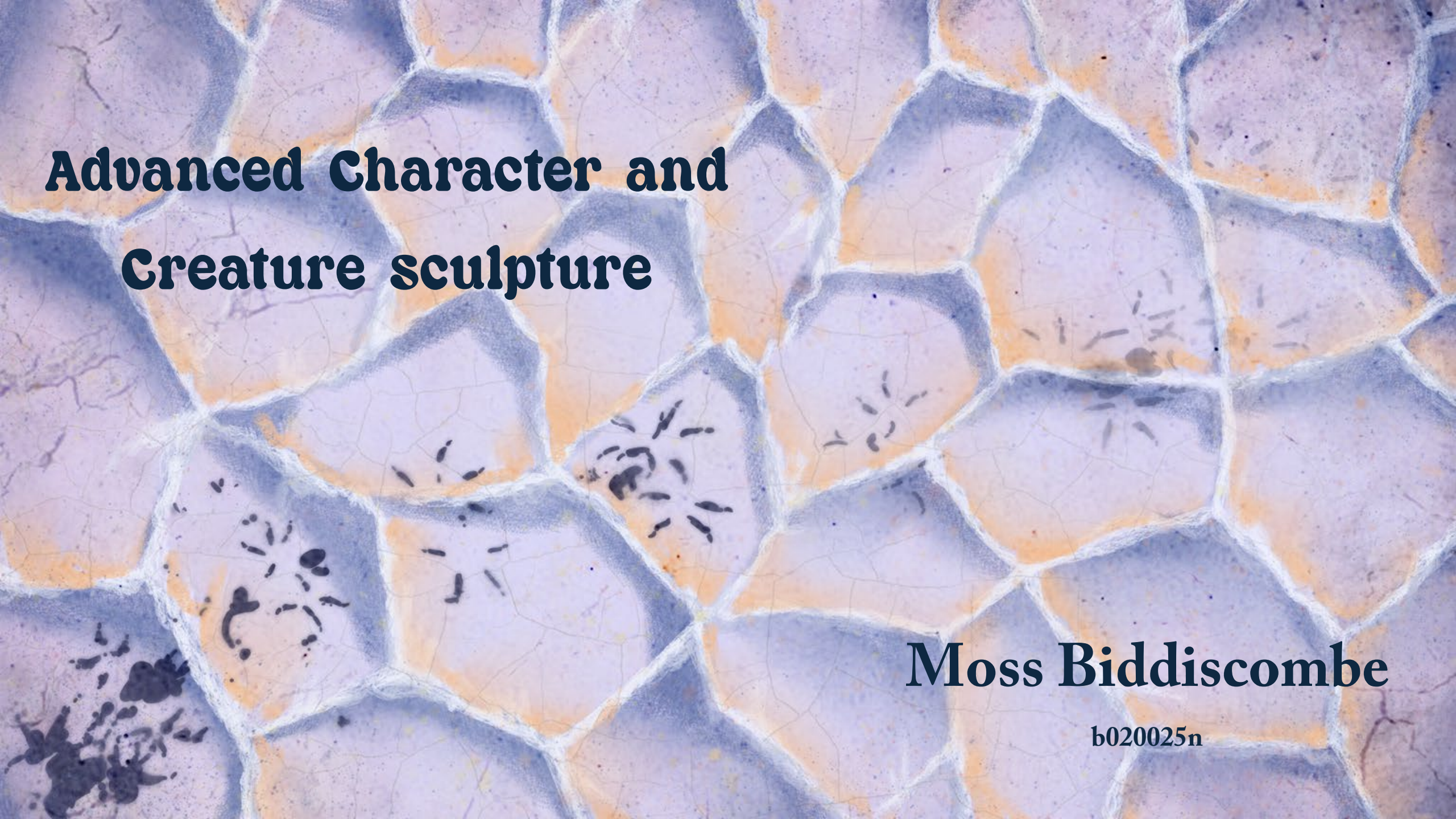


Advanced Character and Creature sculpture

Moss Biddiscombe

b020025n

The Brief

Biome 2 - Salt Flats

Extremely salty and deadly to other inhabitants of the planet, this biome offers life the chance to thrive if it can overcome the harsh chemical conditions present in the salt flats.

The water here is so salty it is redended by the pigments the leech from the rocks. Bare sun, dry heat, heavy chemicals and scare food are just some of the challenges these animals need to overcome. Smaller insect-like animals thrive here by the billions and cause seasonal booms in the feeding habits of the local fauna.

Research

existing salt flats

Famous Salt Flats Around the World

- **South America:** Salar de Uyuni (Bolivia, world's largest), Salar de Atacama (Chile), Salinas Grandes & Salar de Arizaro (Argentina).
- **North America:** Bonneville Salt Flats (USA), Badwater Basin & Devils Golf Course (USA).
- **Africa:** Etosha Pan (Namibia), Makgadikgadi Pans (Botswana), Chott el Djerid (Tunisia).
- **Asia:** Namak Lake (Iran), Lut Desert (Iran), Great Rann of Kutch (India).
- **Australia:** Lake Eyre & Lake Amadeus (Australia).

How They Form

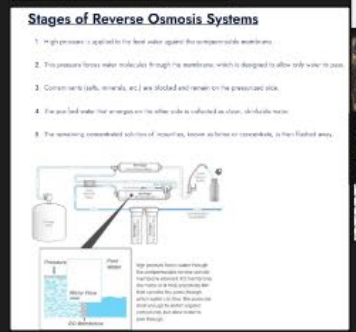
- Salt flats, or salt pans, form in arid regions where water from ancient lakes evaporates faster than it precipitates.
- Minerals, primarily salt, are left behind, creating a hard, white, crusty surface that reflects sunlight.

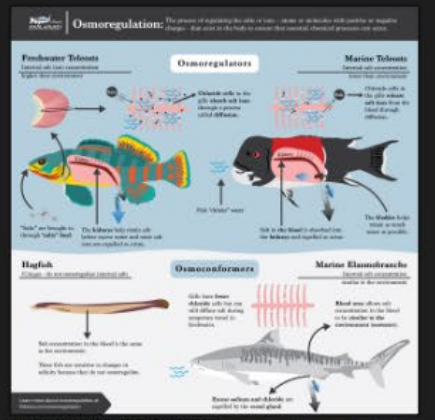
Notable Features & Dangers

- **Mirror Effect:** When a thin layer of water covers the flat during the wet season, it creates a stunning mirror effect, especially at Salar de Uyuni.
- **Hidden Dangers:** The salt crust can conceal deep mud, making them dangerous to cross.

salt flat living
https://www.pbs.org/wnet/nature/andes-the-dragons-back-salt-flat-living/1792/
THE SCIENCE BEHIND THE LIFE AND TIMES OF THE EARTH'S SALT FLATS
https://www.umass.edu/news/article/science-behind-life-and-times-earths-salt-flats
https://en.wikipedia.org/wiki/Bonneville_Salt_Flats

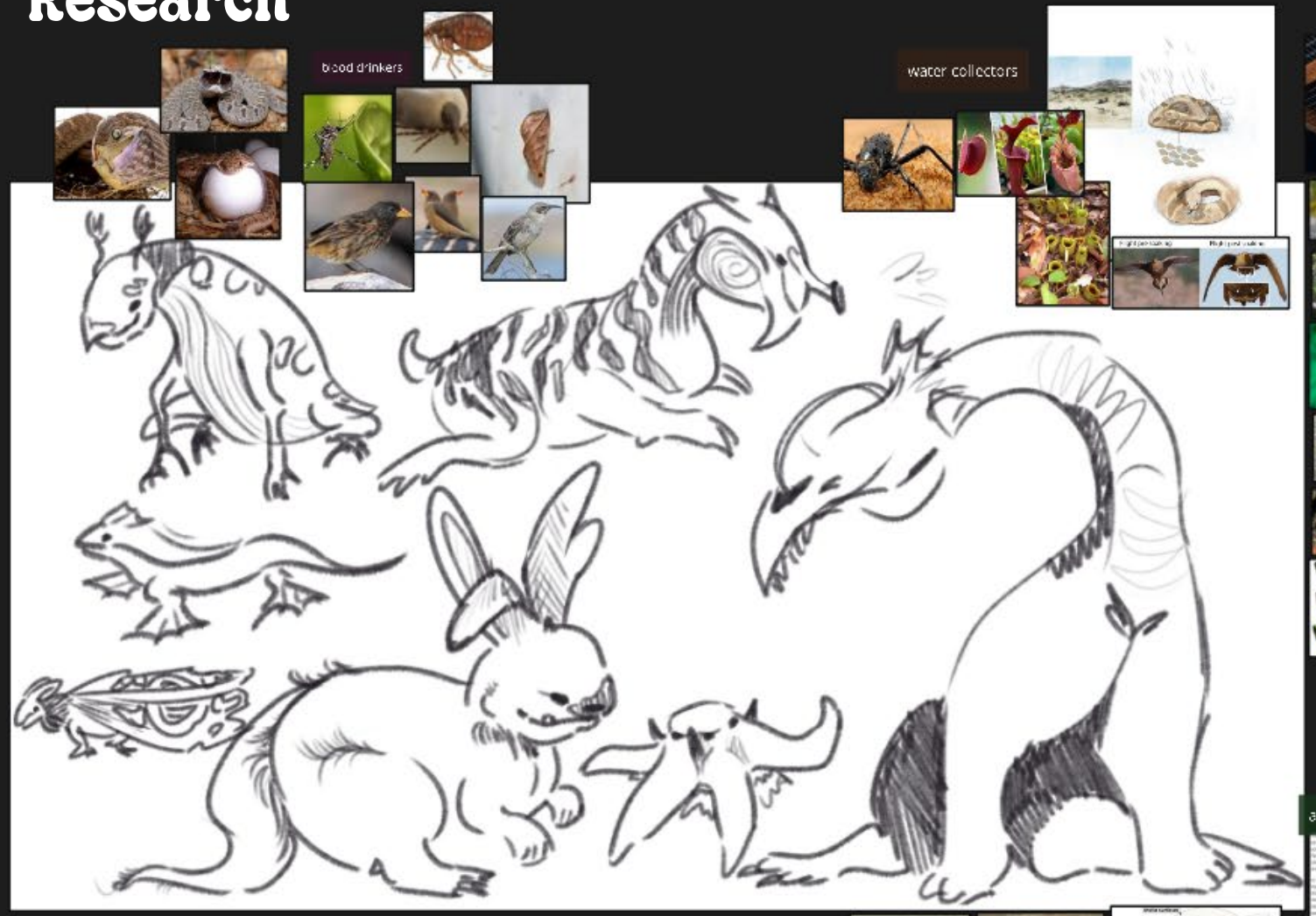
mediterranean salt flat
speculative; the future is wild
https://the-future-is-wild.fandom.com/wiki/Mediterranean_Salt_Flat





The mechanisms which permit brine shrimp to tolerate some of the harshest environments are only partially understood. Previously known adaptive features include a tight protective layer (integument) to avoid water loss and the increased extrusion of sodium (Na^+) and chloride (Cl^-) ions through specialized salt glands in the neck of larvae or the swimming appendages of adults.

Research


blood drinkers
water collectors
poisonous animals
herbivourous reptiles
small herbivores
animals that conserve water

Initial ideation

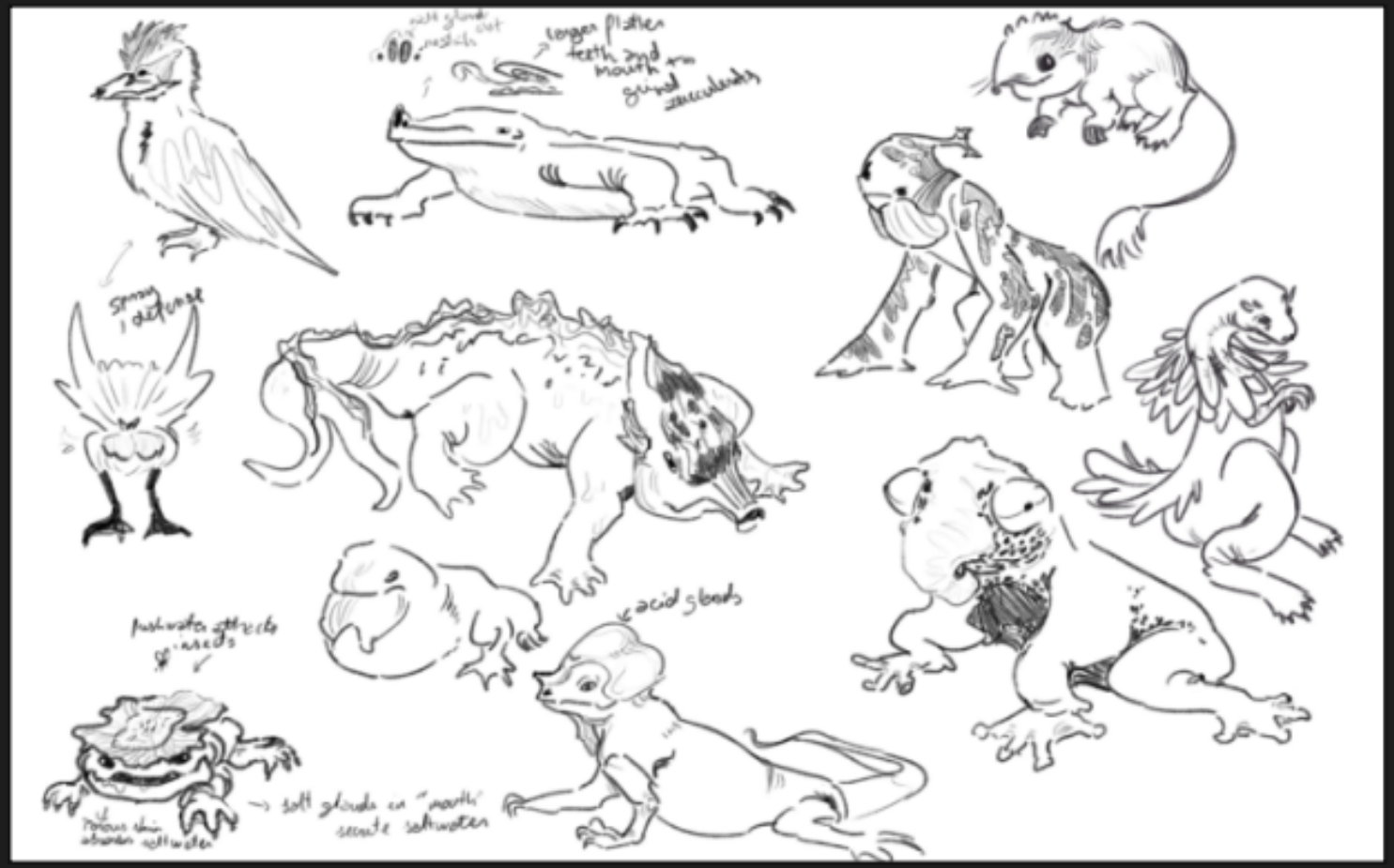
Potential ecological nieches/ direction

1. Herbivore, salt plane dwelling, land, doesnt process the salt well so gets water from succulents and plants (like red saltwart) that do

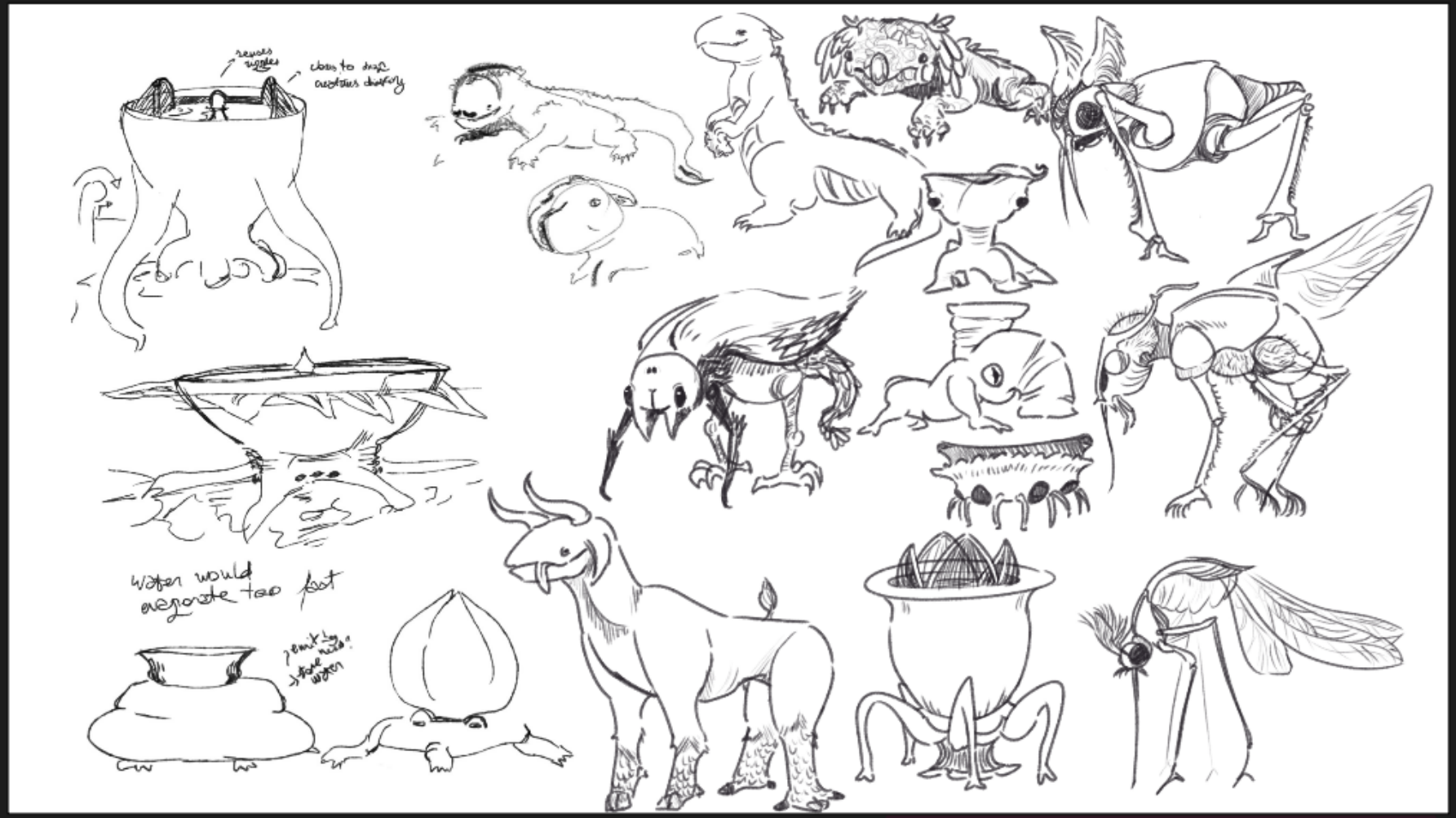
2. hunter/ambush Predator: uses salt hydrolysis to form acidic liquids it uses to hunt smaller creatures on the salt flats/ to neutralise caught prey

2.b toxic prey: uses salt hydrolysis to form acidic liquids it keeps in its body to poison any predator that hunts it, deterring predators for the future

3. anphibian/ aquatic mammalian?: uses reverse osmosis to powerfully suction salt water through a membrane and filter out the salt, stays wet so the excess salt remains dissolved in the water and doesn't crystallize



Initial ideation



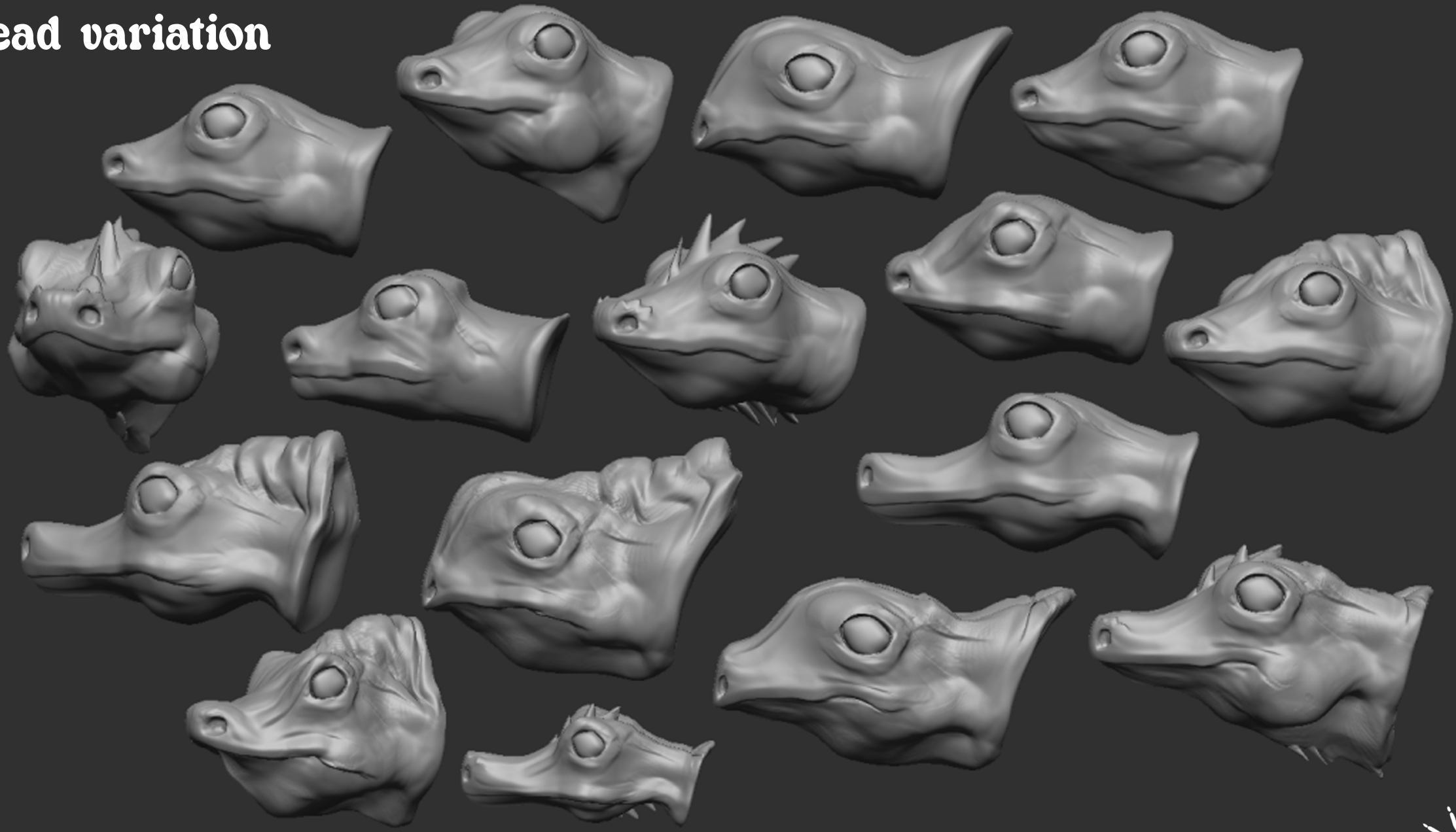
3/4. freshwater lure: uses reverse osmosis to suction up and filter water, luring creatures to the freshwater pool, (like 4 but unreliant on rain)

4. rain feeder?: uses very little energy, mostly stationary, collects rare rain water and slowly absorbs it as needed, the pool of fresh water in the meantime attracts insectoids and small animals which it feeds on

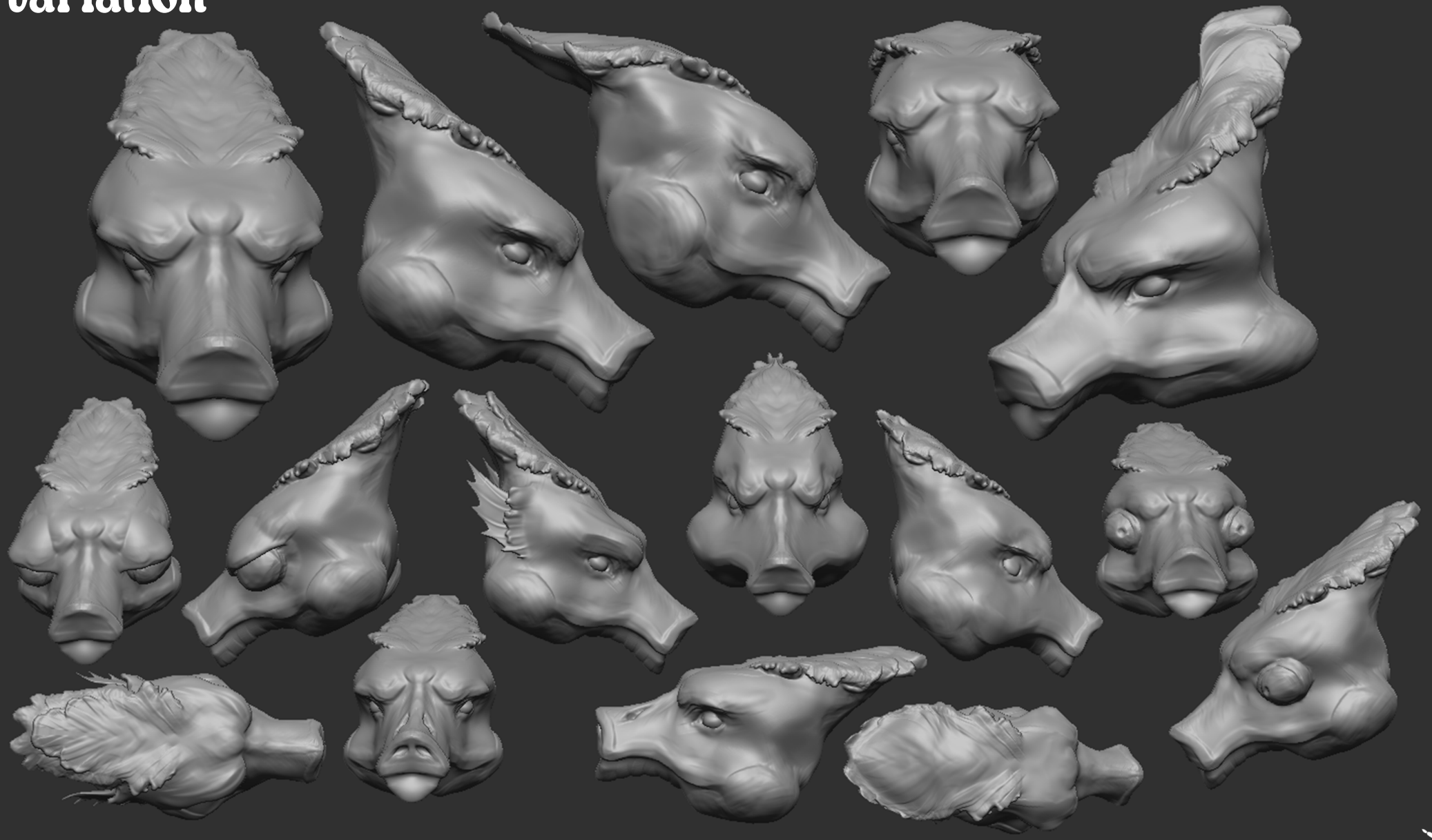
maybe like angler fish the male of the creature is a completely different smaller form, layed in the ground they emerge in rain and find a female to attach to?

5. vampiric insectoid: bad at filtering the salt so it gets most of its moisture from other creatures blood, perhaps like cleaner wrasse they perform some service for larger animals, providing help in exchange for what to the larger creature is barely any blood

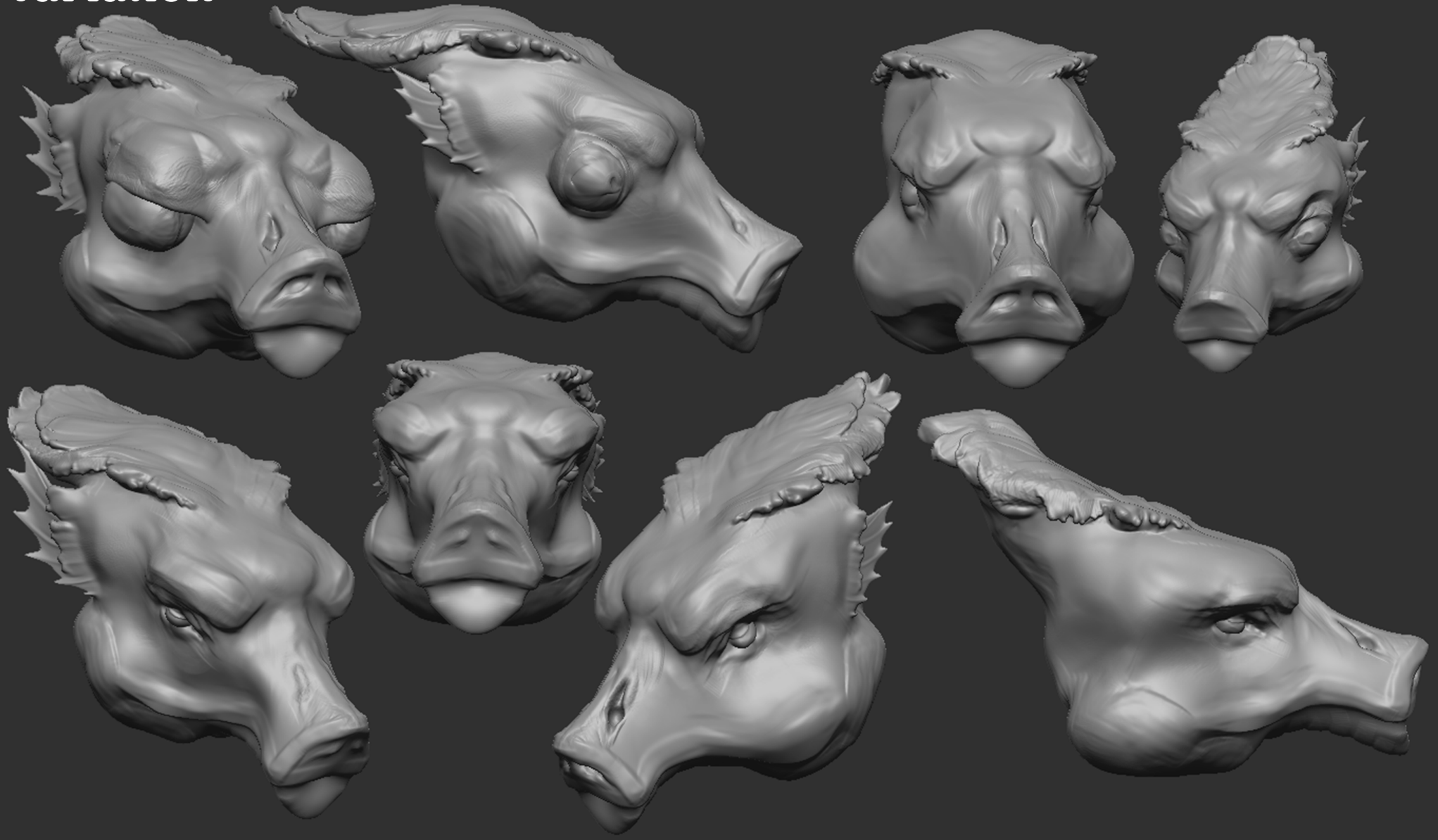
Head variation



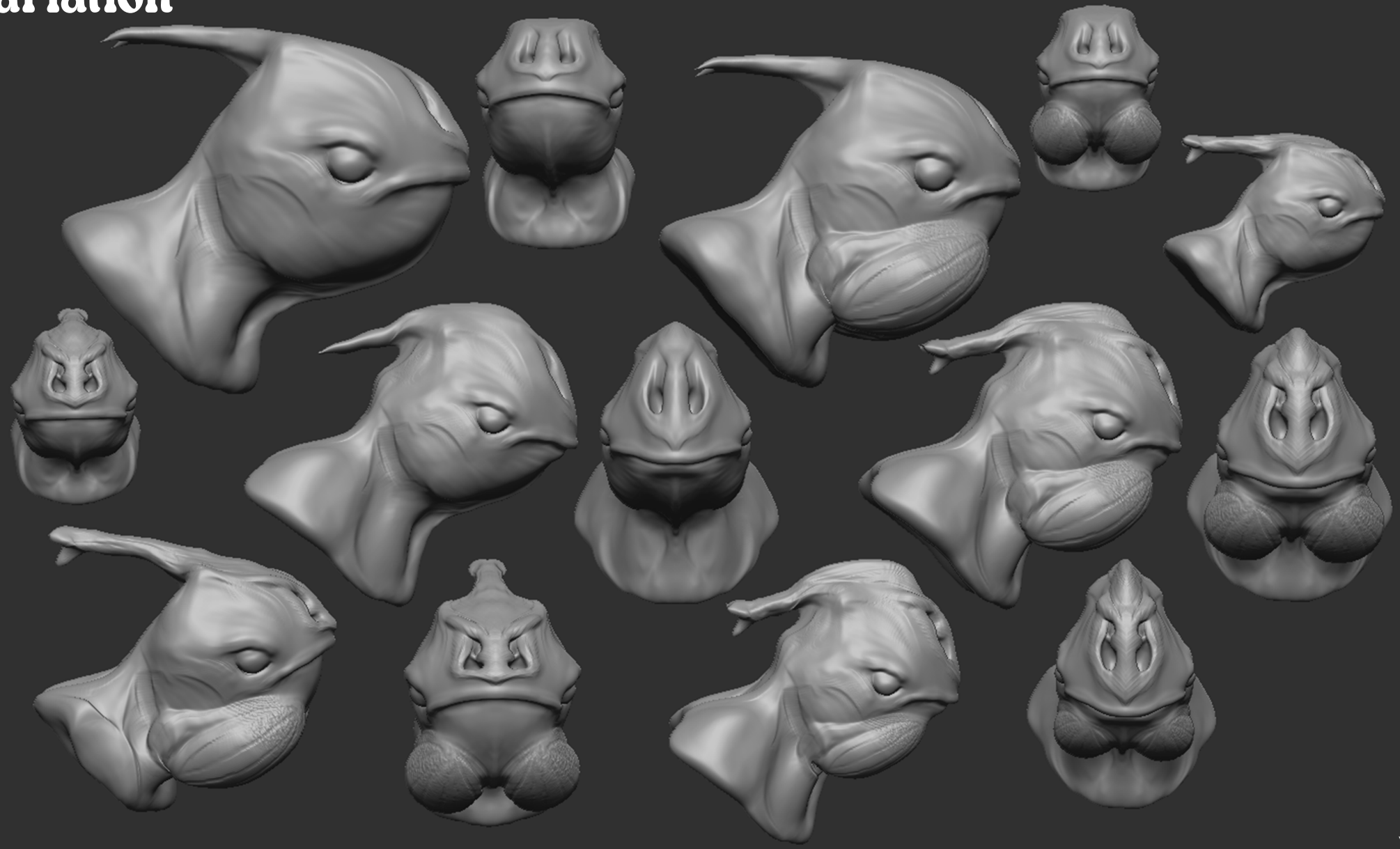
Head variation



Head variation

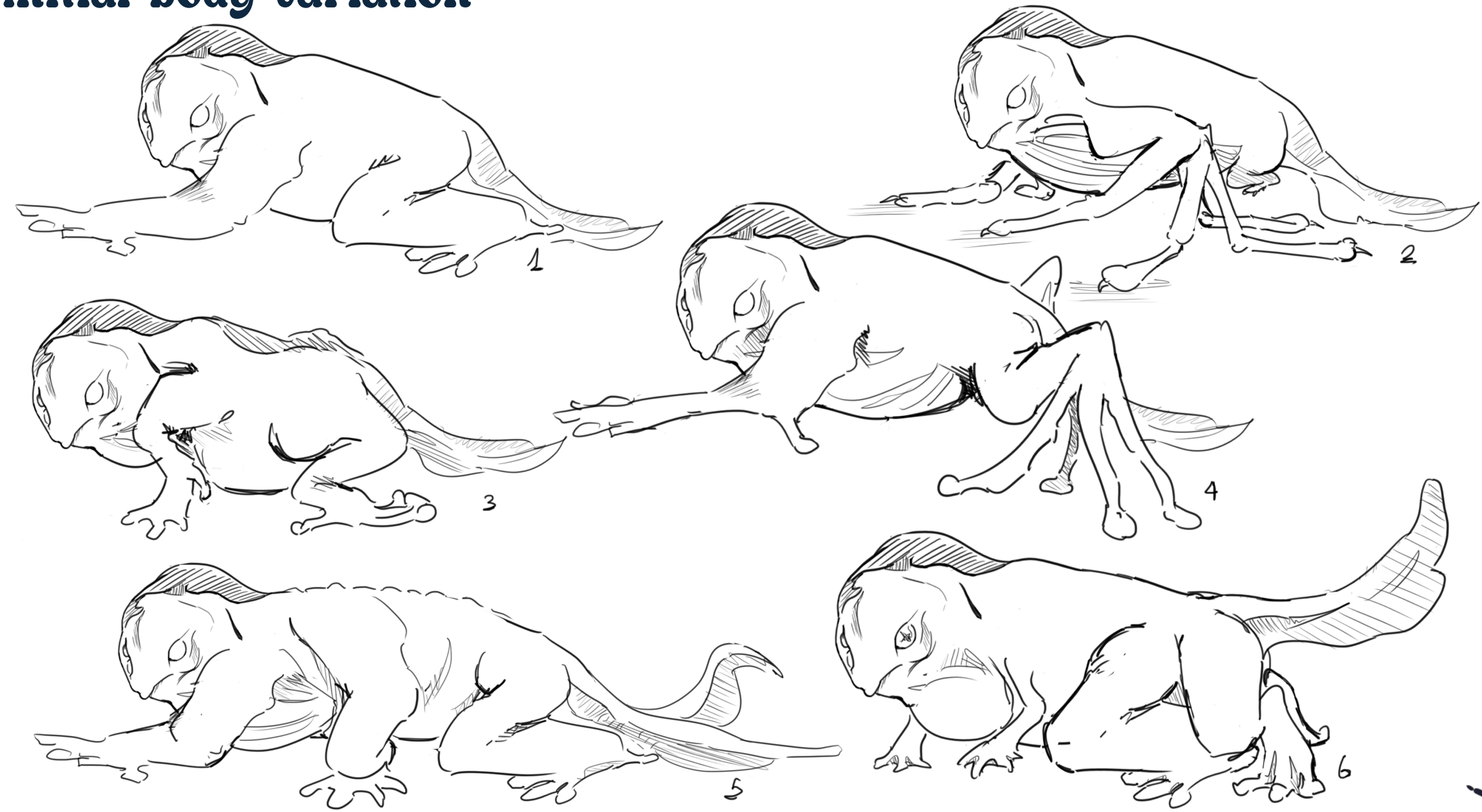


Head variation



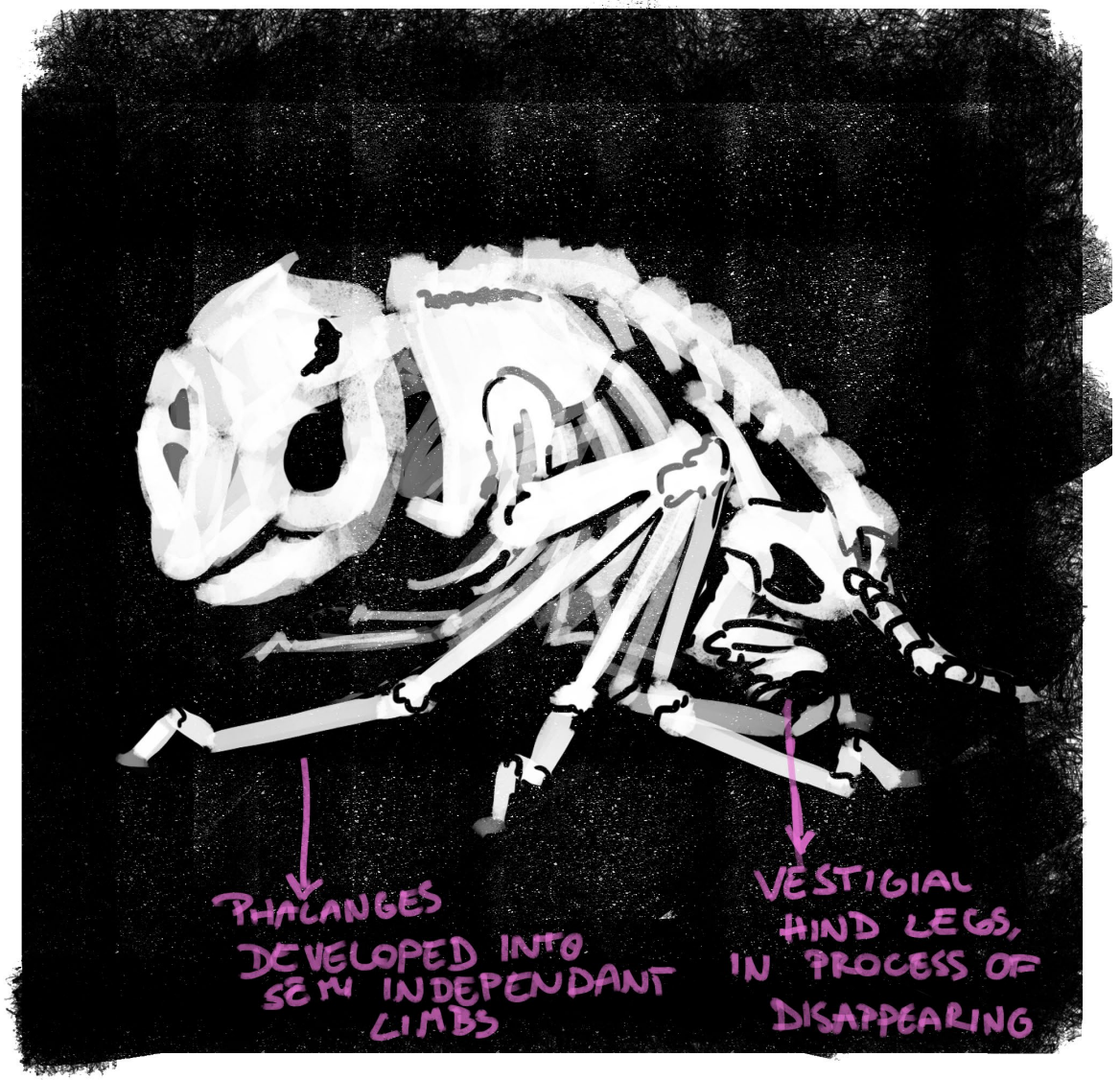
Initial body variation

Initial body variation

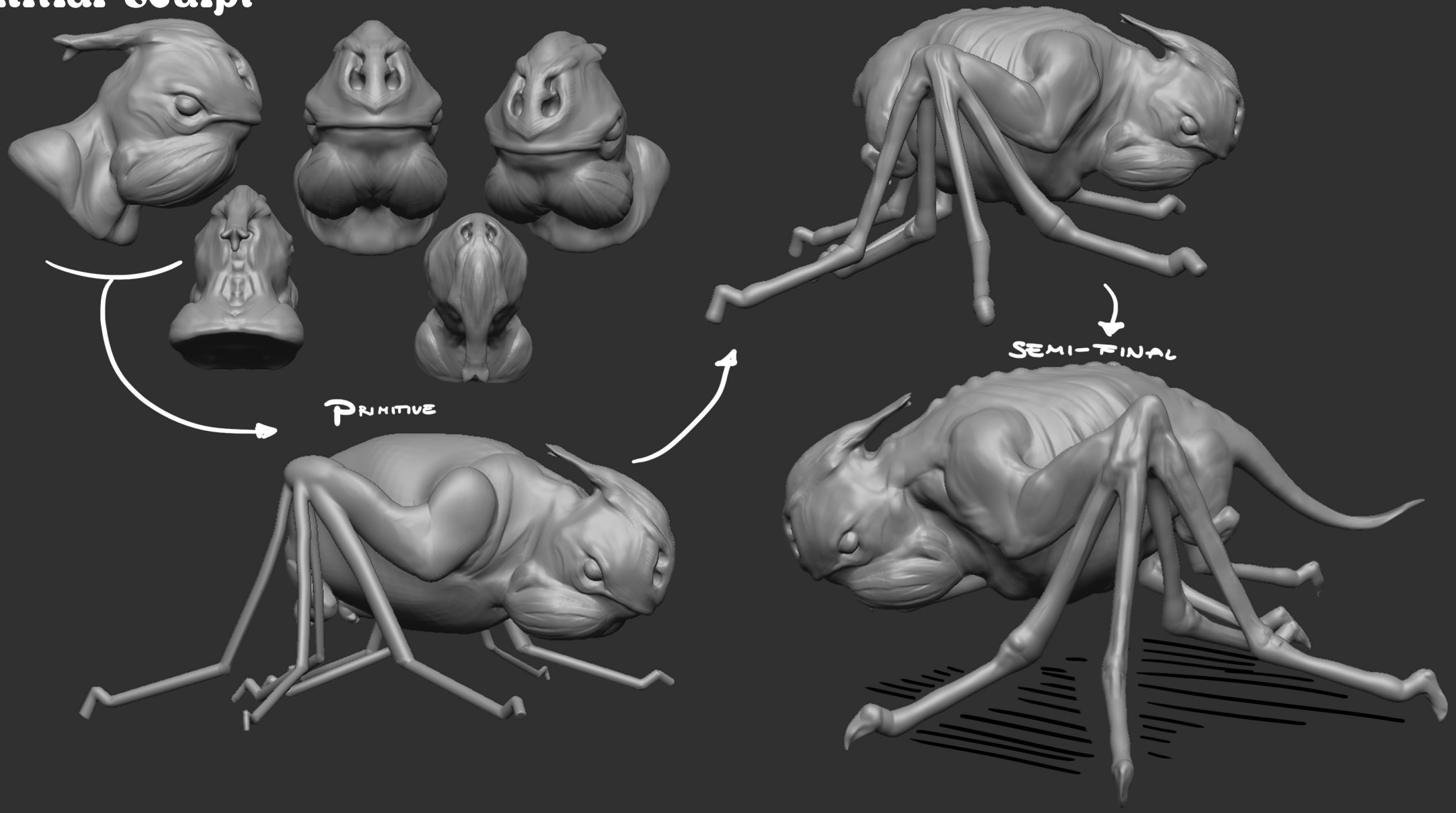


Base idea

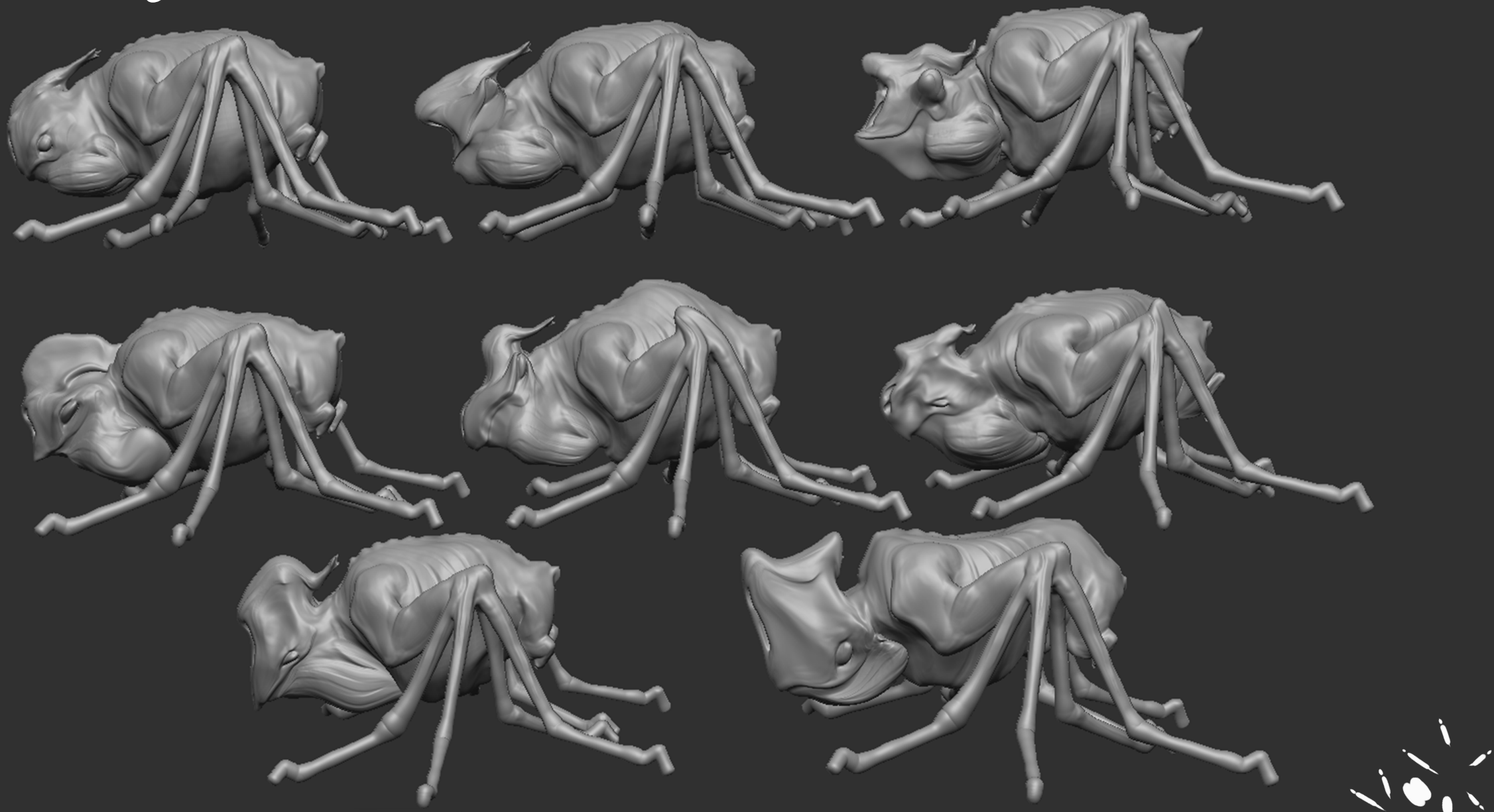

©Bone Clones® 2013


PHALANGES
DEVELOPED INTO
SEMI INDEPENDANT
LIMBS
VESTIGIAL
HIND LEGS,
IN PROCESS OF
DISAPPEARING

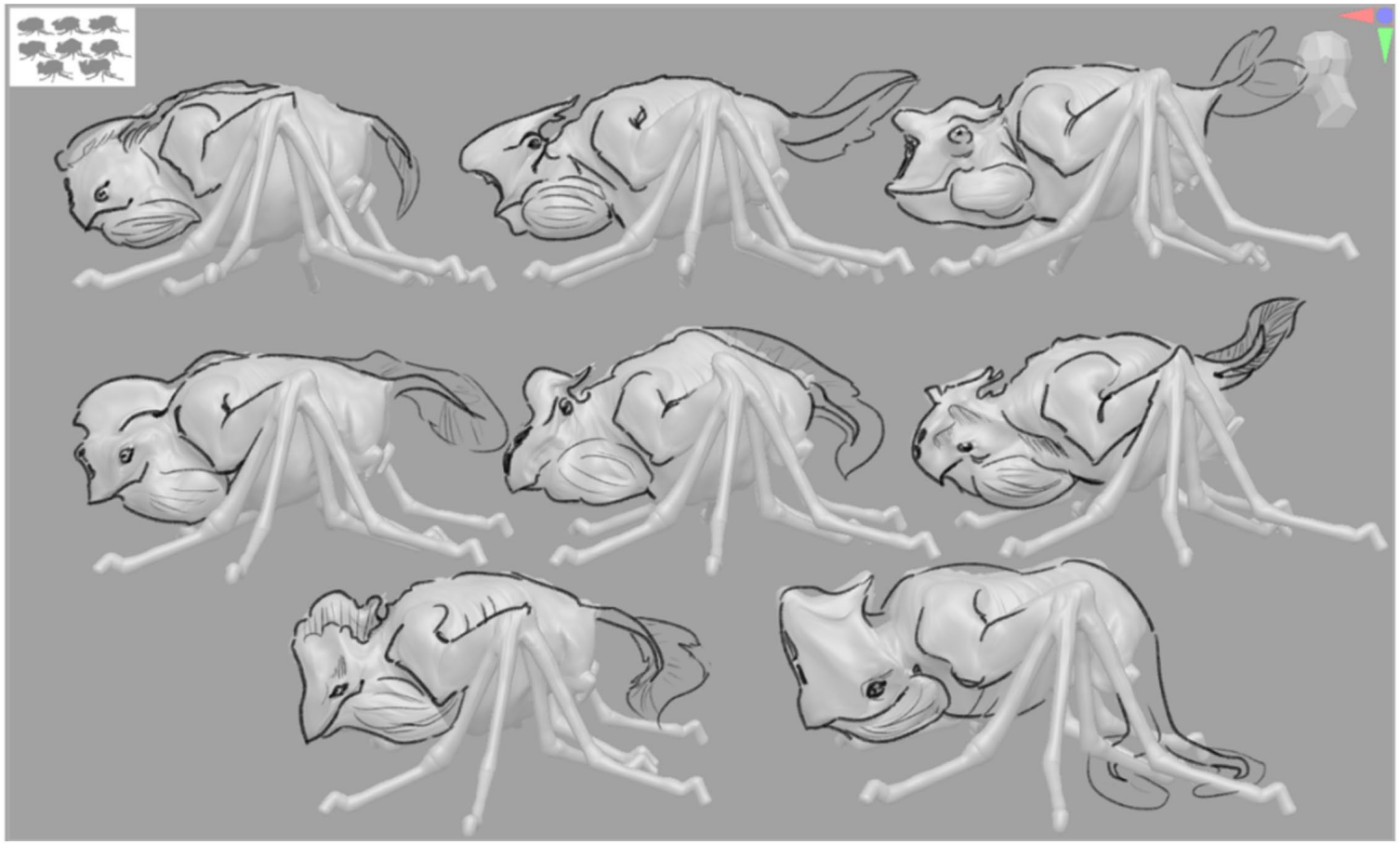
Initial sculpt

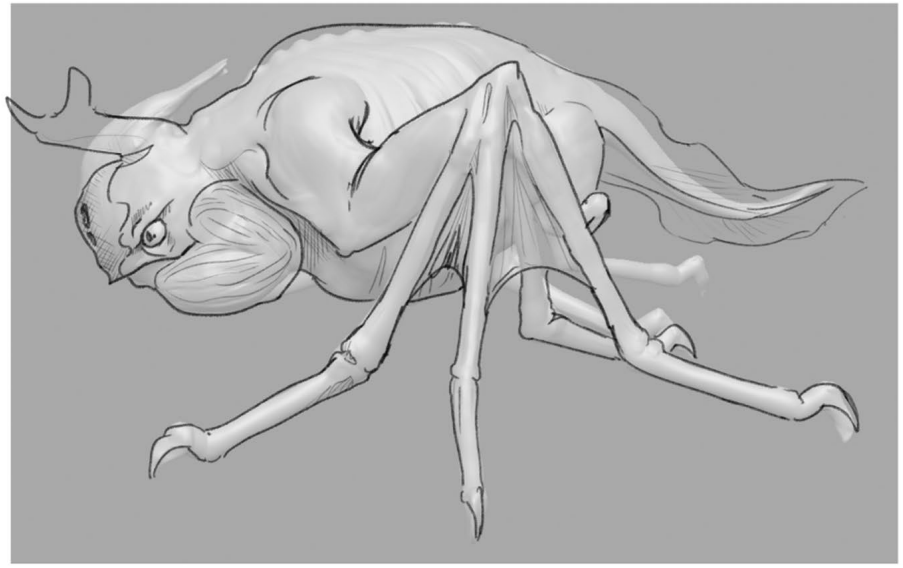


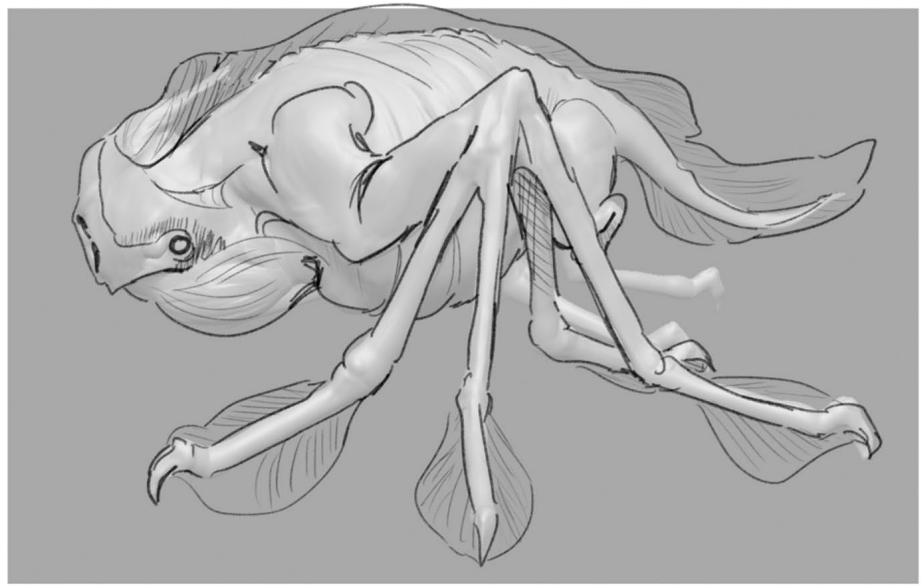
Intermediary sculpt variation



Intermediary variation



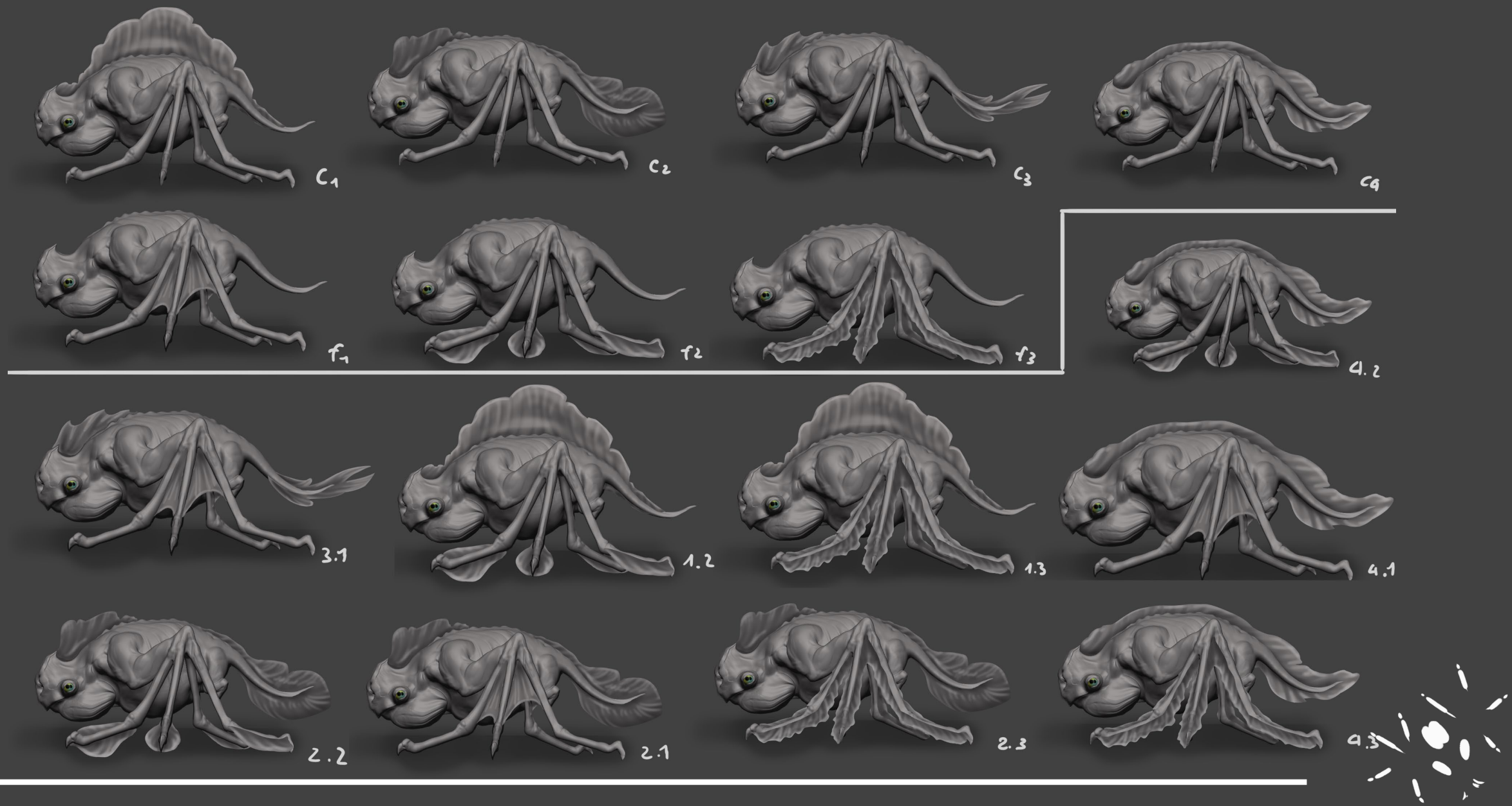




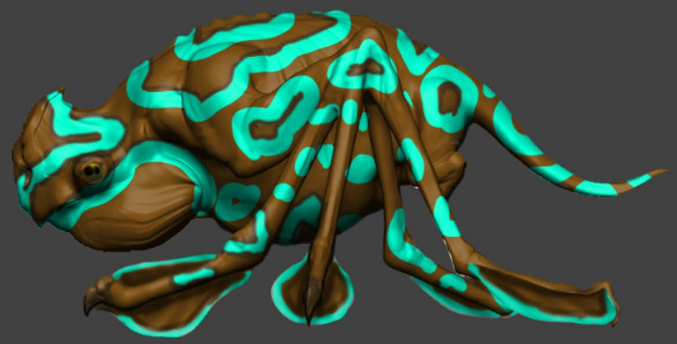
Intermediary sculpt

Movement sheet

Intermediary sculpt



Pattern variation

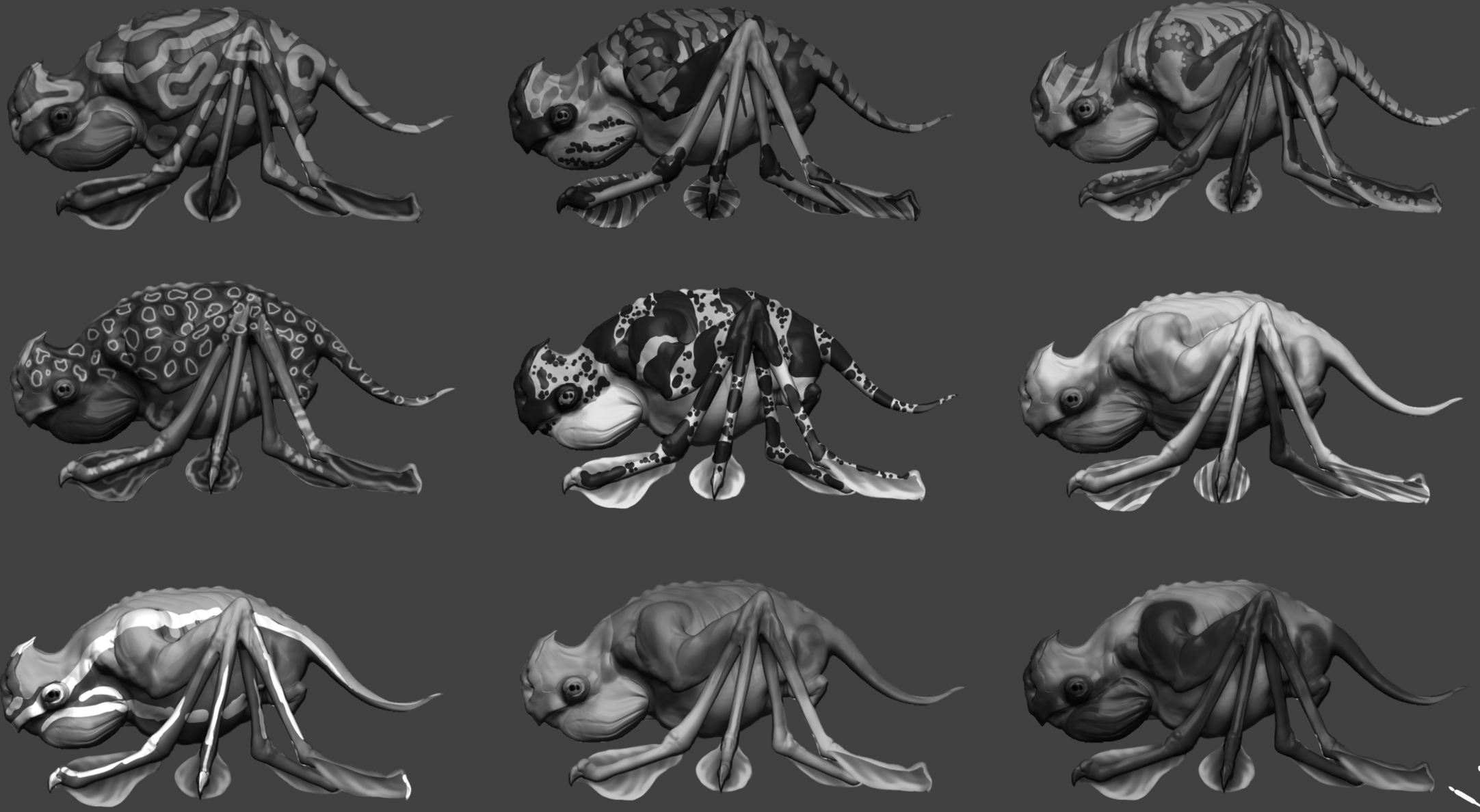




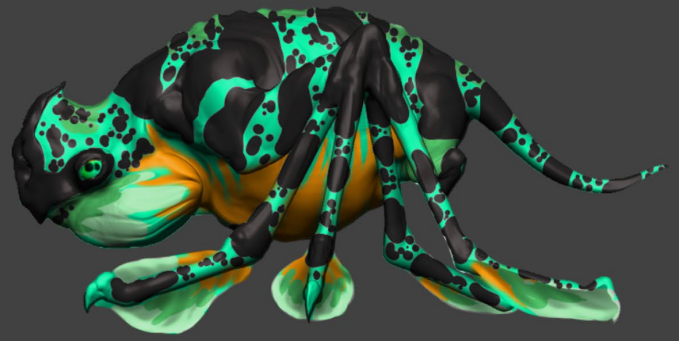


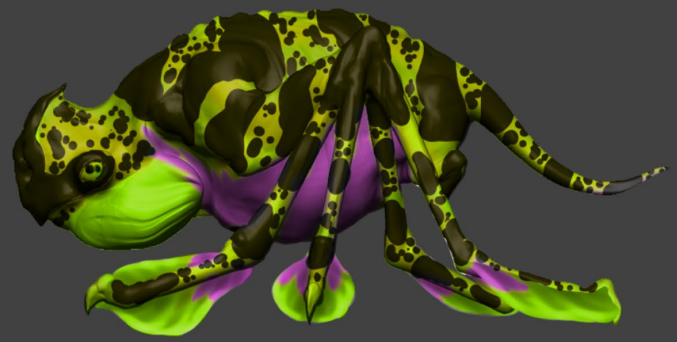
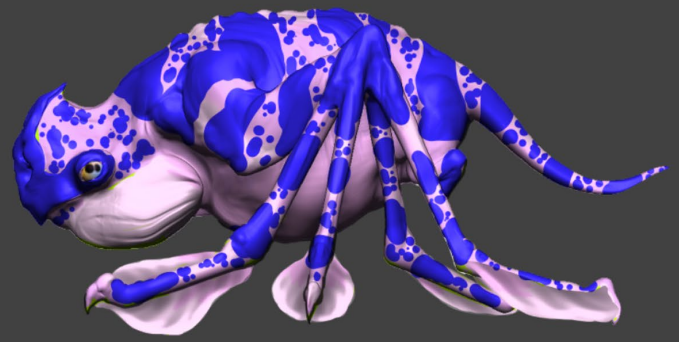
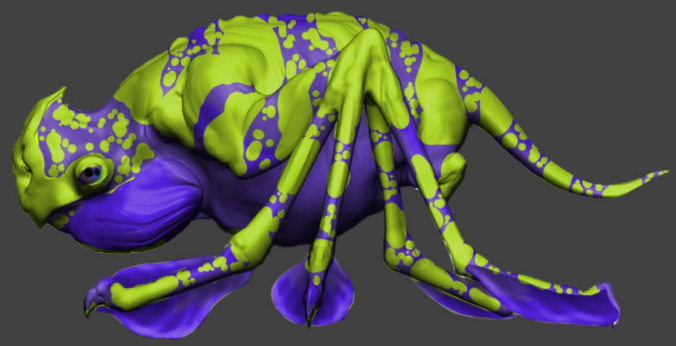
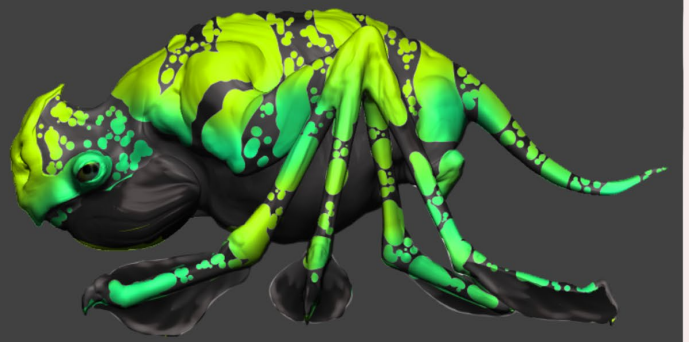
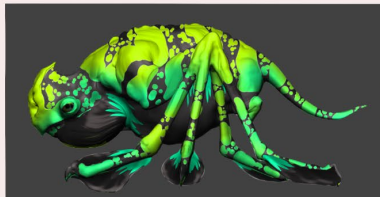


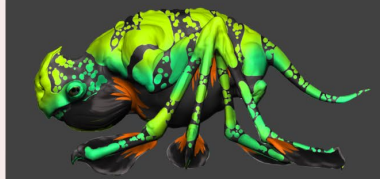
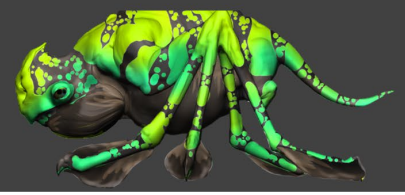
Pattern variation



Colour variation

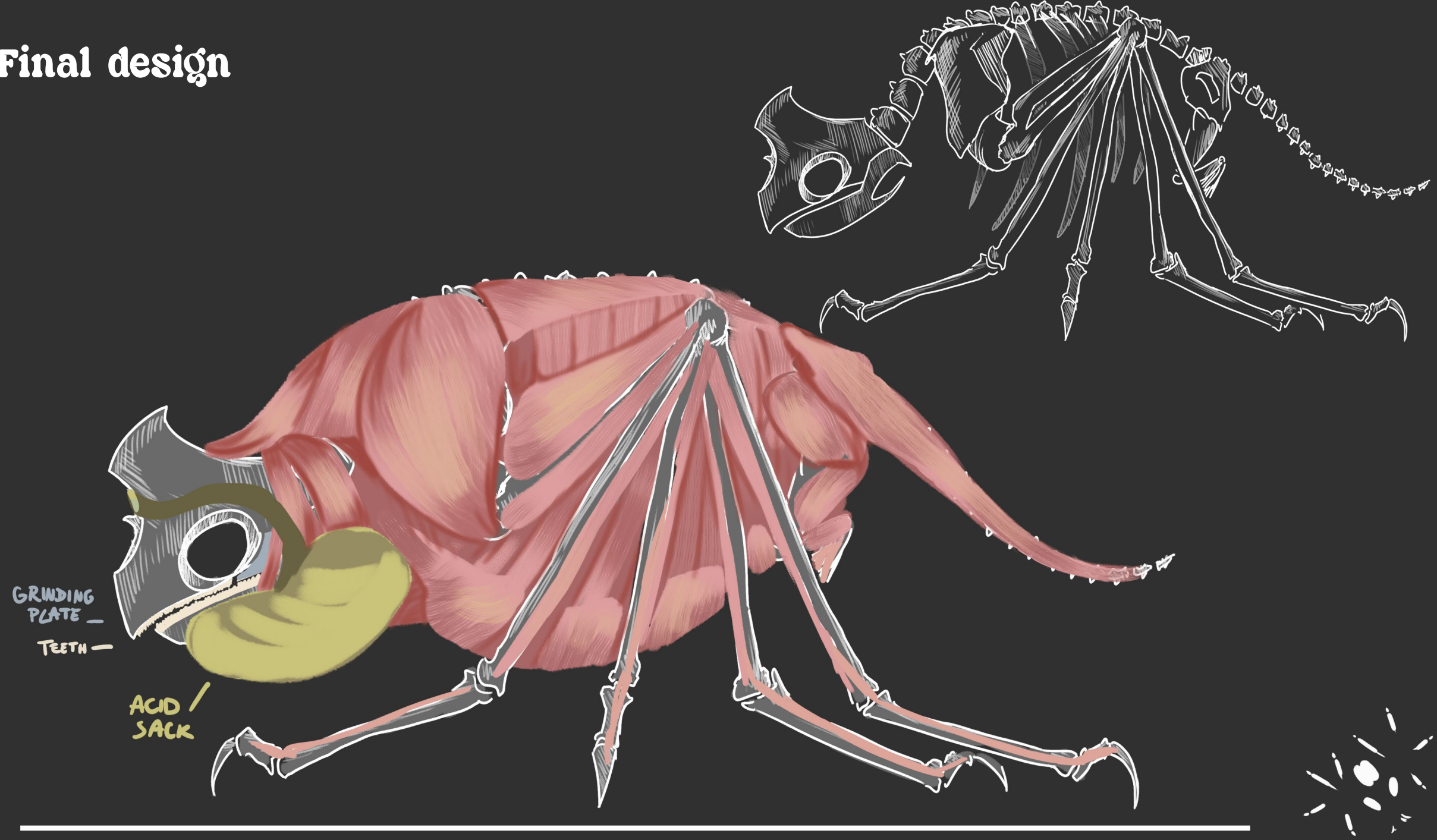



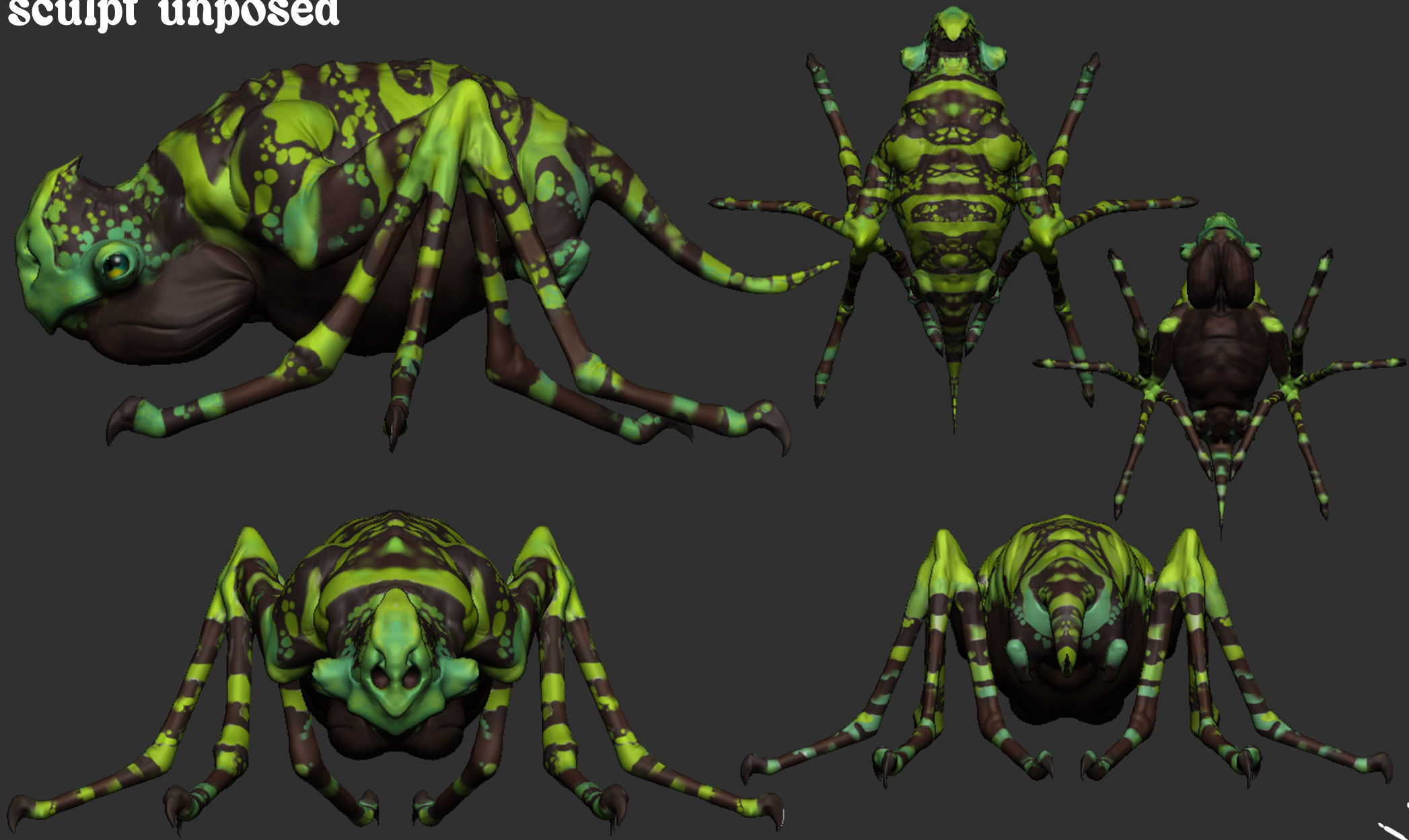

Texture variation

Final design



Final design

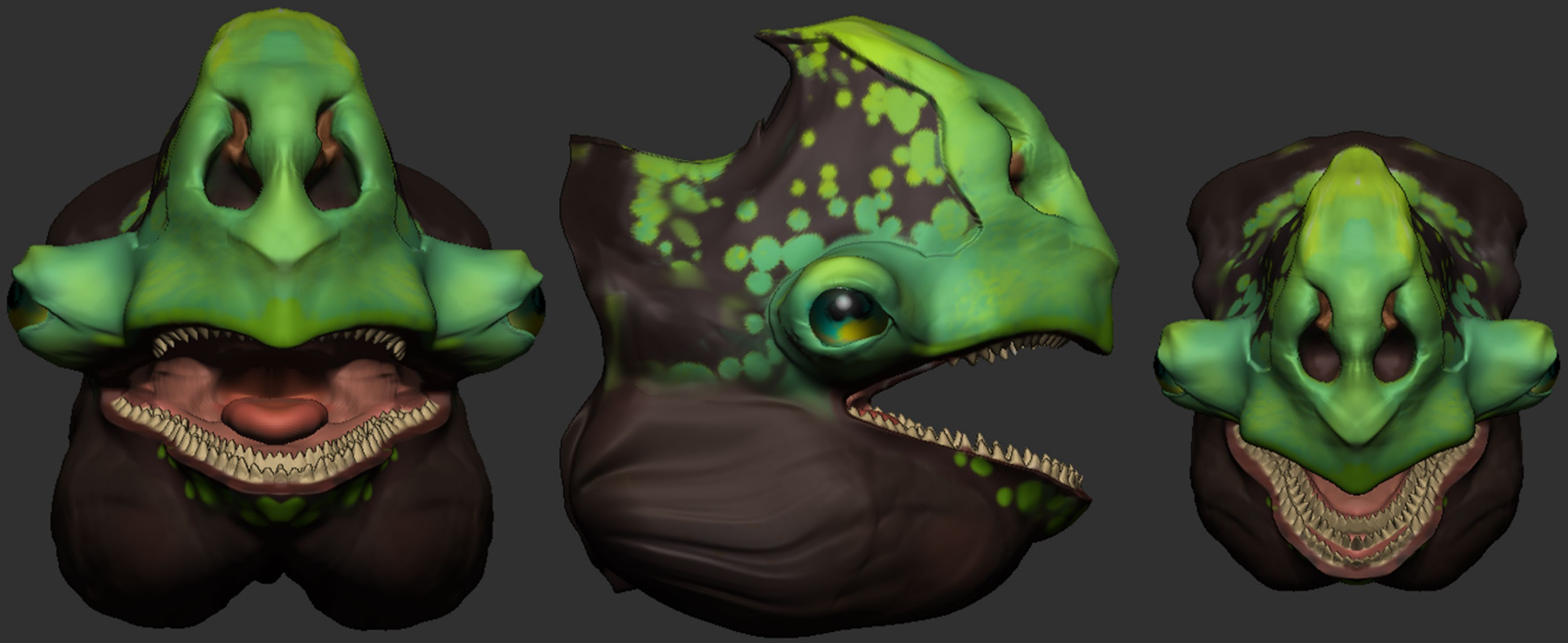
Final sculpt unposed



Final sculpt

Details

Head



Male vs Female