

AV1 bra eller skurr på, da synes det.

nei være på hele tiden!!

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Mølladammen 19.01.17 Ungdomsskole

Gammel skoleologi: AC wifi skanner

velig trist for vår elev

Teknisk skop.

Introduksjon for lærere, nei

ME - eller hjemme fra og til 2 år

hvilke klasser har

fordere kontaktet - om Netisolation

Lærere så mye kraft if kommunen

Er det fornuftig? Jam-så-ses ordning

L kostnad over på foreldre. - prøv med.

På gå gjennom NAV - trykknemiddel

det går bra - hva gjør i da når flere strenger"

Face Time - funker ikke i det hele tatt

nei være på hele tiden!!

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-
- Elevers tilknytning til den?
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Lærers behov:

- Noe du ønsker? en påminnelse?
- Hvordan ladningen utføres?

JONG SKOLE 19.01.17

Først ute med A1

fra 3 kl. - 7 kl.

Dårlig 4G

1 dag på Hallingdal
leirskole

- opplyttende
eneste gang den kunne bli brukt

- Skolen betaler selvsagt NAV
- Kraw på hjemmeundervisning - gira på AV1
- Pådrive AV1
 - liten fordel
 - enkel å bruke for lærere
 - kunne stå seg
 - laminerte informasjon til lærere
 - enkel bruker manual.

ELEVER RUSELØKICA

7. Klasse (11.12)

SITUASJON → RESPONSIBASER VASJON

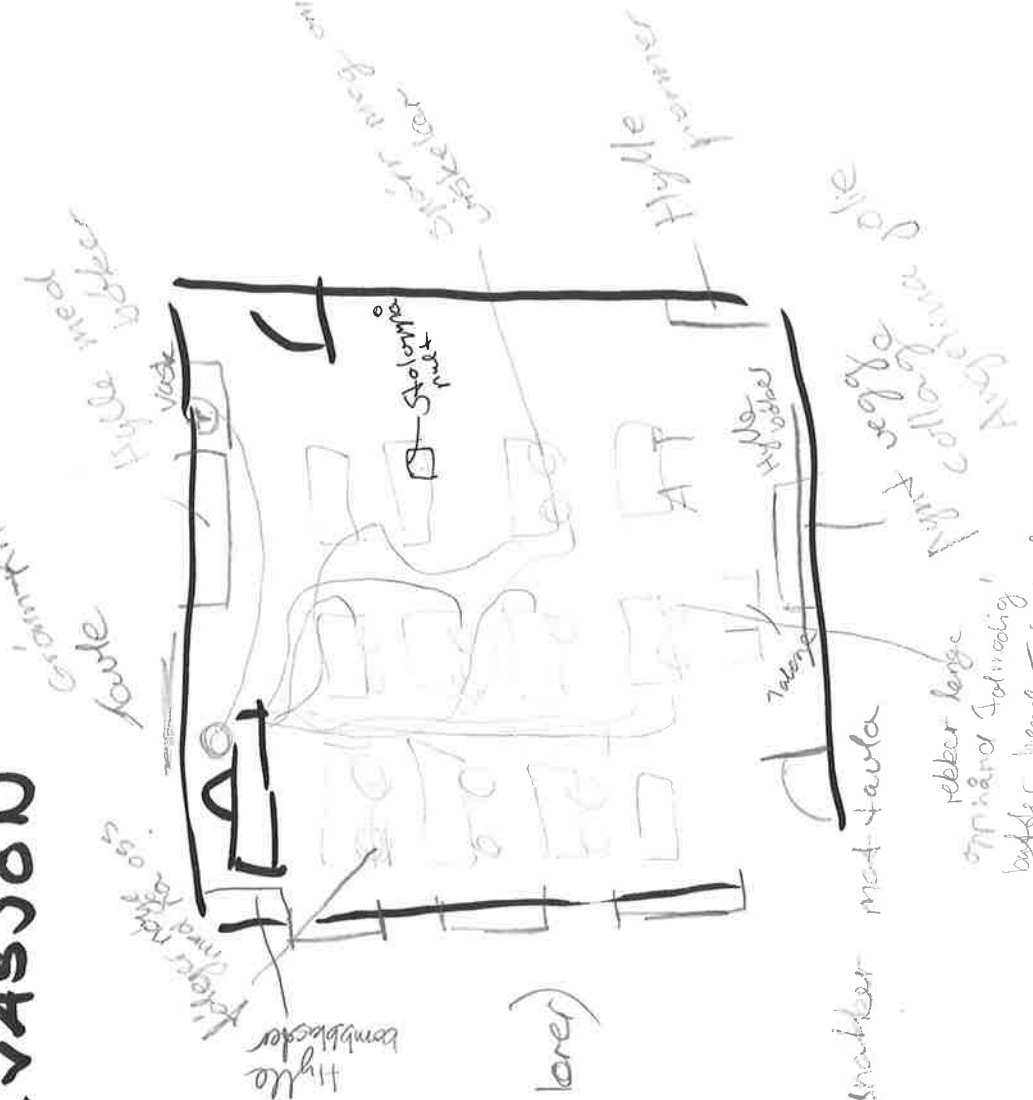
Samarbeid

- trenger utstyr - Spør om hjelp
- spørsmål om omgitt - viser i bok
- Lærings partner
- Rekke opp hånd - Si lærers navn
- Punder på svar - (skriver svar tavle lærer)
- Lærer bruker navn før å snakke til elever.

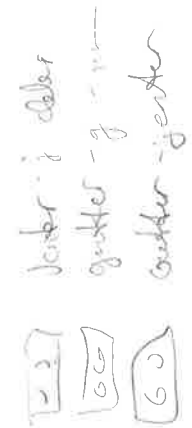
- Svare 'resmenig' til svar - peker og snakker mot tavla
- peker i bok.
- trenger viskelær, lærer hender.

Individuarbeid

- lærer går rundt, elever viser og de står sammen og ser i bok

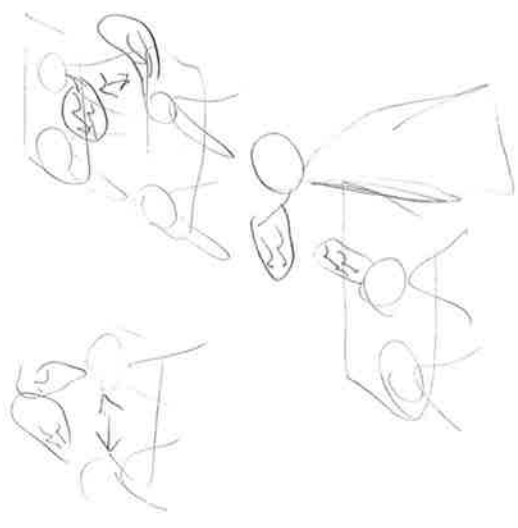


litt vanskelig å høre de fremste elevene



- Det er nissevising i bok!
 diskusjon rundt oppgaver.

- Elever har med bokar for å vise om lærer er opplyst



seg sjøl
 svar å vite
 for de
 med
 lærer



Martin!

"Svar runde" - navn til elev - hver svarer
 skriver på tavla

SPISING elev kommer å niser pøse

ordens elever hender melk.

- elev flytter seg rundt "dere skal sitte på egne plasser" lærer
- Bursdags barn 'per sang' for kake! lærer varmer opp elever
 full sang med bevegelse!!

- 10/10 om gymn - de som ikke har gjort lekse må vente
 i skolekjøkket, 2 og 2 - i volleyball

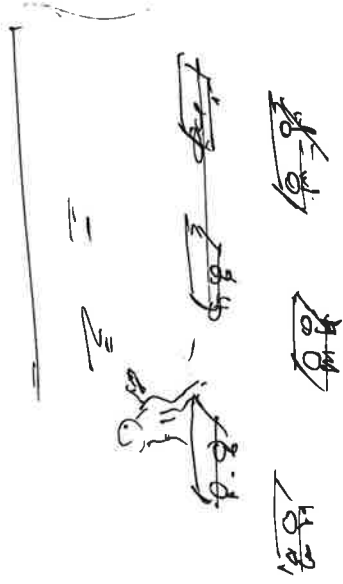
ELEVER RUSEL ØKKA

MATEMATIKK

SITUASJON → RESPONNS / OBSERVASJON



To og to jobber sammen
 Læringspartnere
 Kan snakkes sammen om
 oppgave. Diskusjon



Lærer gjør en og en gruppe
 mannsikt de har foretatt oppgaven.
 Flere svarer høyt.
 Resoneringsoppgaver, samarbeid utvils
 samarbeid over mellom grupper for
 knipses for å få læreropptaksomhet
 Lærer er litt morsom på elevens "beretning"
 low med spetting.

Flere fæder ses = begynner å fikle med penn
 Lærer ser elever ikke forstår / jobber og
 gjør umiddelbart et til de.

Lærer starter opp oppgaveliste elever
 men jobber ses gjennom. blir rundt å
 veileder underviser ved håndopprekking.

"Lærerstyrst"

29. Mars

Lebbr-Gine |

- mer foredrag

- Helberg, jobber der 100%
- Akademiet 36 timer i mnd
- elektronisk tavle 'lyset av'

Student:

fagdager tidligere
ogs. 1 dag 2 fag!

- På pult: data, bok, redbull, mobil, veske, headphones notatbok.

L: snakker til elever, ser fra per. til per for å inkludere

- Skiller spr. ang ting hun viser på tavle

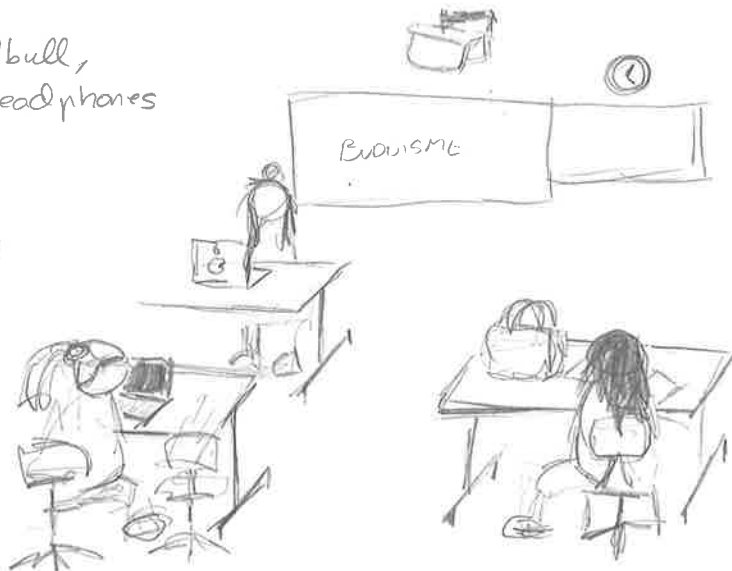
- vekslig av blikk

- Samtale mellom lærer- elev - blikk vekslig, spørsmål
- Lærer tar ansvar for samtale fra elever.
Input

"sier navn og spør" veileder til rett svar.

Kommunikasjon lærer-til-elev, elev-til-lærer ikke noe mellom elever.

Lærer: "Tea henger du med?"



CONCEPT DEVELOPMENT

SKETCHES

PHASE 2.

ATTENTION - MOOD

- * Passiv - Light (rhythm-color) Movement
- * 'HAND UP' - I WANT TO SPEAK
- Light - intensity color rhythm
- Movement: 'hand' UP
- Sound: ONE - REPEAT?
- CHANGE FIGURE

* CO - WORK

- Motion - follow group
- Move parts

INFO:

BATTERY: ICON

WiFi

'NEUTRAL'

light intensity

Sound

Movement

Mood status read....

- Kon vi lese: glad

trist

overasket

....

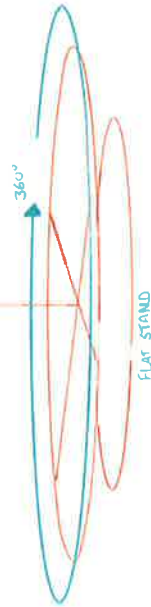
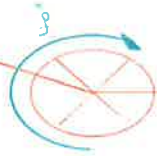
....

TH 2G4G TH

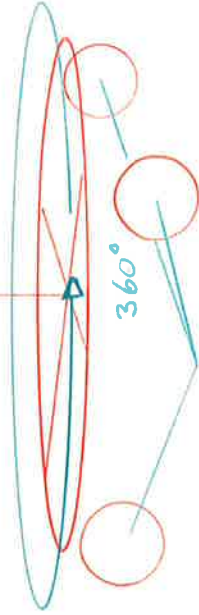
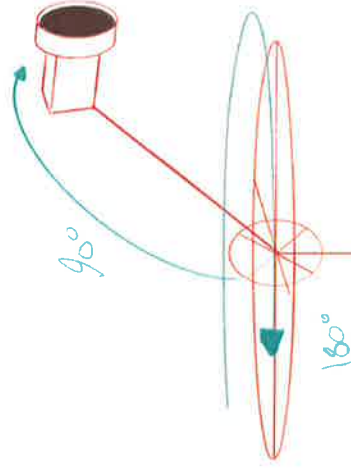
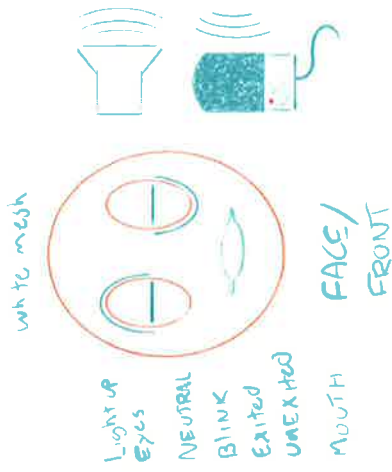


EXISTING SOLUTION

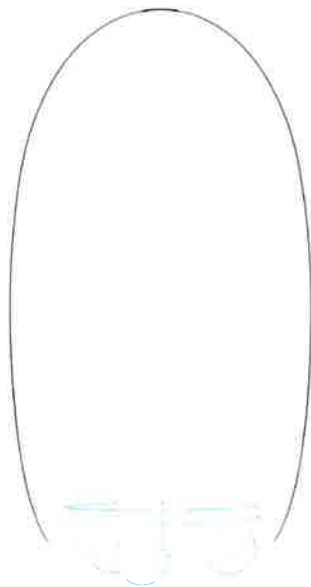
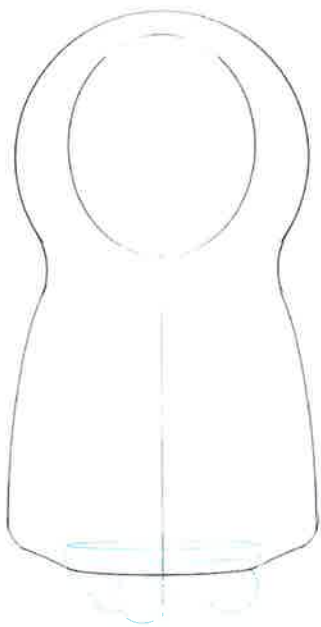
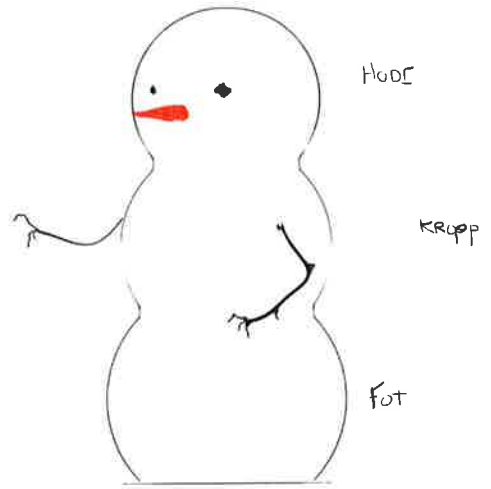
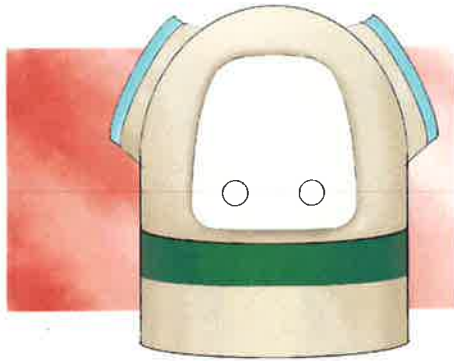
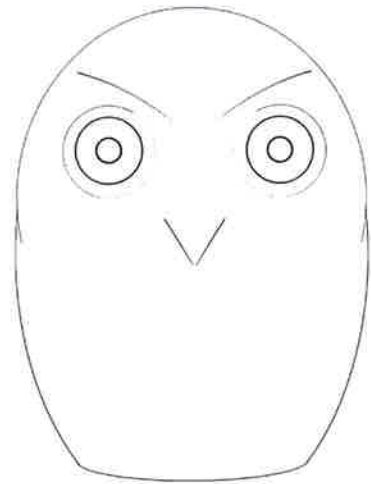
LIGHT SOURCE
PASSIVE
ATTENTION

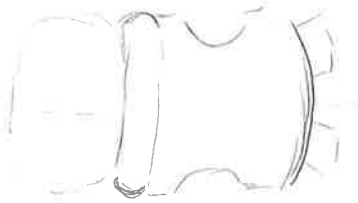


FUNKTIONSSKISSE



3 POINT
STAND





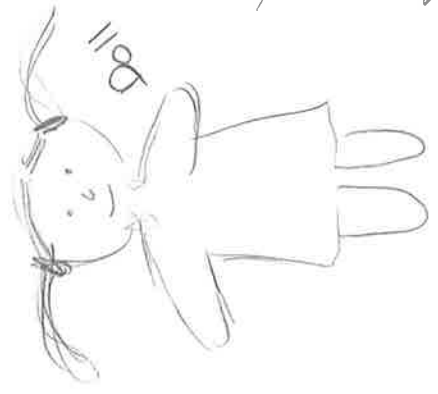
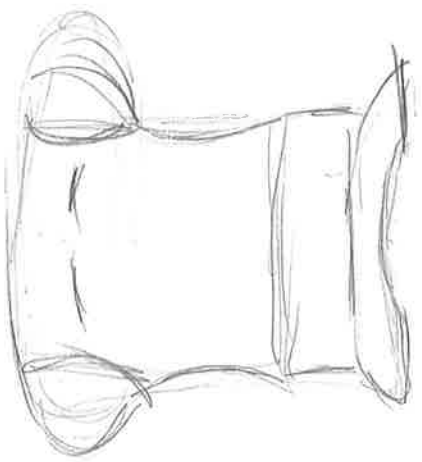
Front face
point of reference

rotation
bend

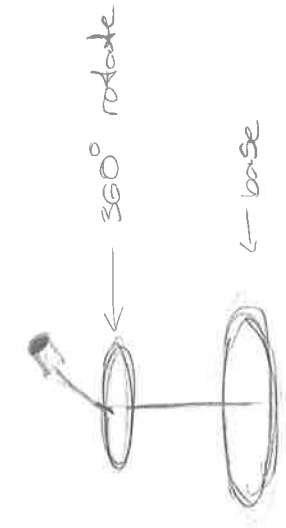
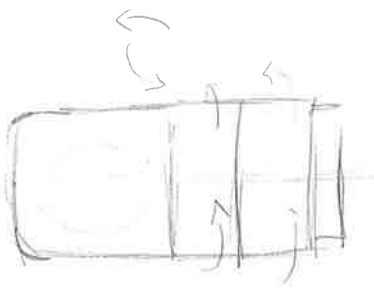
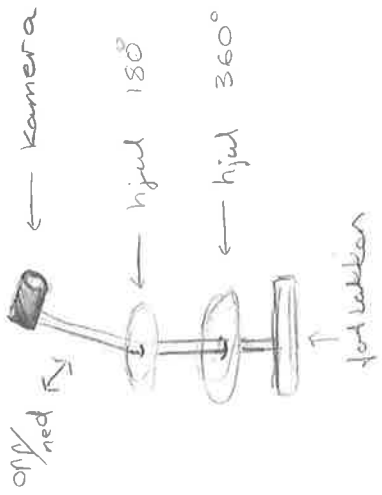
view point
- look up and down
twist 180°/360°

body to hold

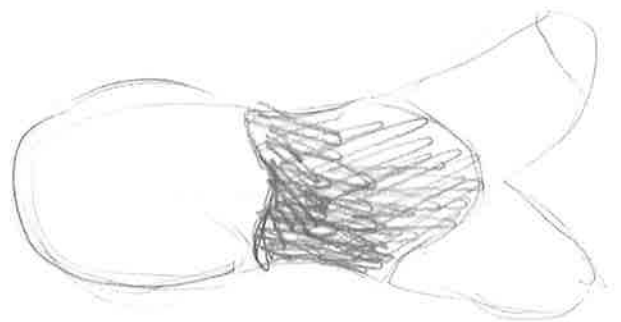
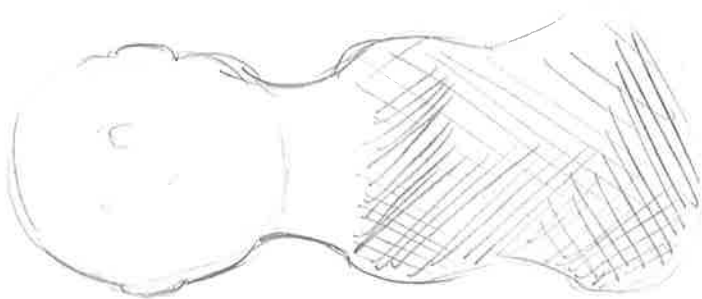
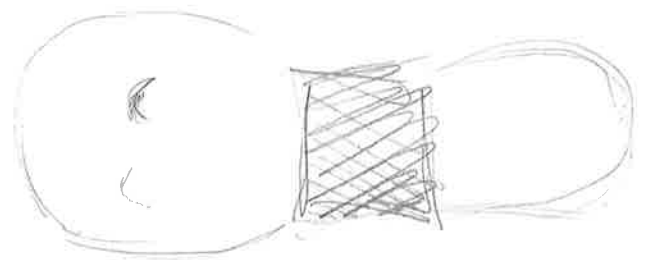
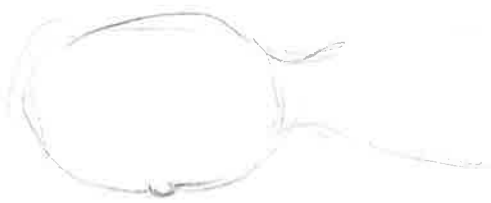
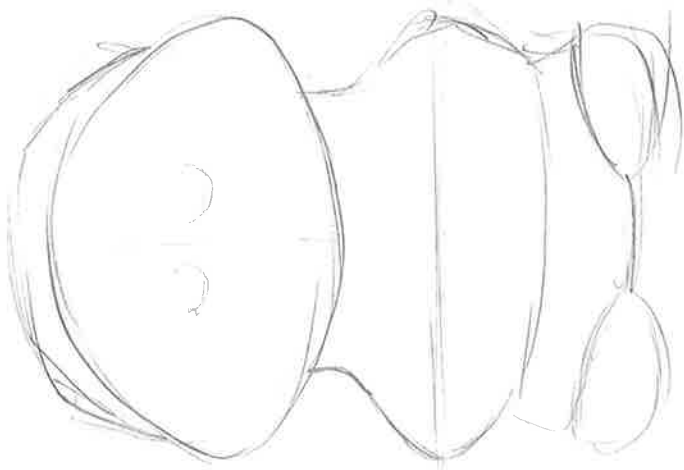
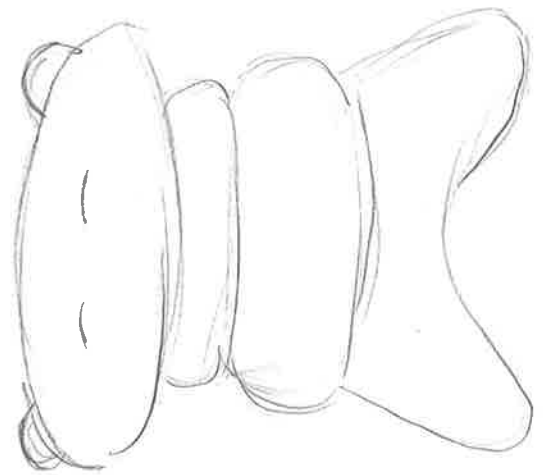
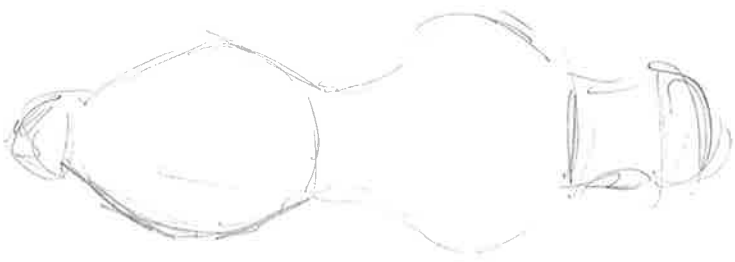
carry
stand steady

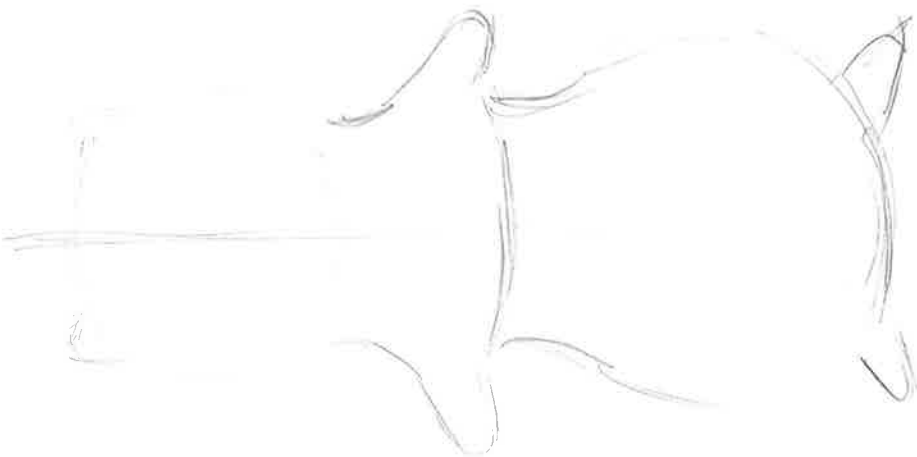
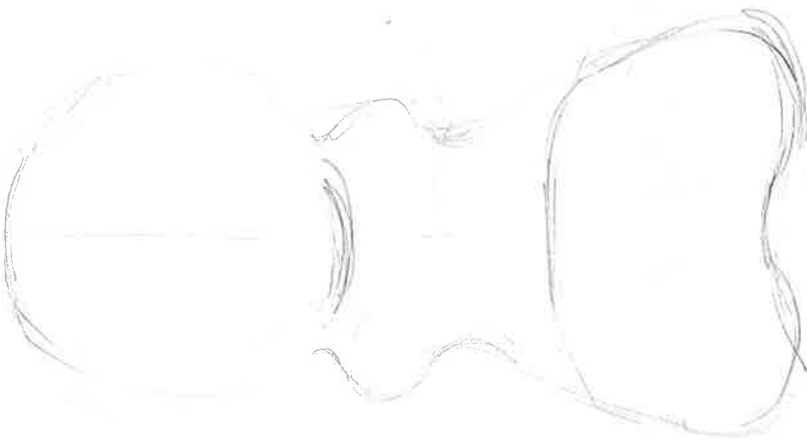
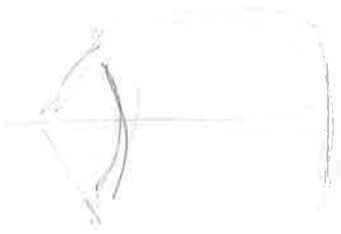


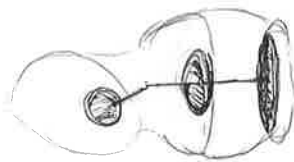
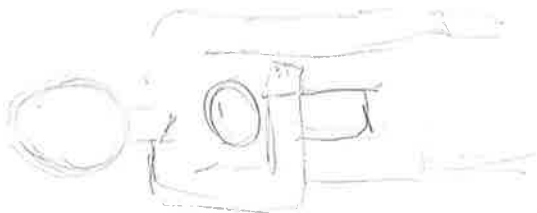
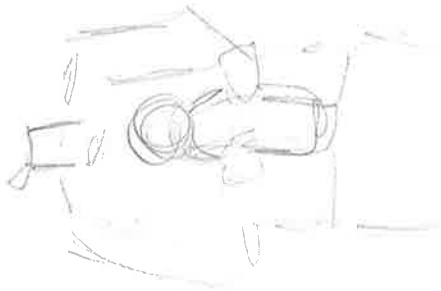
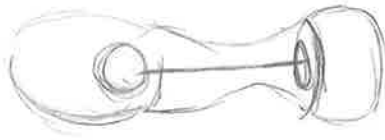
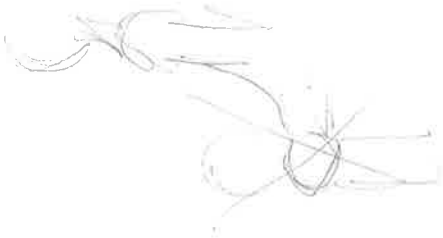
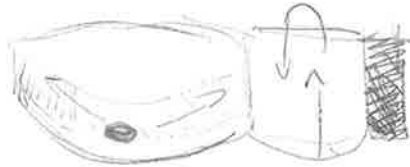
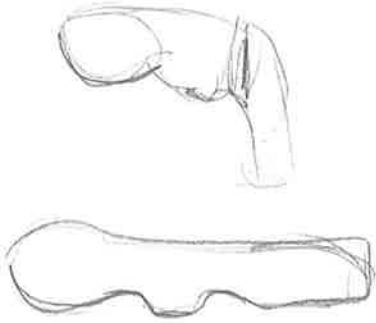
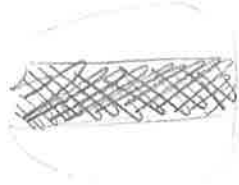
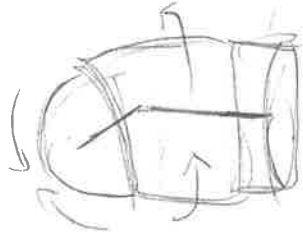
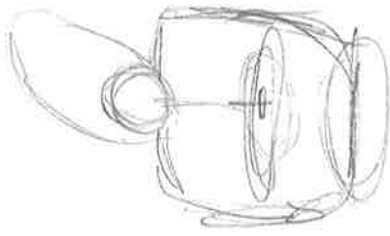
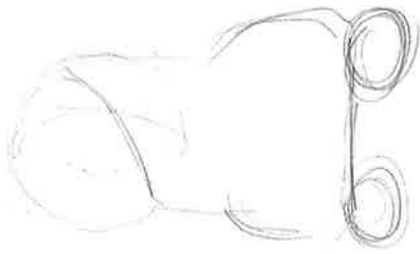
sit
steady

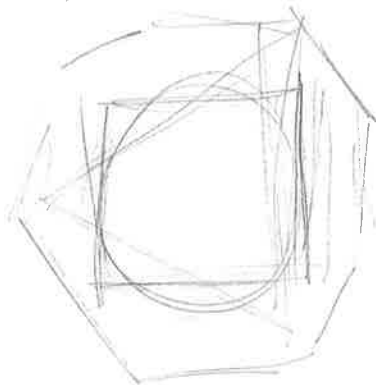
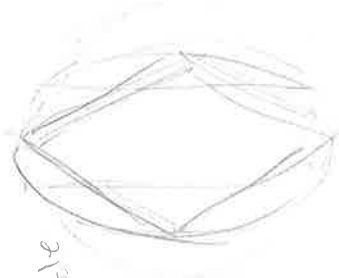
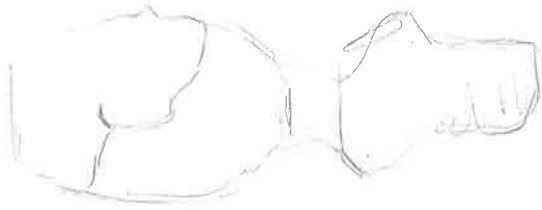
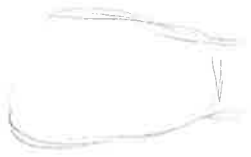
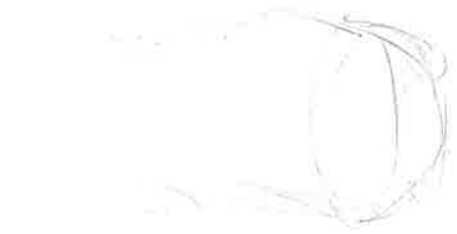


'Show it what happens'



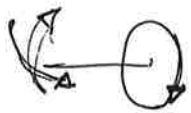






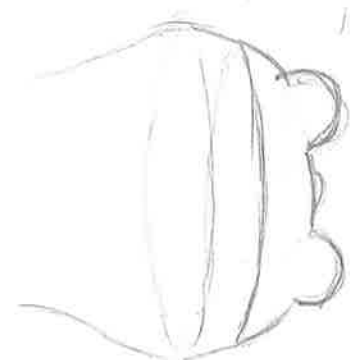
1.5.18





160°

- Handy



to be able to fall
all around
rubber
foot

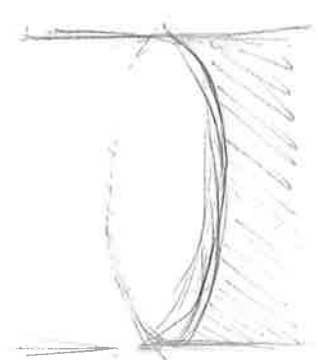


Grin
wedge

mask



360° rotation
circular mechanism

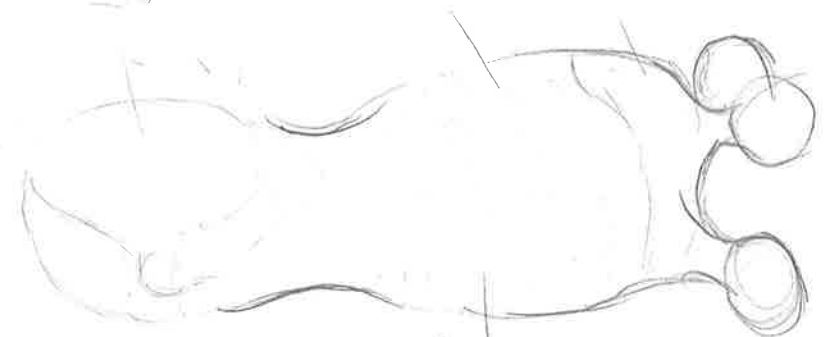


metal base

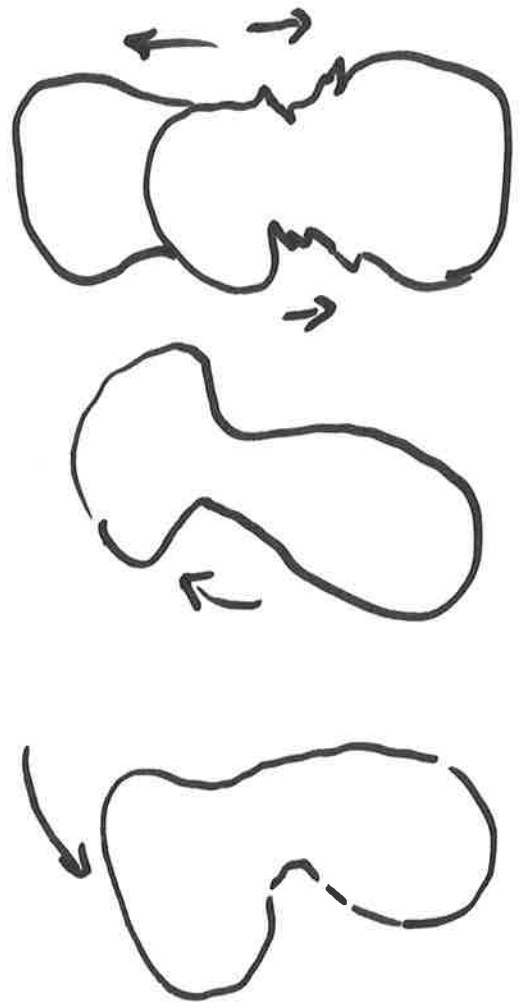
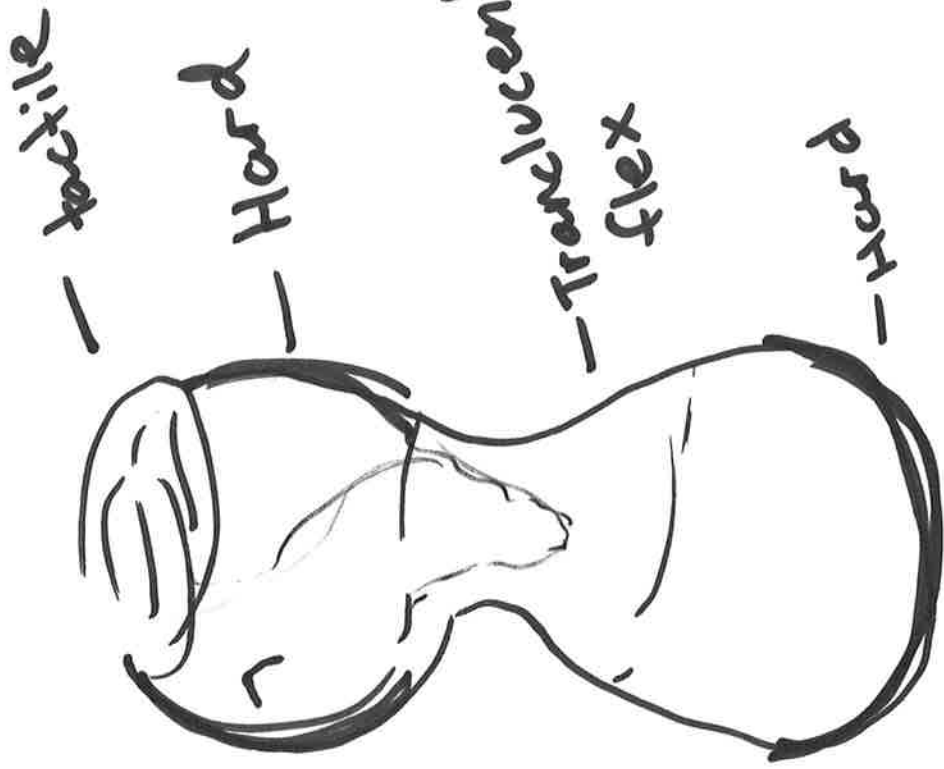
textile

160°

145°

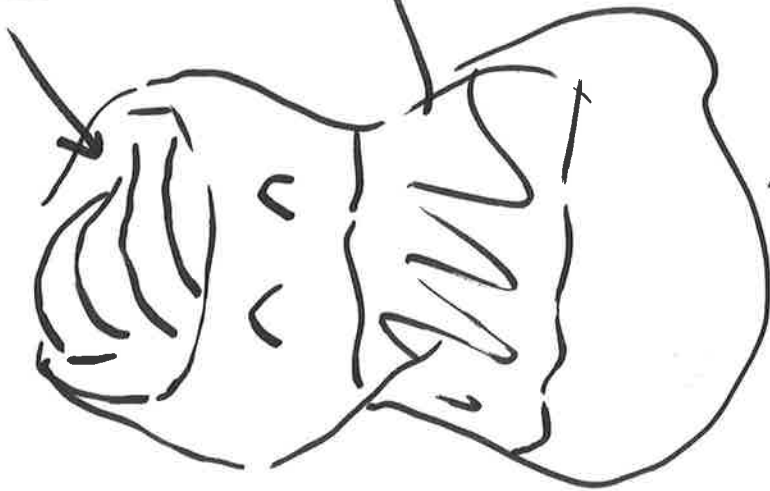


rubber
grip

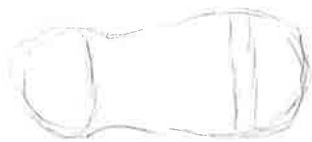
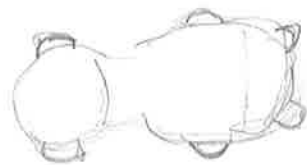
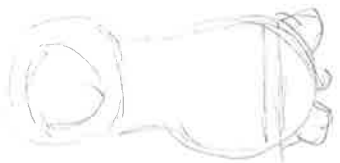
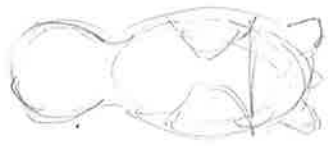


motions

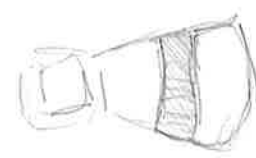
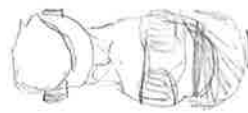
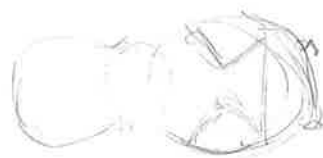
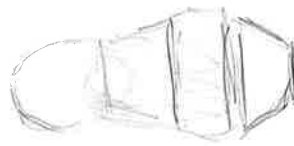
light flex of i p



steady reports



Swain
Organism
Skimby
stuff
Swain



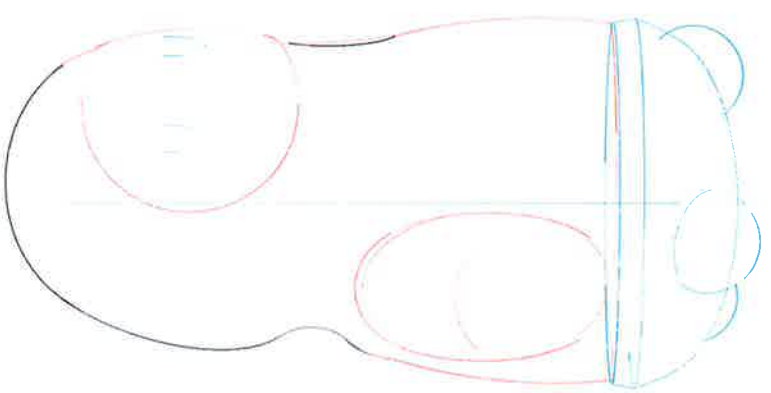
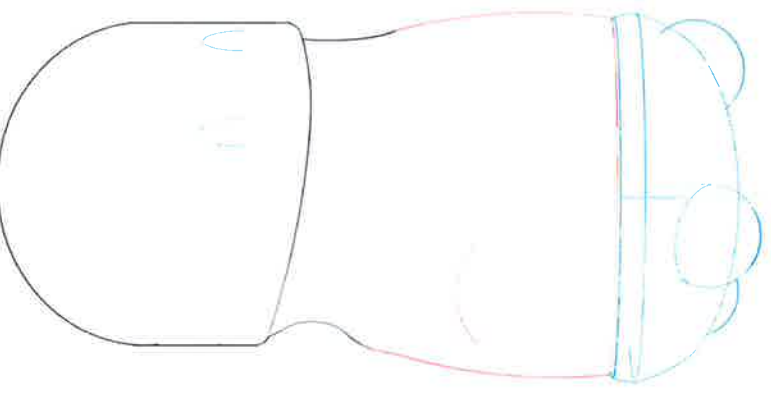
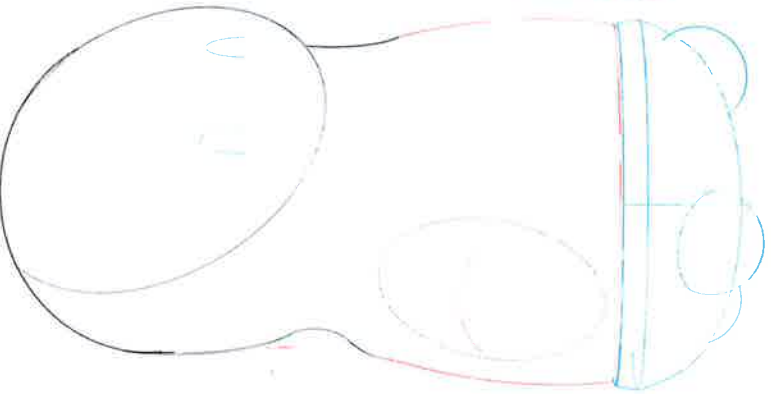
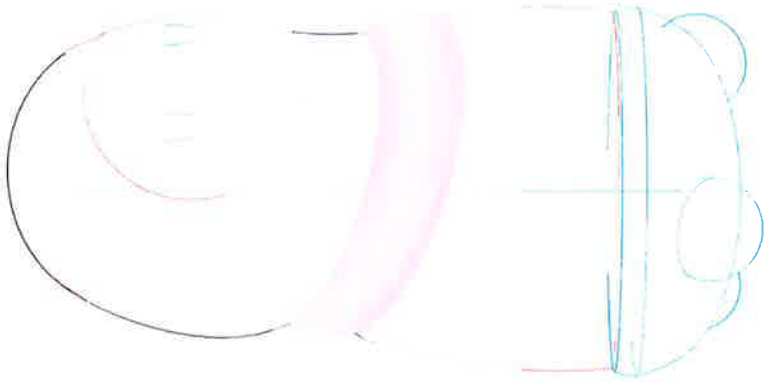
"Baba"
"Baba"
"Baba"

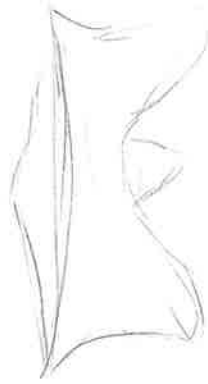
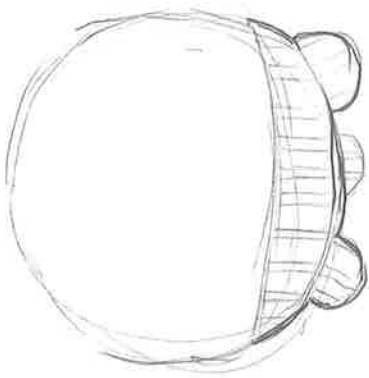


CONCEPT DEVELOPMENT

SKETCHES

PHASE 3.



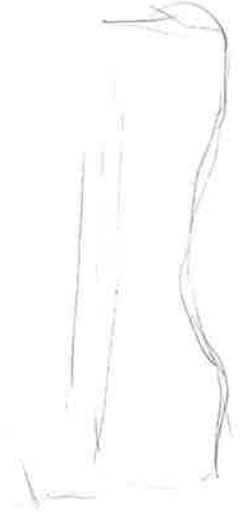
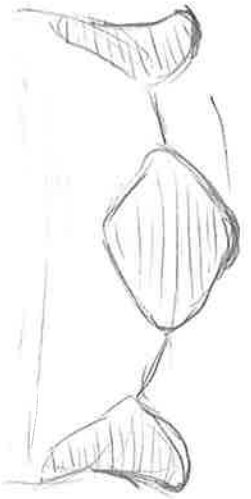


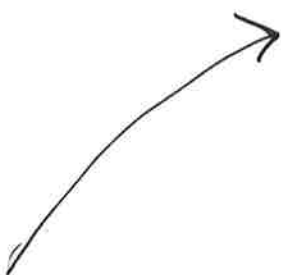
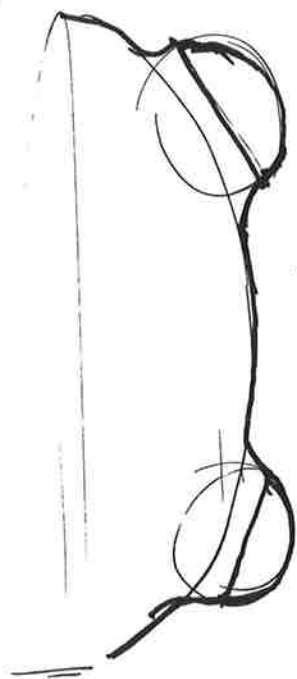
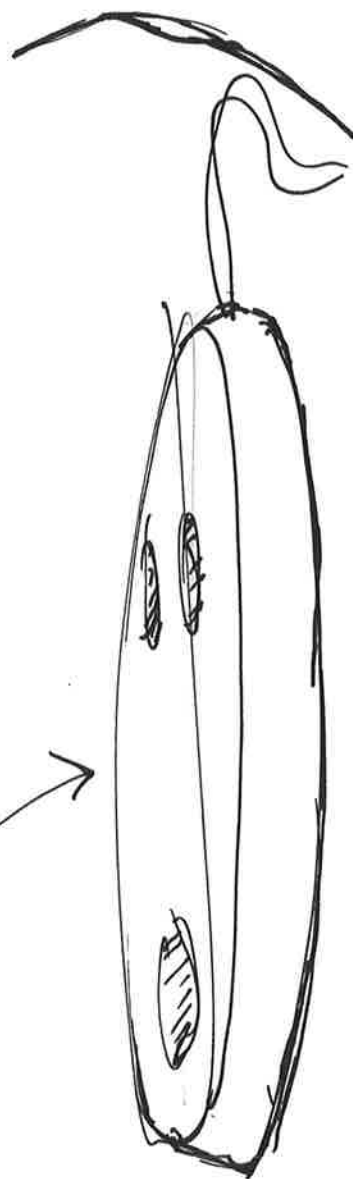
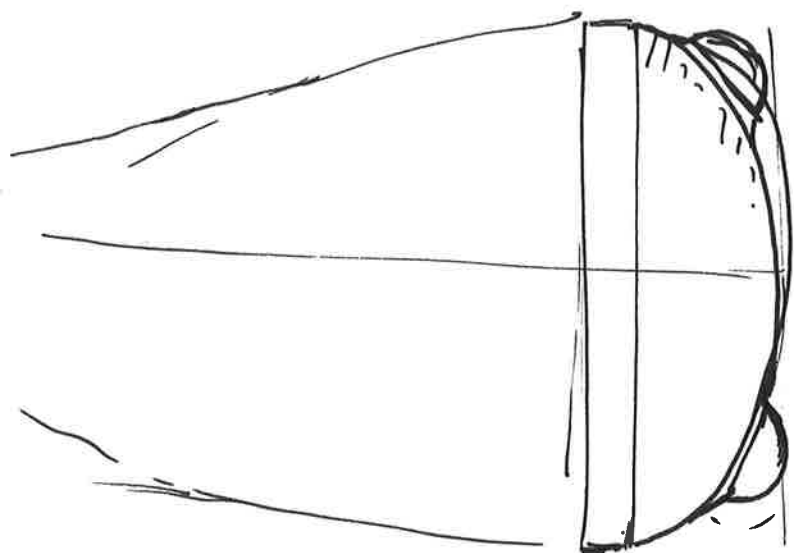
← 2 meters
360°

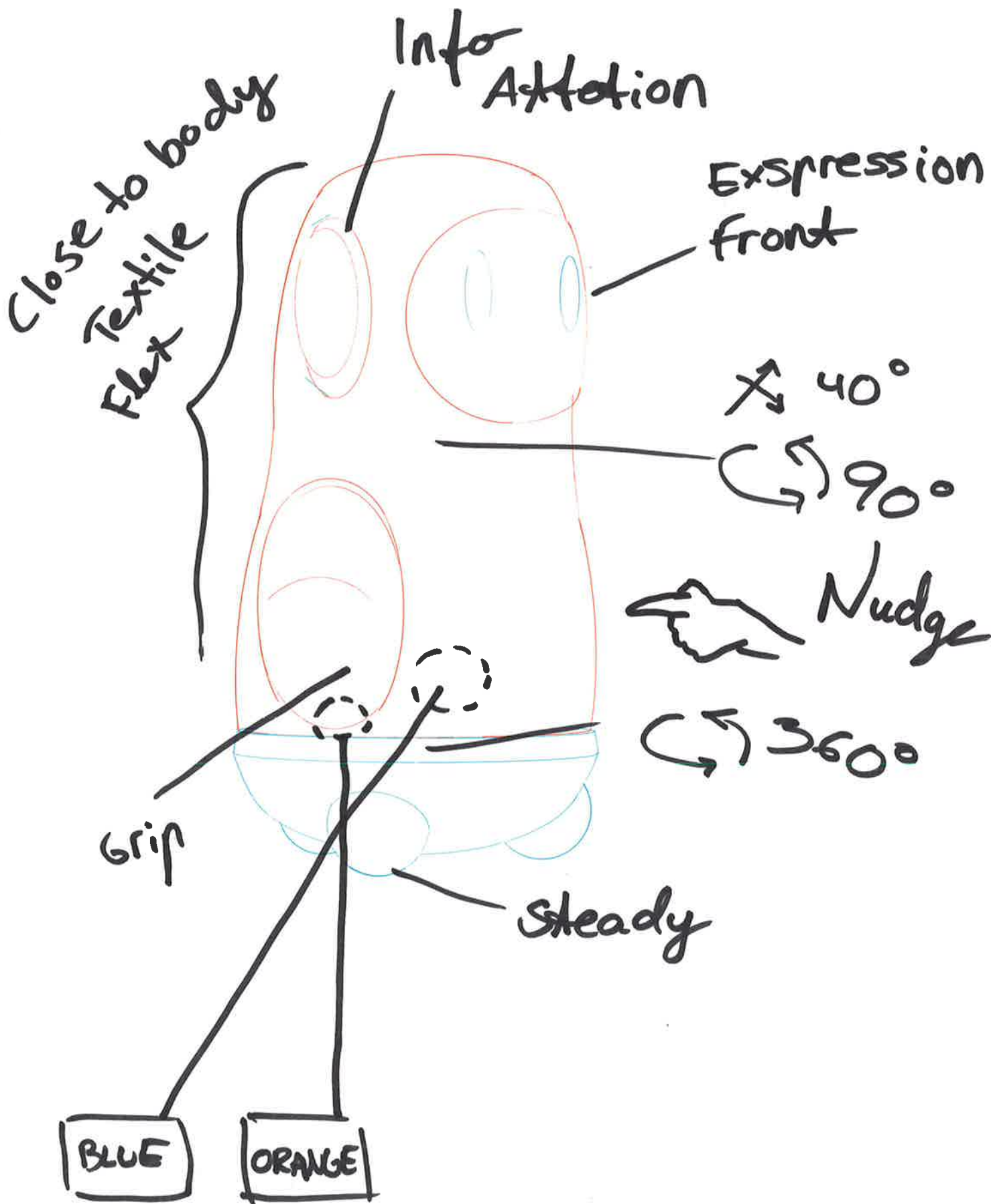
Battery []

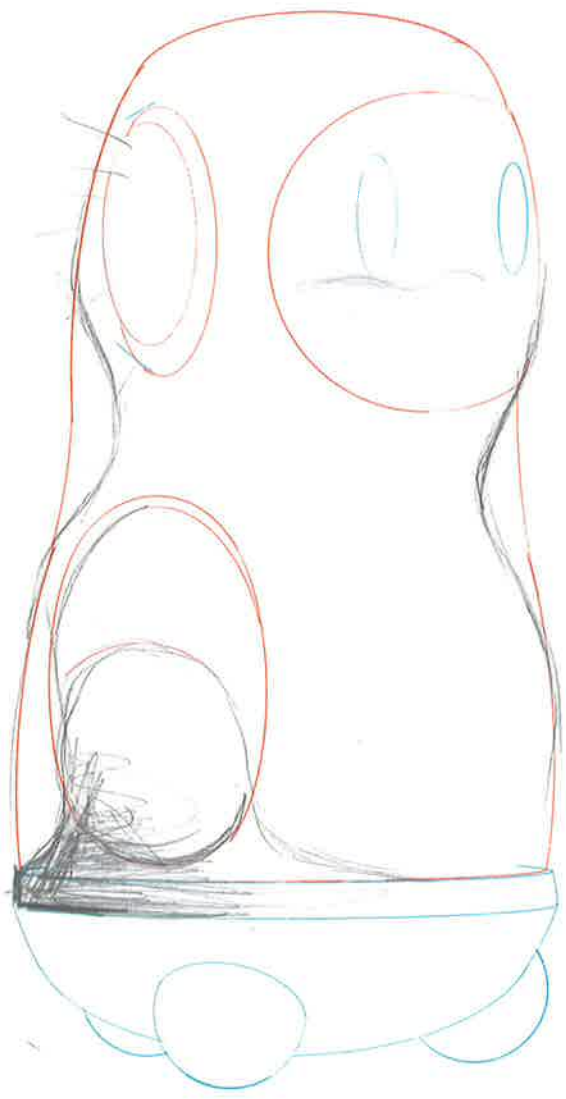
connection []

Dock charged?









Hello my friend

head ↑ material
different
speed



90°

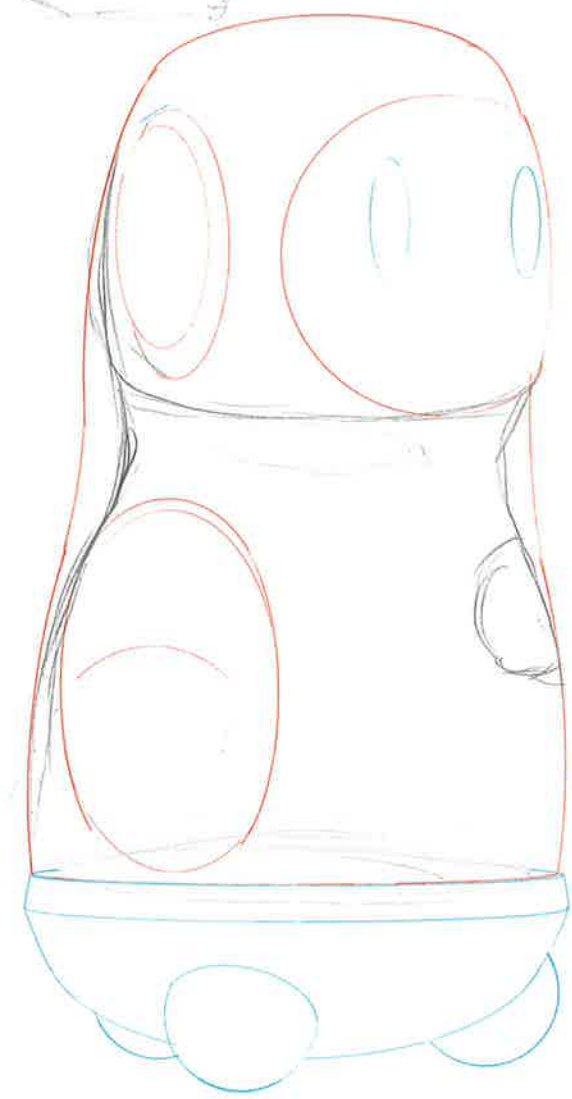
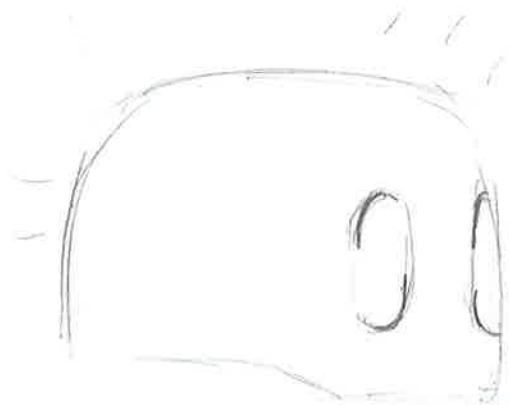
360°

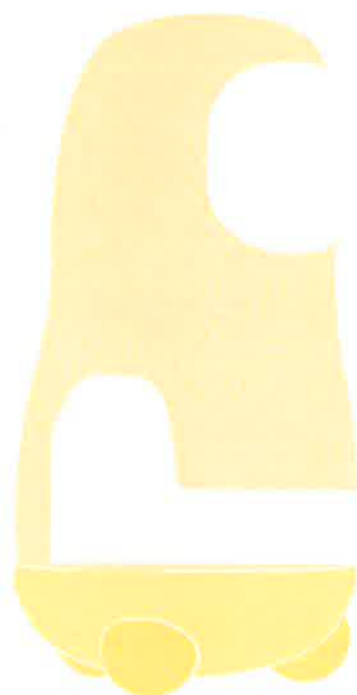
Grip

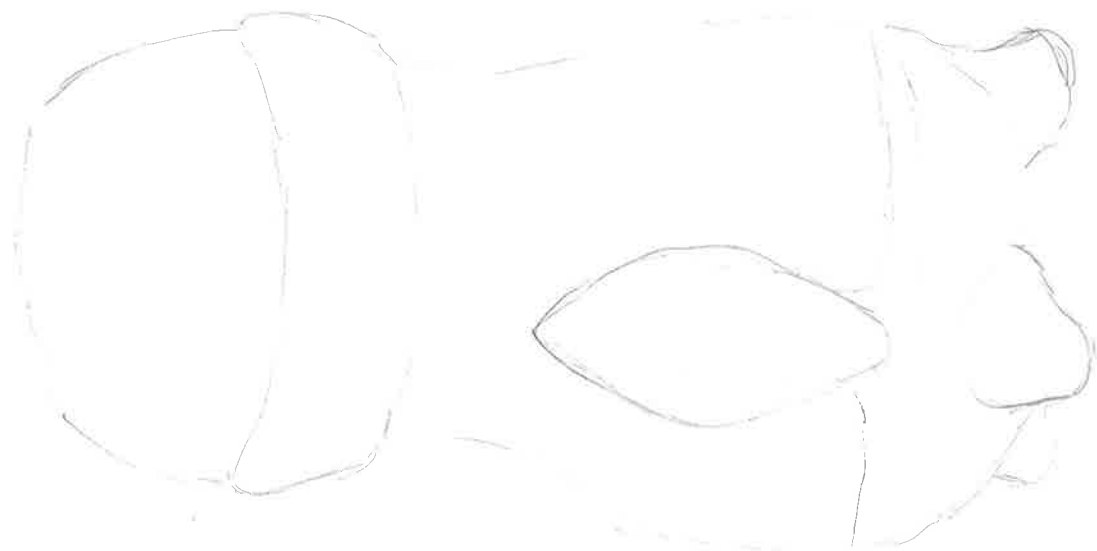
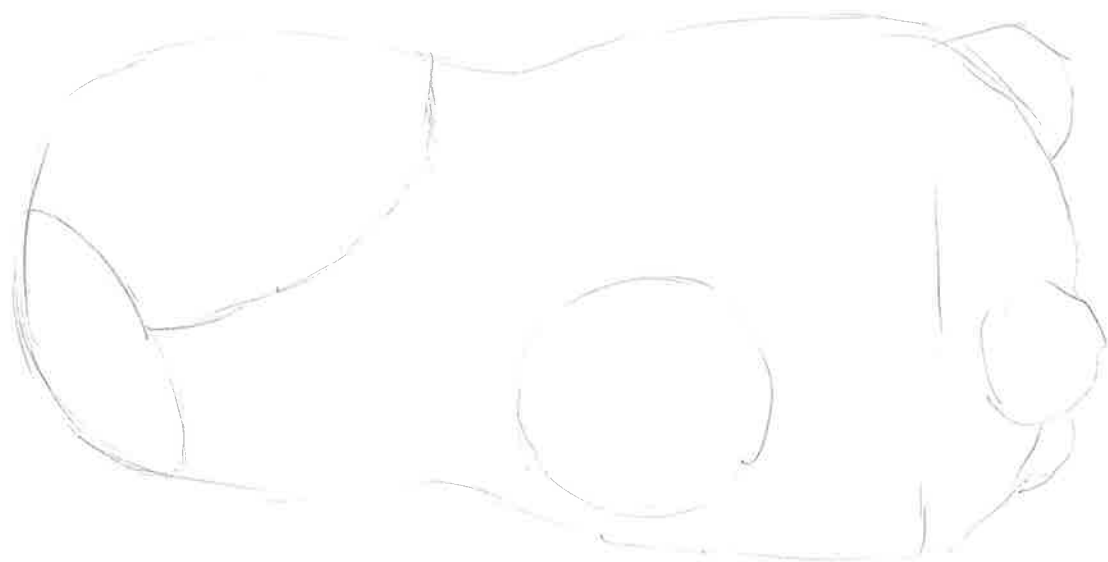
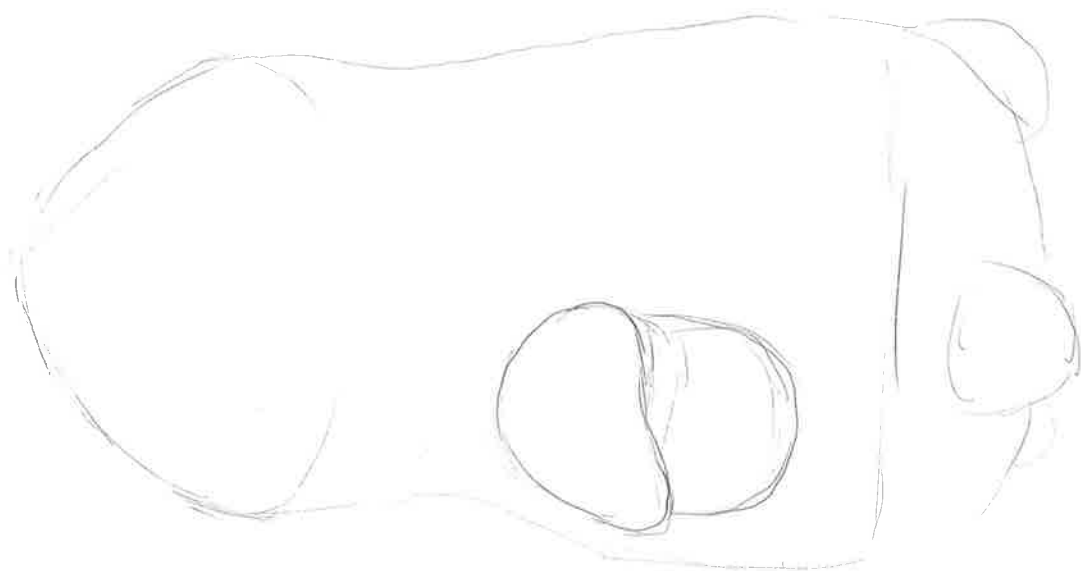
Indication
too hold
right way

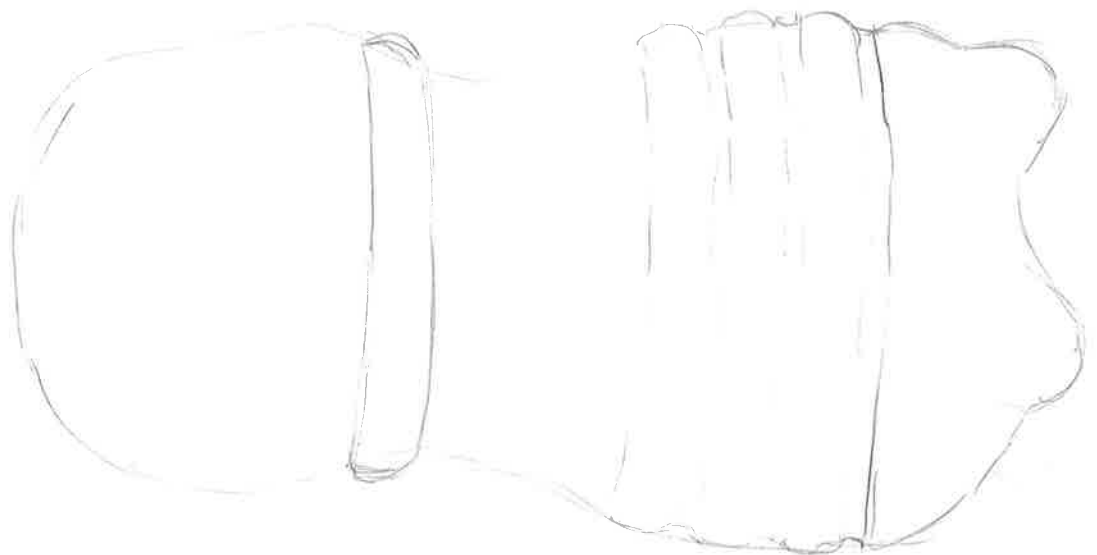
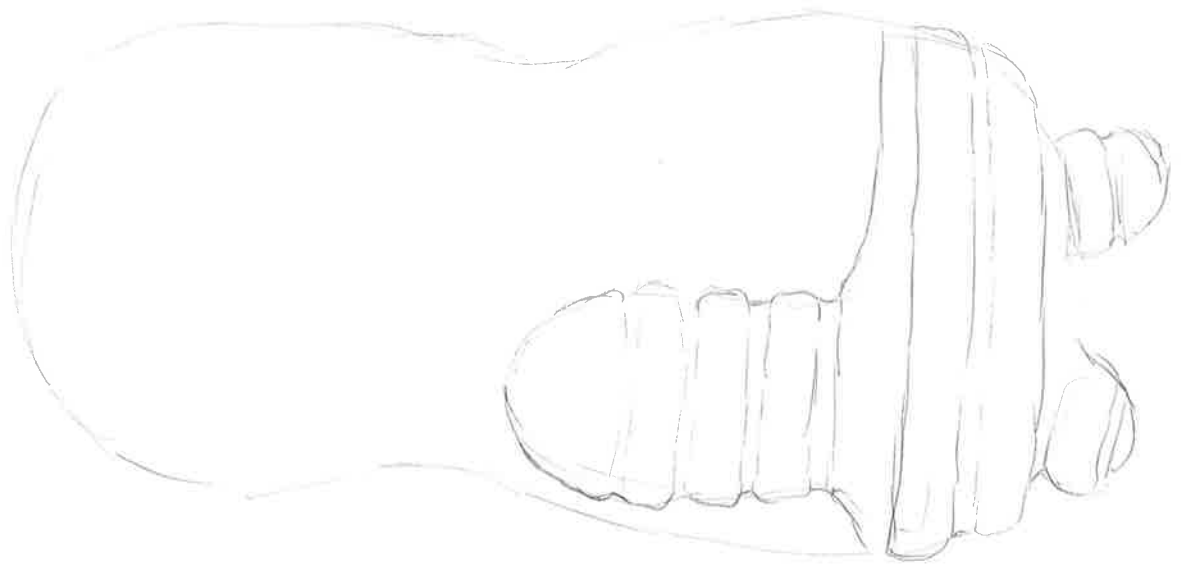
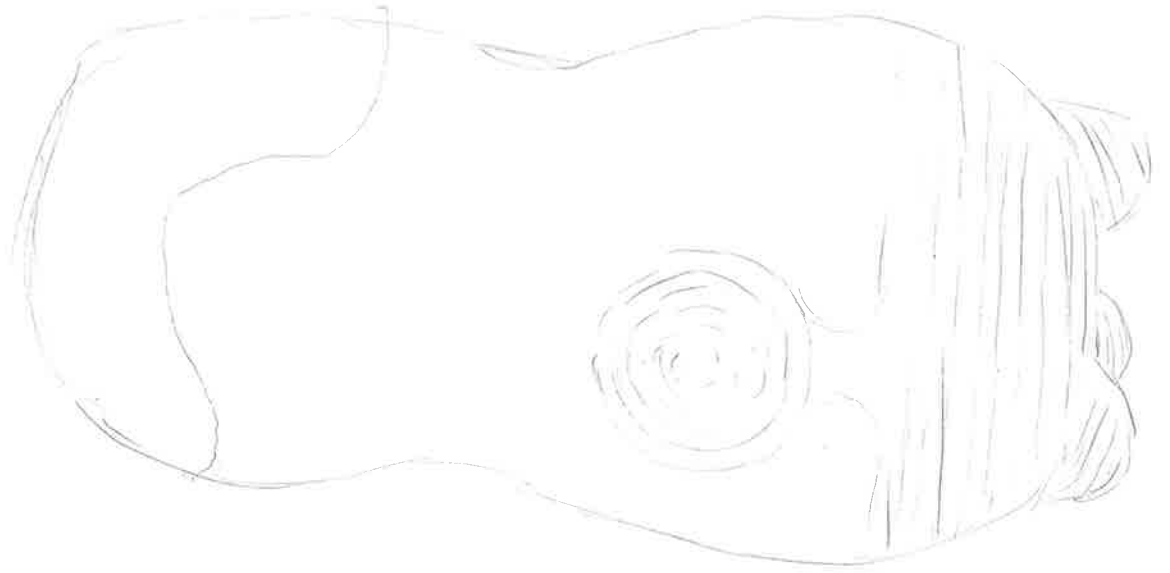
Steady

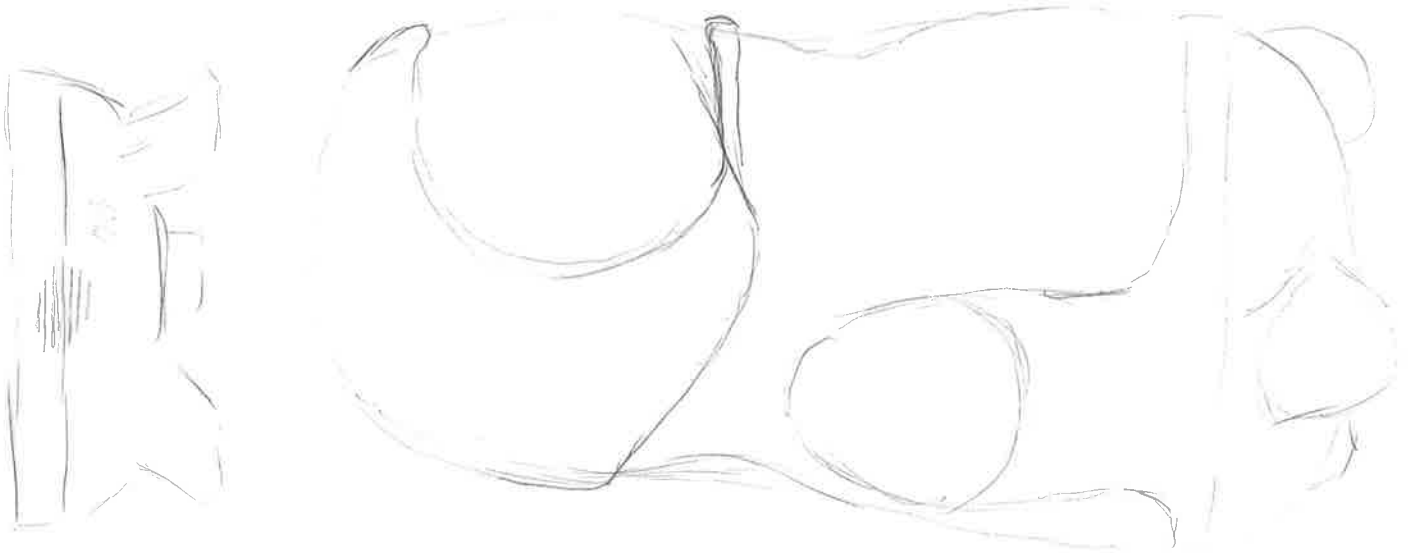
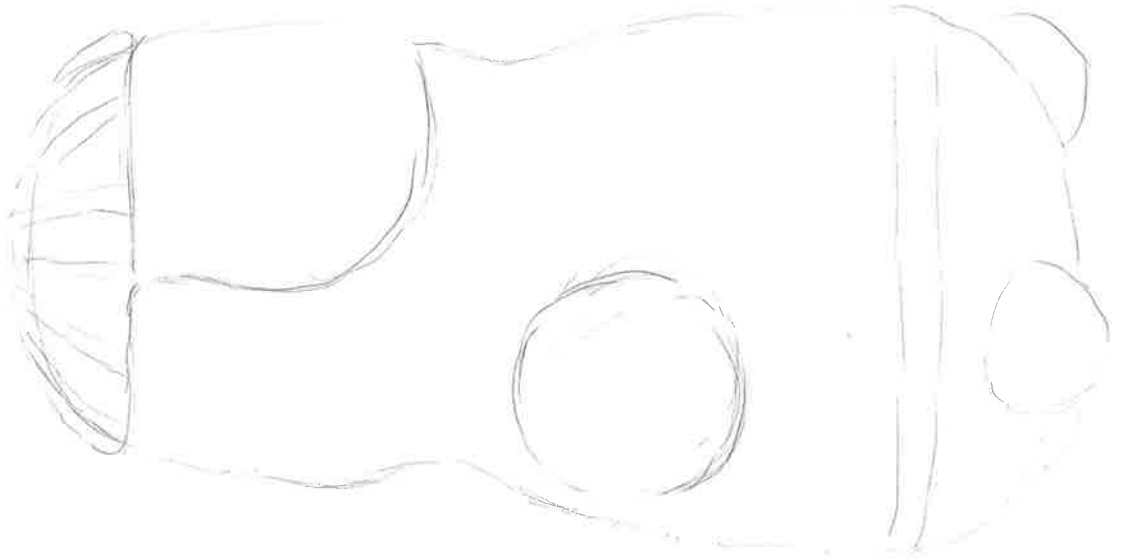
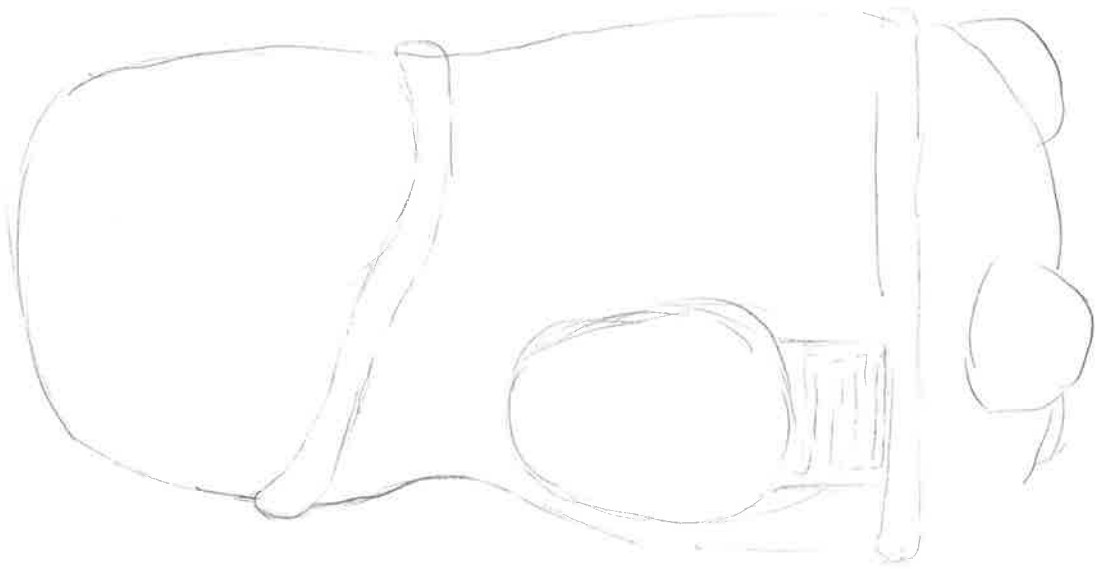
Where is } passive?
How is } question?
 } neutral?



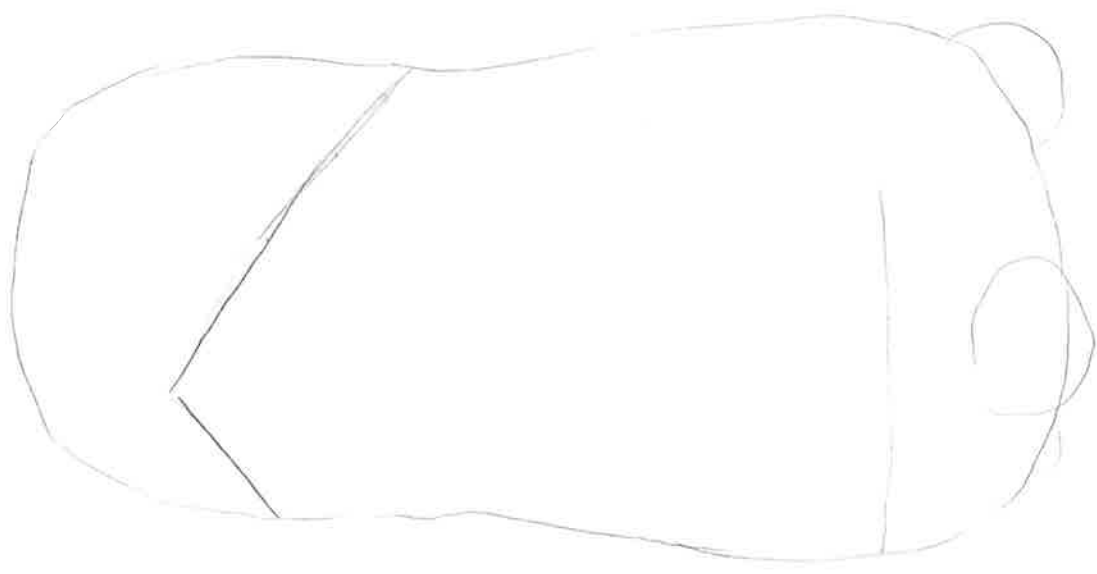
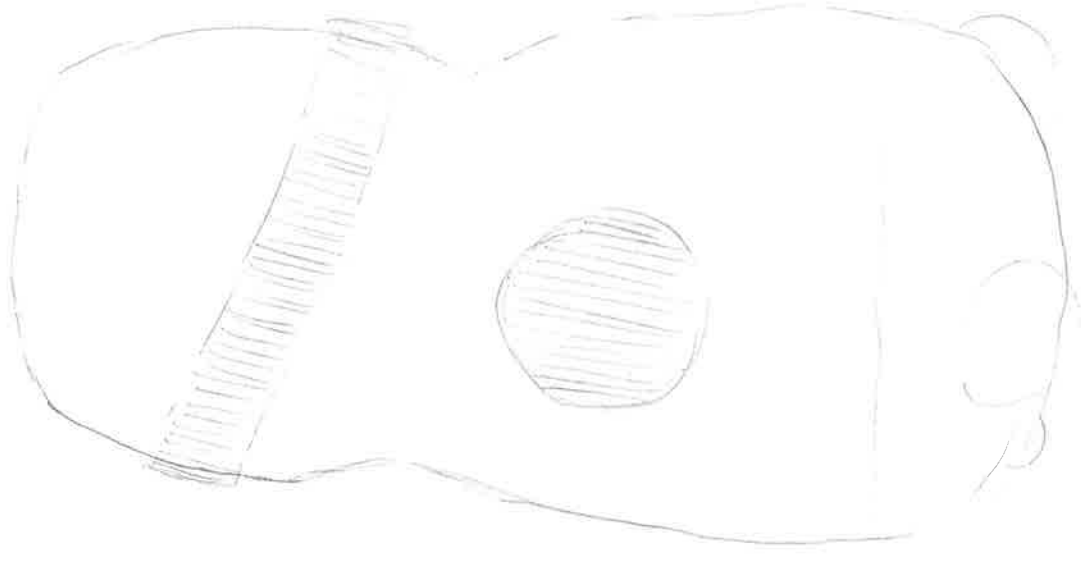


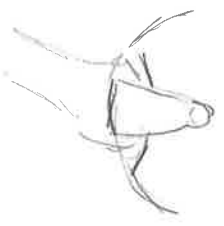




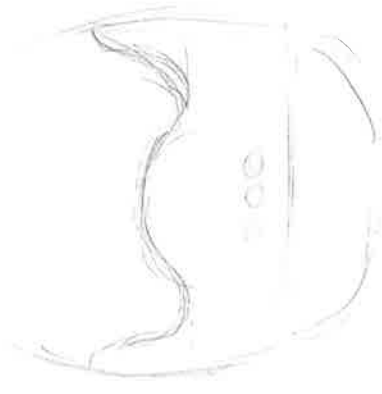
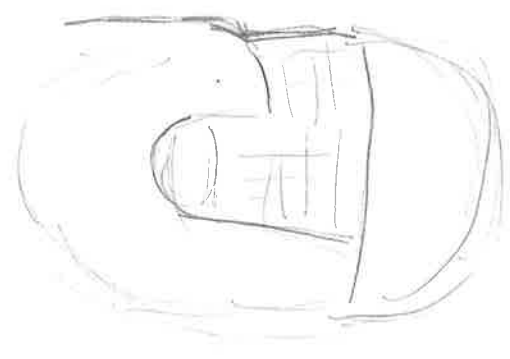
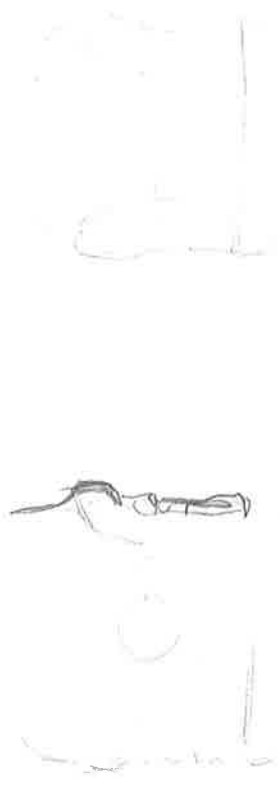


Passiv - Light 'puls'
Eyes - Light
Attention - Flash/blink

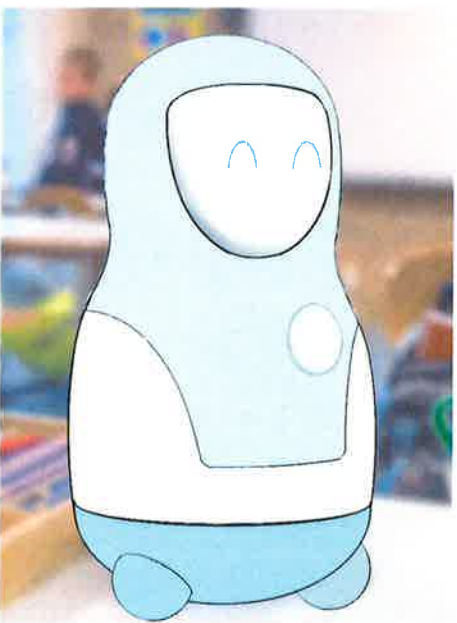
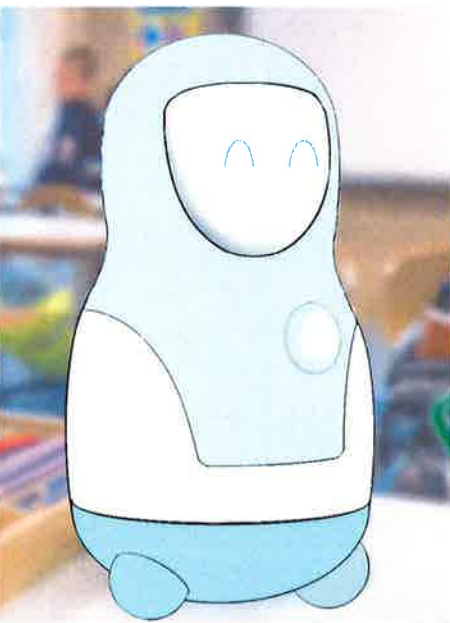
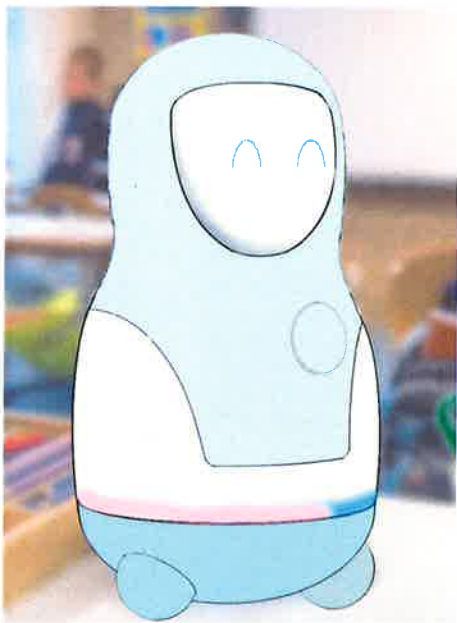
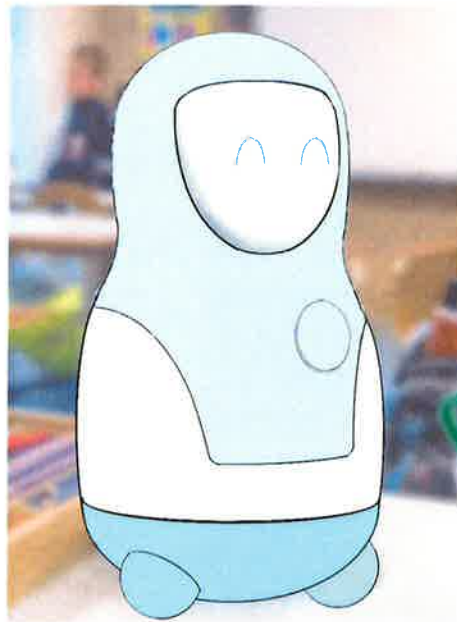
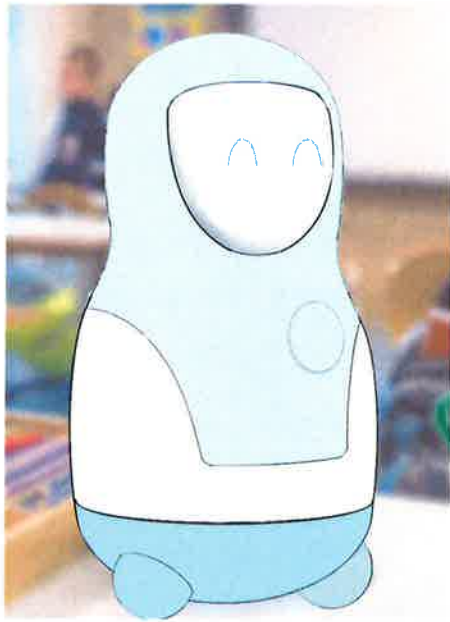


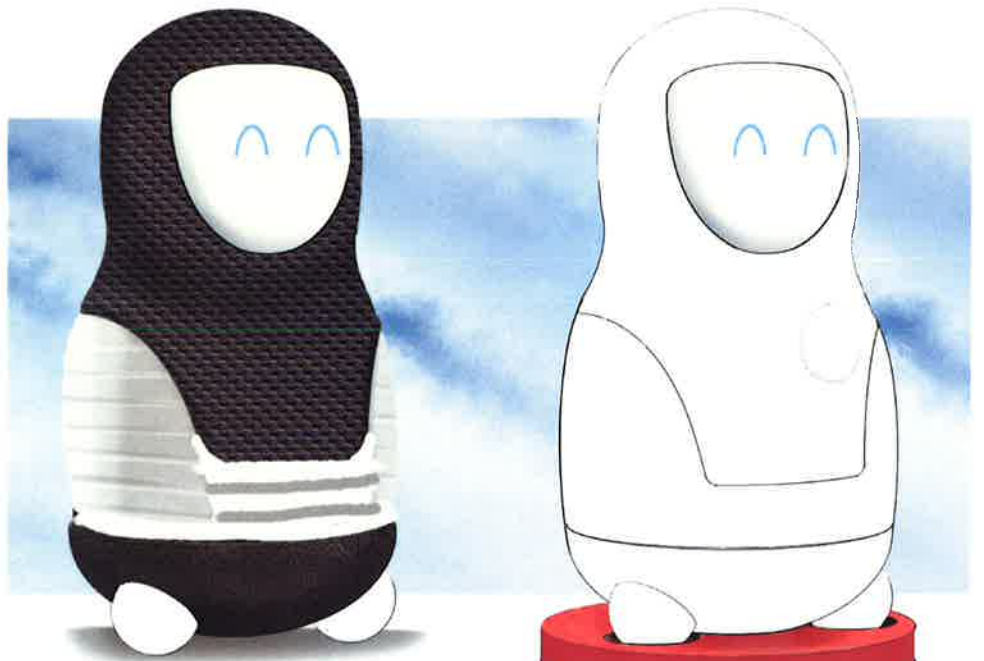
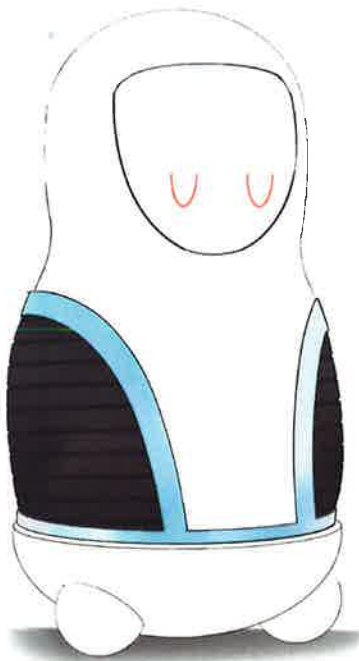


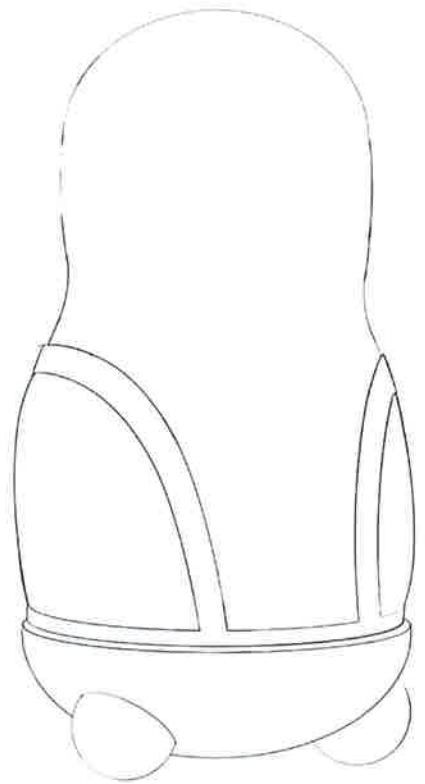
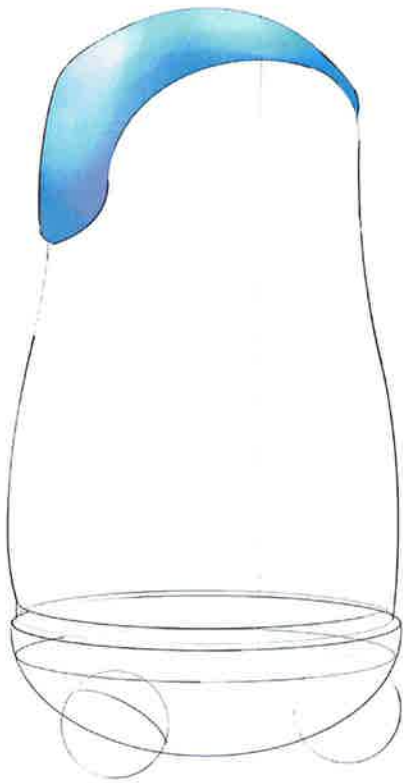
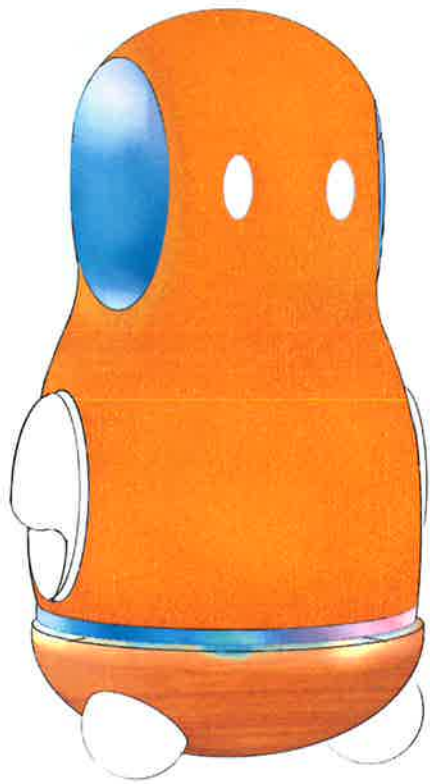
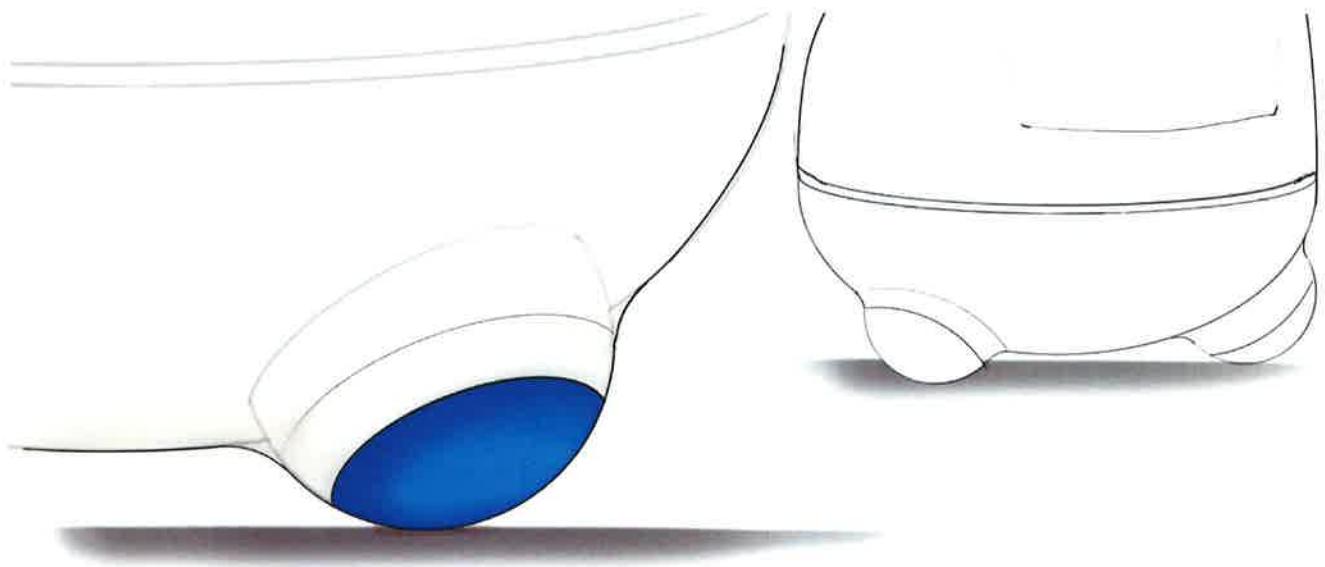
- på. = venter på pålogging
 logger på - tilkoblet
 Aktiv - Oppmerksomhet
 Passiv
 = Skrut seg av - drakoblet



Modusbesing : Batterinivå
 Dekning







FINALIZING

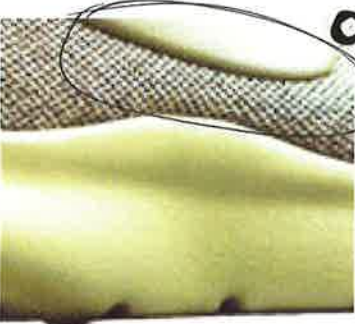
MOOD BOARDS, SKETCHES AND RENDERINGS

FOR HARDE OVGANGER

MER
STIV



KAN SKJE UANSKELIG Å FÅ TIL Å
FLYTE OVER I FORMBU?



MUGGENE?



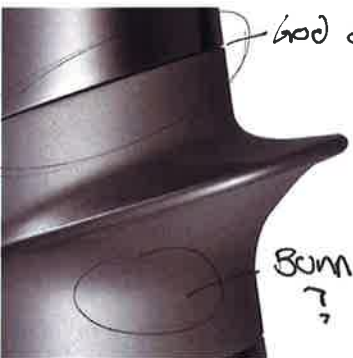
FOR MEKANISK?
HARDE OVGANGA



MEKANISKE
OVGANGER
FOR HARDE?



MER JOM
BOLGER



god overgang

SOMN MATERIAE
?

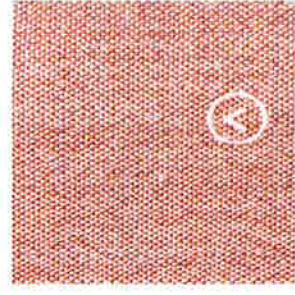




Soft transitions to get a easy clean.



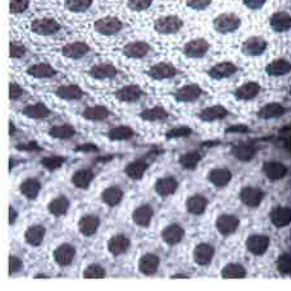
Strong for not being unsanitary and easy to take of and put in the washingmaching when needed.



Marked Nudge button?



Discrete but functions after needs, fitting the hand of a child as well as an adult.



Soft, for protecting the technology but a nice meeting to the body holding it.



transitions, nudge button?



GRIP A surface that allow you to hold the avatar without being afraid of loosing it.



FLEX TOP taking in use flex material on top part, allowing for human alike motion in neck, rubber/textile



MATERIAL MEETING merging, and all other needs, plastic for grip, textile close to body.



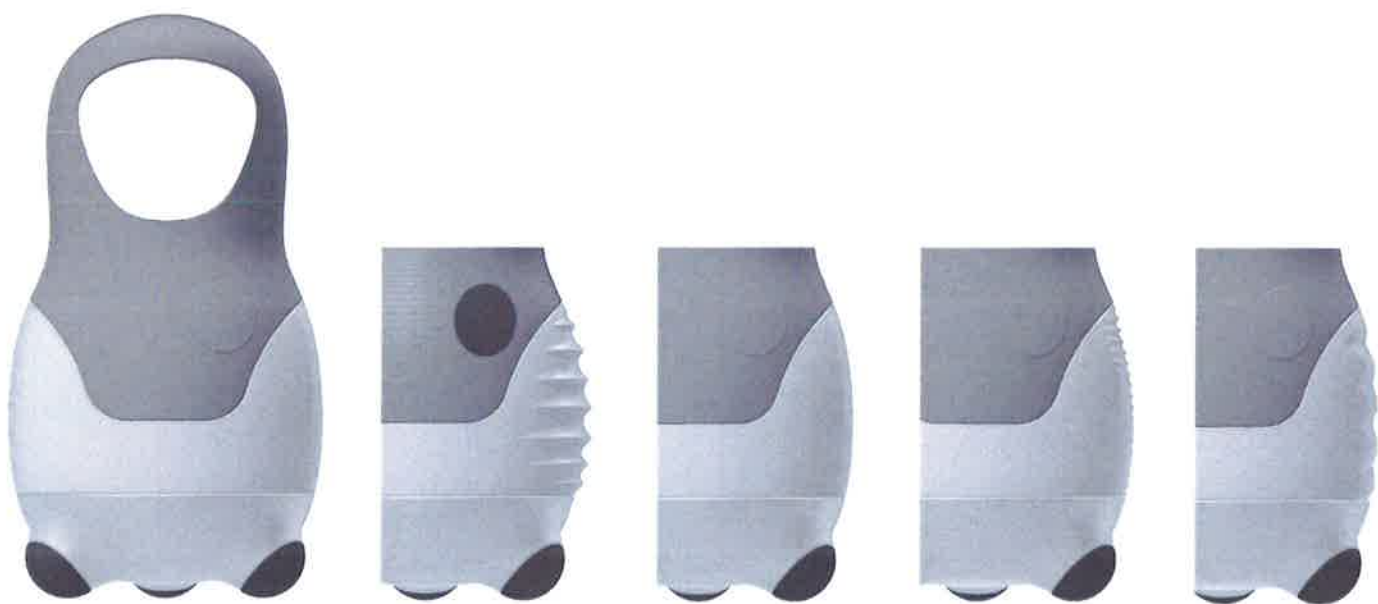
Subtle, not showing light unless pushed to give you information when wanted, sunk down to not get pushed unintended.



INFORMATION BUTTONS Tactile, symbols, embold

LIGHT Using colors and different intensity to indicate different moods and functions

SCREEN White screen for face, lit up and eyes have a more intensity and different options.









Shampoo



functions testing



AV - Hode ned



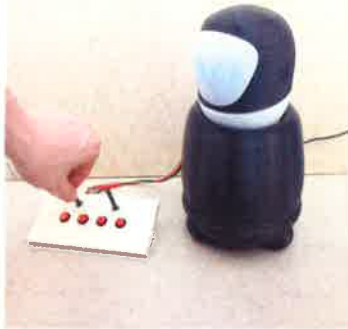
eyes



Negative?!
..



Harry!
..



Look to the right



Look to the left

NOT BODY SPINNING
only after 40°



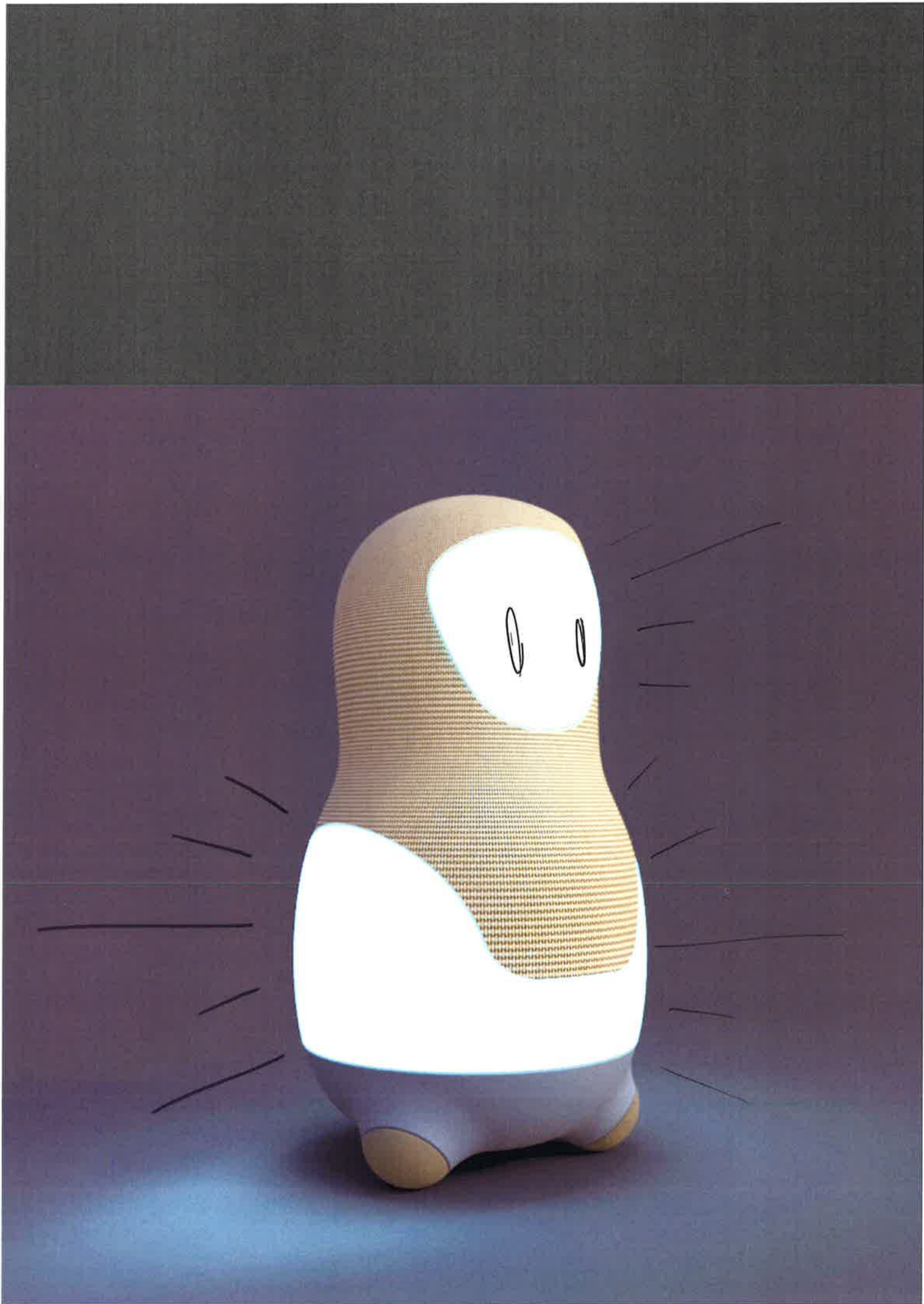
Down, as it is
when off too



Normal



UP





TRENGER Seiner









FARKESPEKTER



LADERBIKE



