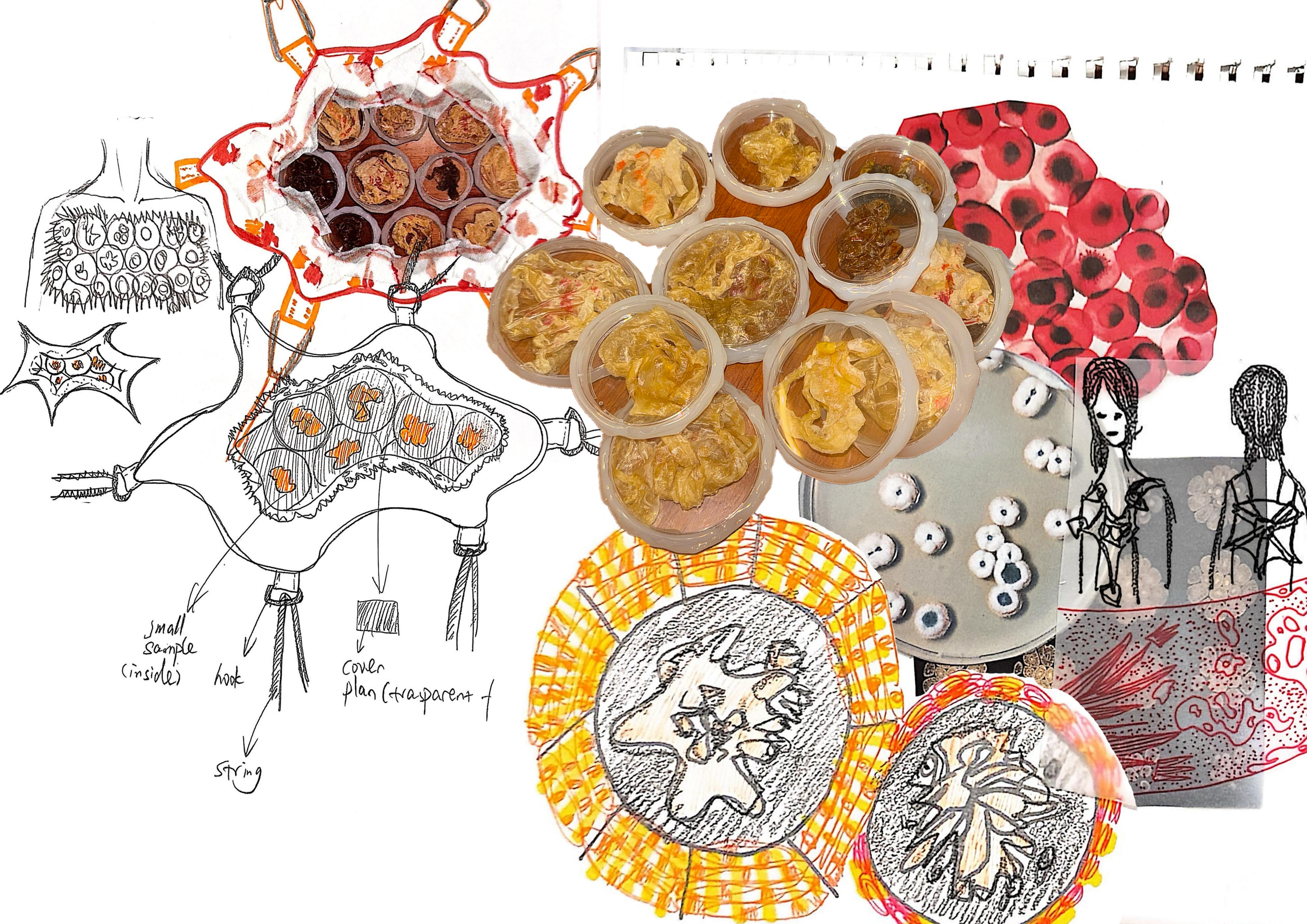
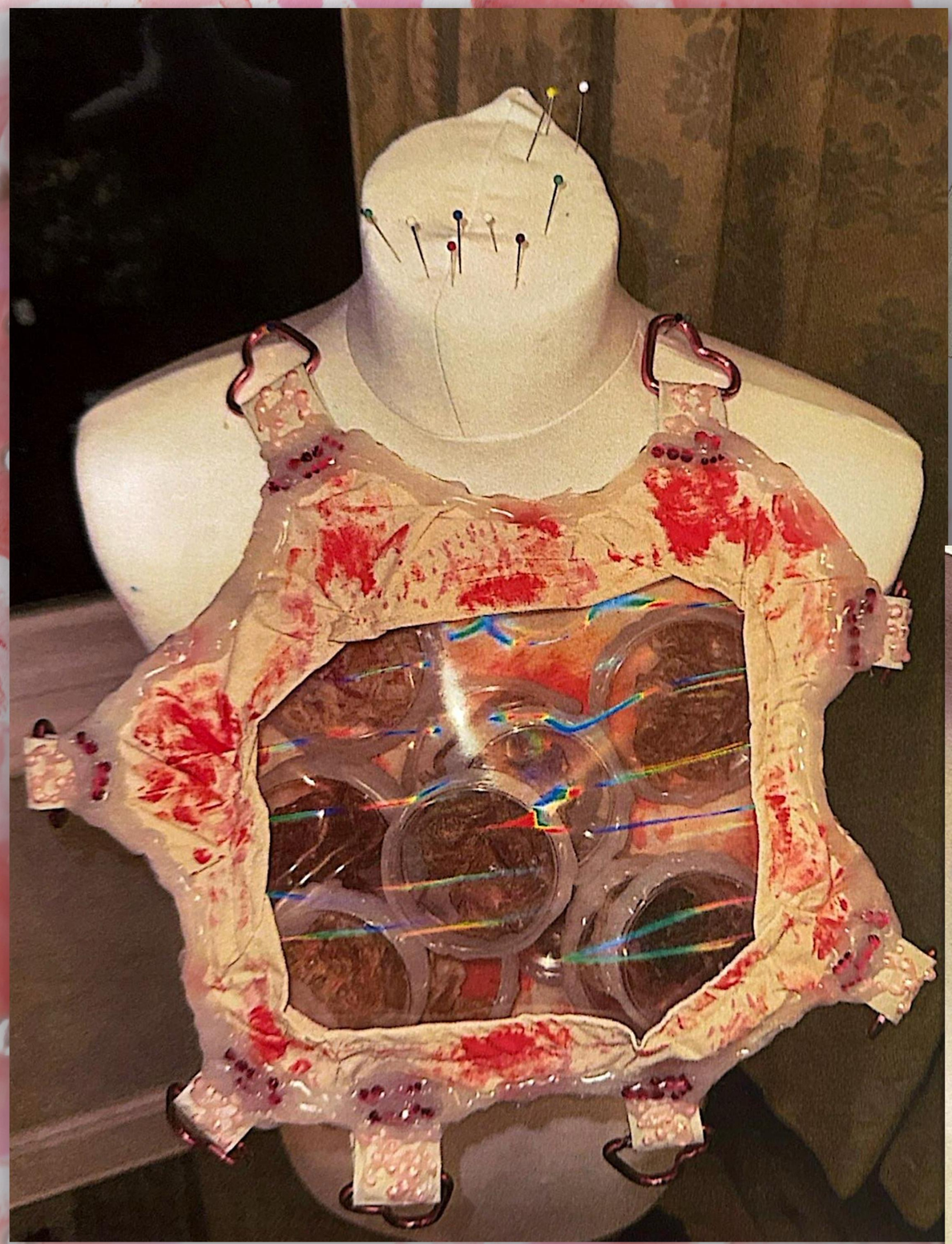
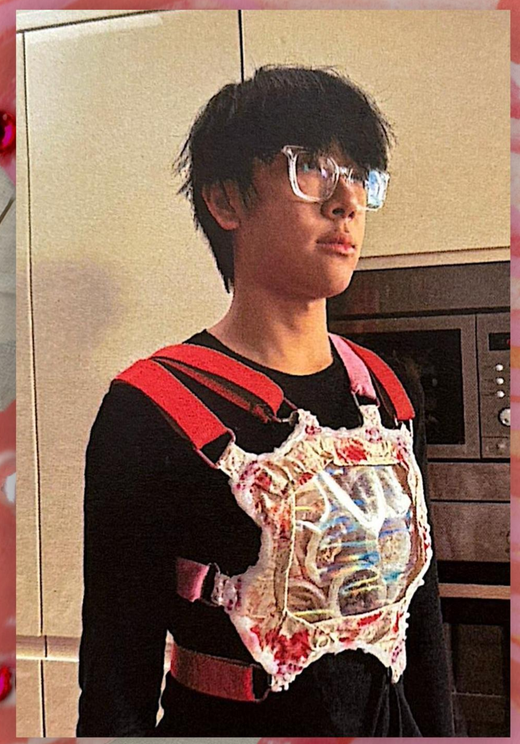
Intergrowth

Chenyue Zhang

Pronotum
Head
Femur
Tibia
Holter
Metanotum
Abdomen
Cerci
2nd. main dark costal spot


small
sample
(inside)
hook
cover
plan (trasparent
string

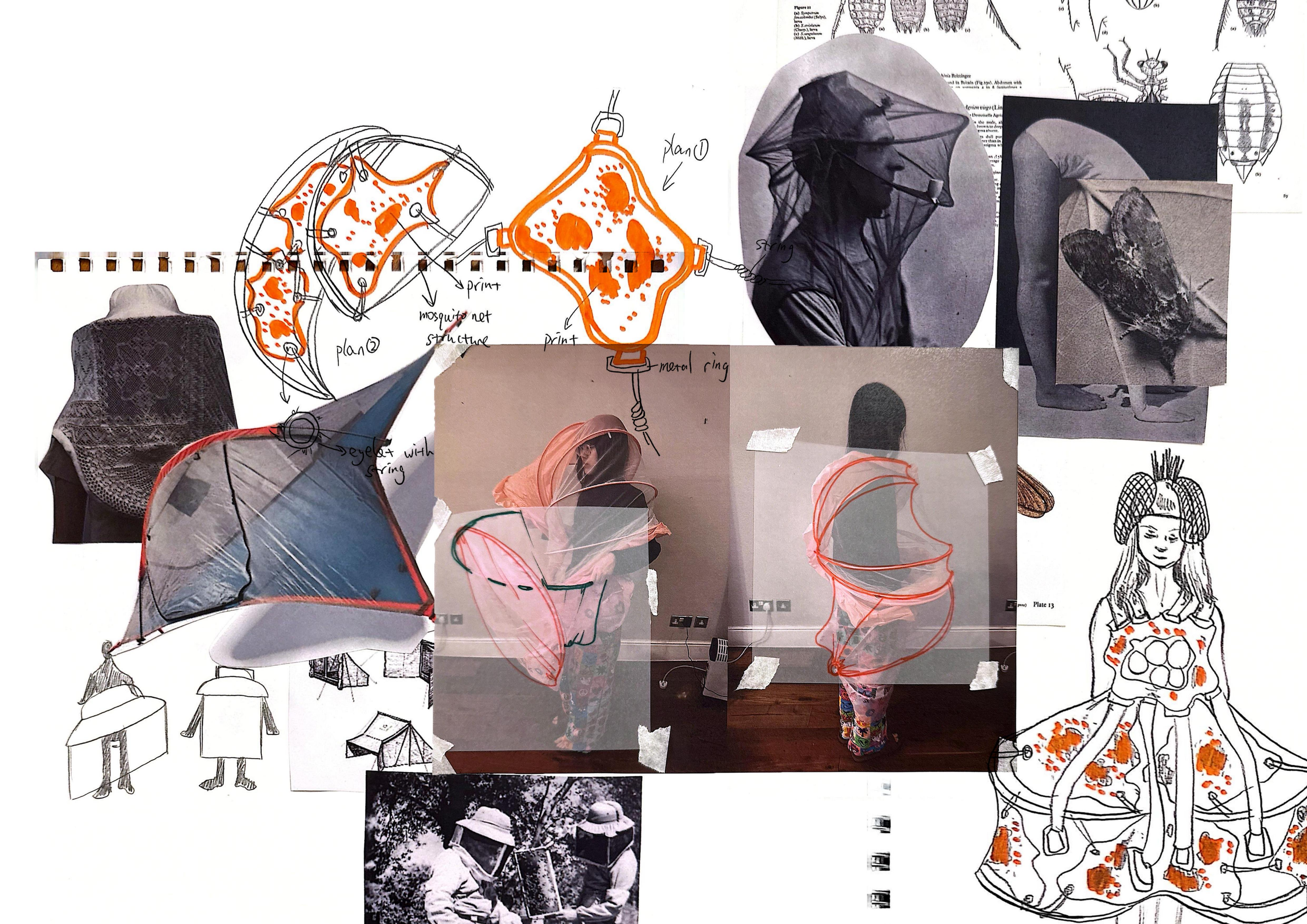


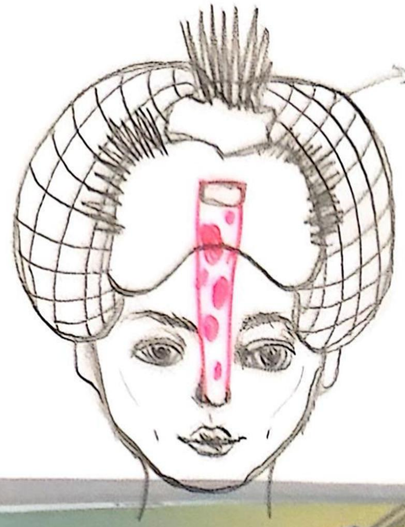


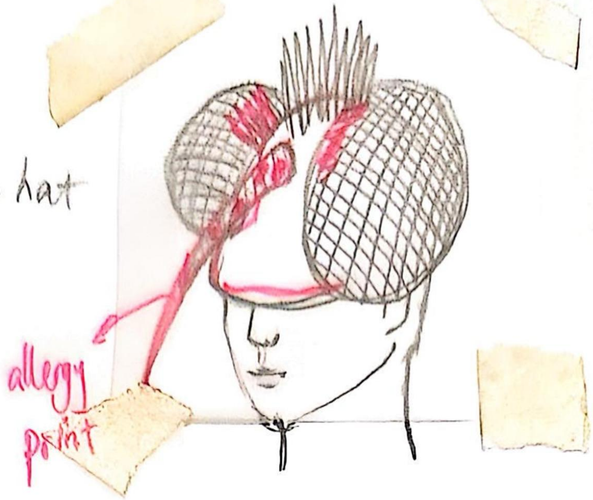
up

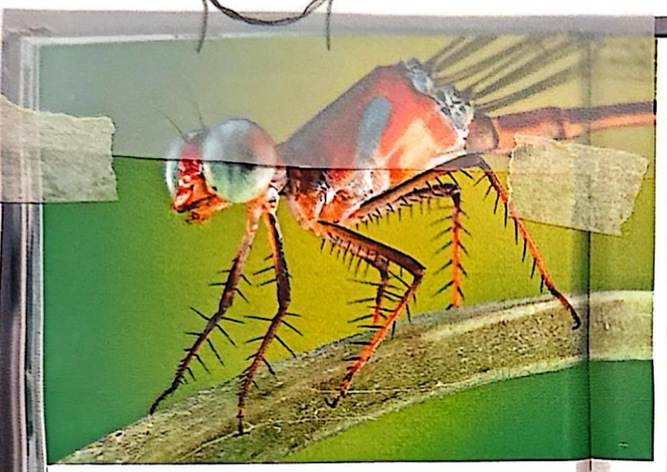
detail
shoulder design
waist
string

add print


plan①
string
print
mosquito net structure
plan②
print
metal ring
eyelet with string
Plate 13







ABOVE
Damselfly Zygoptera

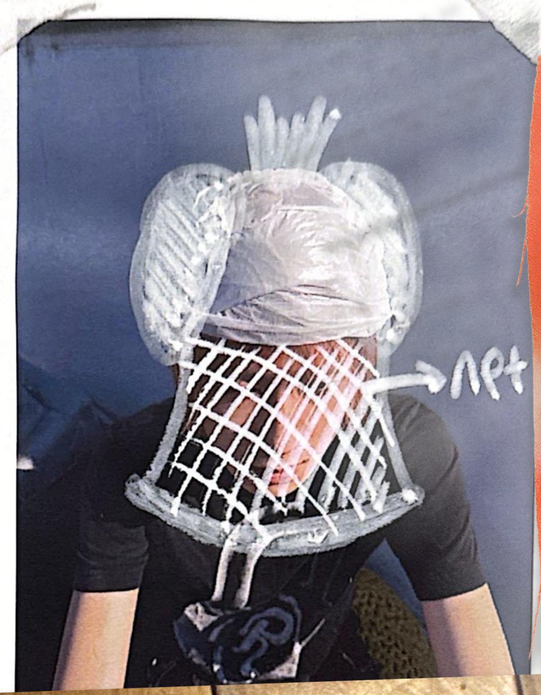
Damselflies have pseudopupils, dark spots that move around the insect's eye and make it appear as if the insect is following the observer with its eyes. In photographs, the pseudopupils usually give the impression that the damselfly is staring right at the camera.

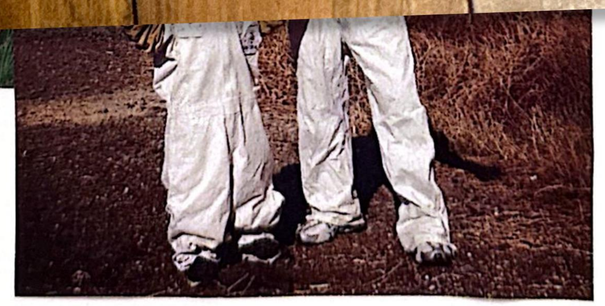
OVERLEAF
Little Blue Dragonlet
Erythrodiplax minuscula

The blue male and orange female chose to rest on the same perch, providing a perfect example of the sexual dimorphism exhibited by this species.

OPPOSITE
Ornate Pennant *Celithemis ornata*

Insects are not known for their personalities, but this dragonfly appears to be smiling. It's unlikely that this dragonfly is actually in a cheerful mood, but it highlights the ability of macro photographs to reveal the expressiveness of insect faces.





laboratory much preparation and practical work has been done, and to Mr. George Wood, M.Sc., Principal of the Stockport College for Further Education, whose interest in my drawing and teaching of the subject has been the source of constant encouragement, and also to Mr. Kendell for much advice with regard to the reproduction of such work.

Finally, I should like to thank the publishers for their courtesy and consideration at all times.

MAUD JEPSON.

May, 1938

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To Professor Graham Cannon I am much indebted for his valuable help and advice.

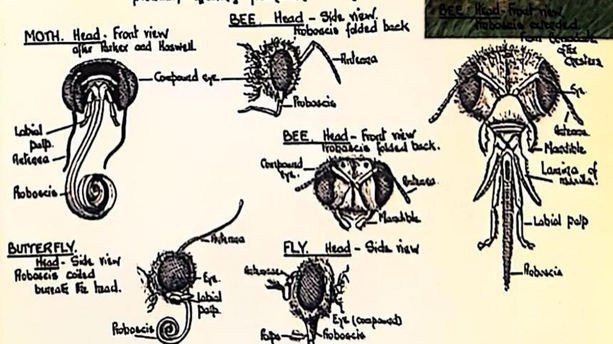
MAUD JEPSON.

February, 1939

They are attracted by dirty colour and foetid
Some flowers are especially adapted for poll

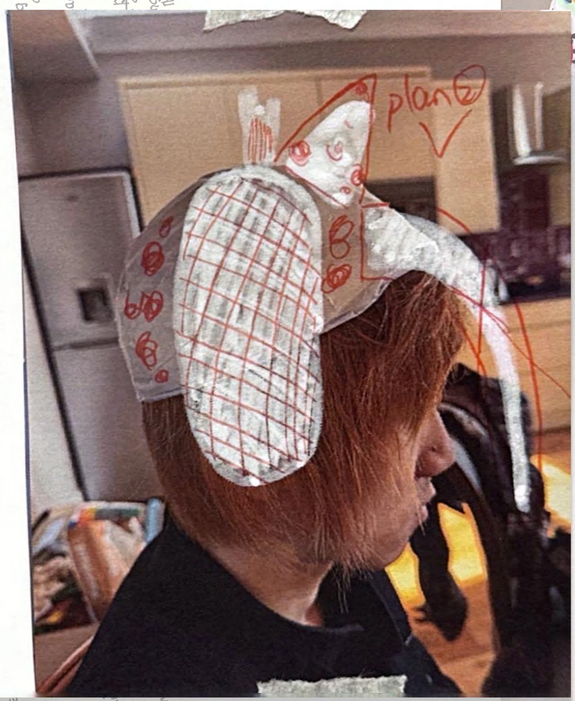
Beetles

These insects do not possess a proboscis, but
probably effecting pollination during their



Cuticle - non-cellular secretion of the upper epidermal cells upon the thickness of the cuticle depends the rate of evaporation.
Upper epidermis cells usually devoid of chlorophyll.
Palisade tissue } Mesophyll
Spongy tissue }
Lower epidermis
Intercellular spaces.
Guard cells of the stoma, which are rich in chloroplasts
Pigment-containing cells which enclose the vascular bundle of the mid-rib.
Medullary ray
Thickened (collenchymatous) cells whose function is the protection of the main vein, above and below.
In a dorsi-ventral leaf the upper epidermis is usually devoid of chlorophyll, except in shade-loving and submerged water plants.
Vascular bundles.
Sclerenchymatous fibres forming the bundle sheath.
Phloem (Sieve tube
Companion cell)
Cambium
Parenchymatous tissue
Xylem. {Metaxylem (Pitted vessels)
Protoxylem (Spiral and annular vessels.
Vascular bundle of Maize (Monocot)
Central vascular core of Buttercup root.
Endodermis (radial walls thickened)
Pericycle
Root hairs.
Starch grains
Companion
Sieve tube
Sclerenchyma
Pitted vessel
Spiral vessel
Annular
Parenchyma tissue
Lysigenous space
Primary {Metaxylem
Xylem {Protoxylem.
Phloem.
Parenchyma cells
Coil particles containing molecules
Film of water surrounding the particles
Soluble salts.
Air spaces between the
Root hairs (Prolongation
The carbon dioxide, respiration of the root and forms a dilute acid. necessary salts in are insoluble in pure
Palisade cells which are elongated, rich in chlorophyll, and with few intercellular spaces. These cells responsible for the manufacture of carbohydrates in the presence of light.
Spongy tissue of irregular shaped cells, with few chlorophyll grains. The irregularity of their outline is responsible for the abundant cellular spaces, with the result that this tissue is especially suitable for interchange, (oxygen, carbon dioxide water vapour) which takes place through the
Vascular bundles.
Vascular bundle
Epidermis
Cuticle
Chlorophyll grains.
Parenchymatous cells of the mesophyll.
Protoxylem.
Metaxylem
Sieve tubes and companion cells of the phloem.
Strengthening cells.
Parenchymatous cells of the mesophyll which are responsible for photosynthesis
Intercellular spaces
Epidermis.
Guard cells of the stoma
M.W.M.S.

plan


plan