

PRODUCT DESIGN II ARCHANA S 176130010

B I O M I M E T I C

B O B S T E R

FOR THE PLAYFUL GROWTH

Design Statement and Considerations

To design an innovative playful ride on equipment for children of age group 6 – 12 years of age to be used outdoors.

The solution should encourage physical and creative development in children while promoting a cohesive play environment.

May Have's

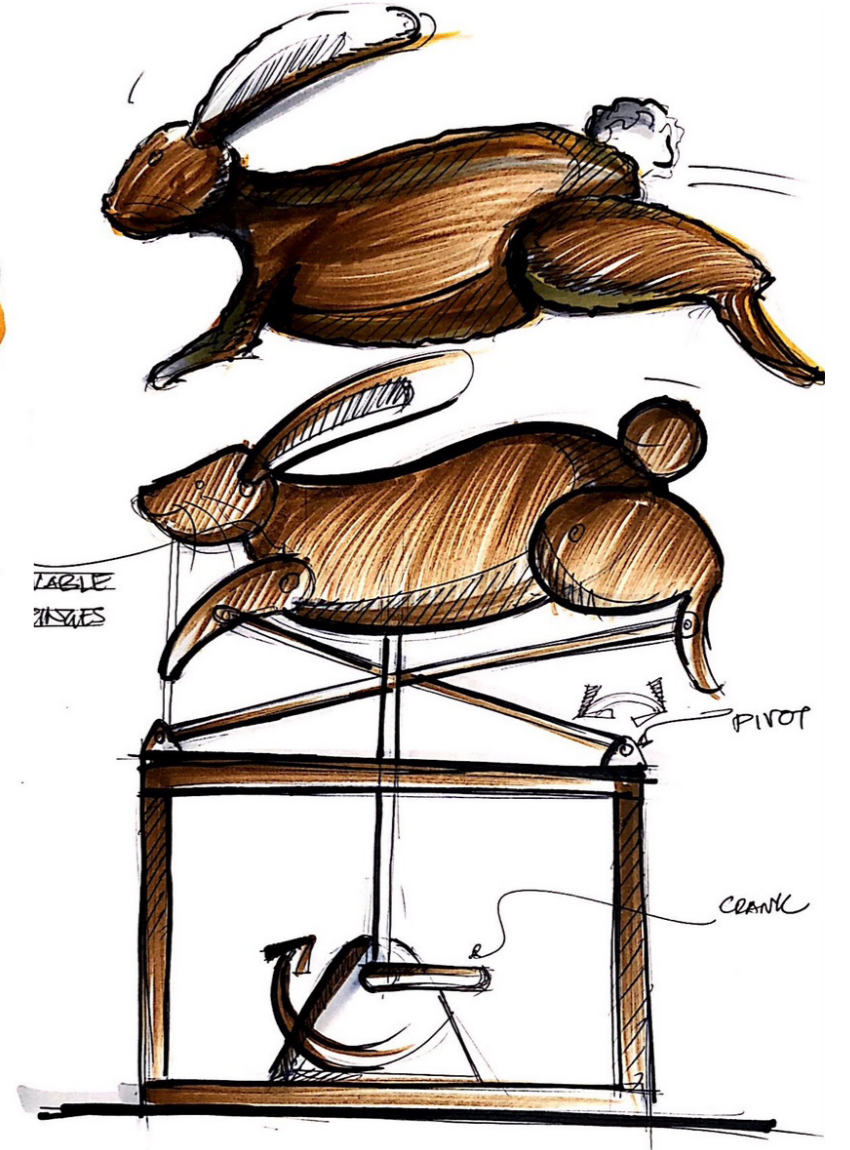
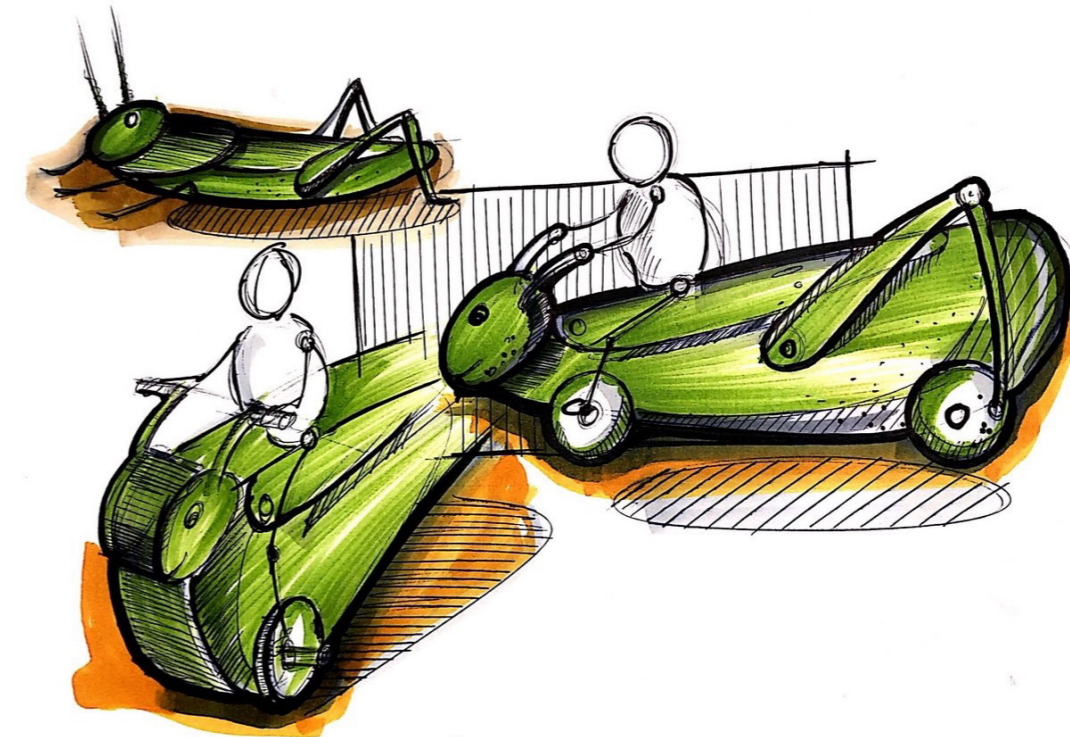
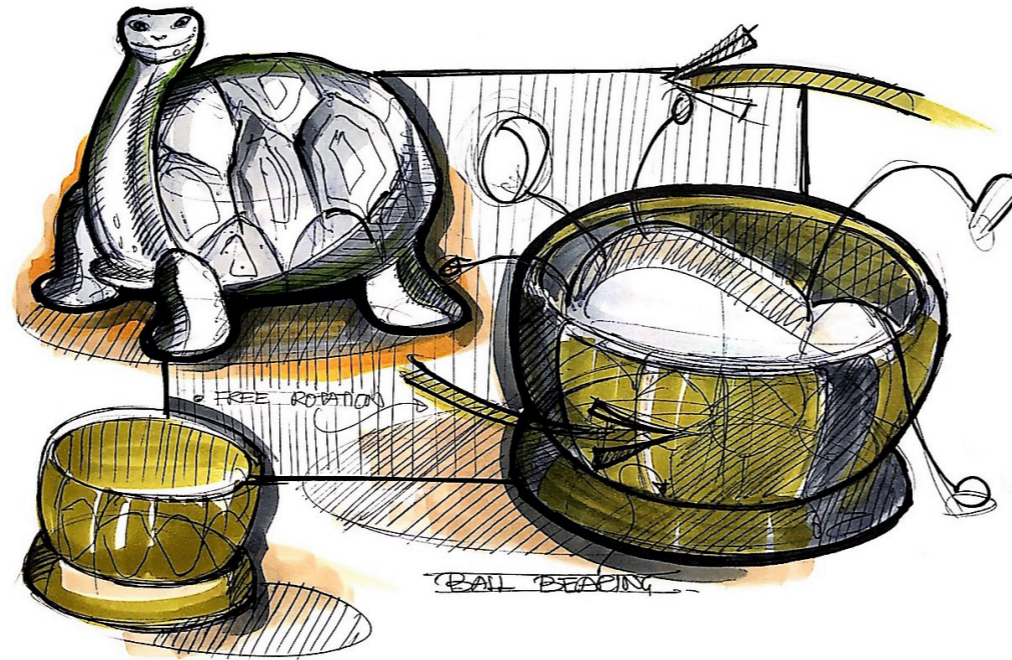
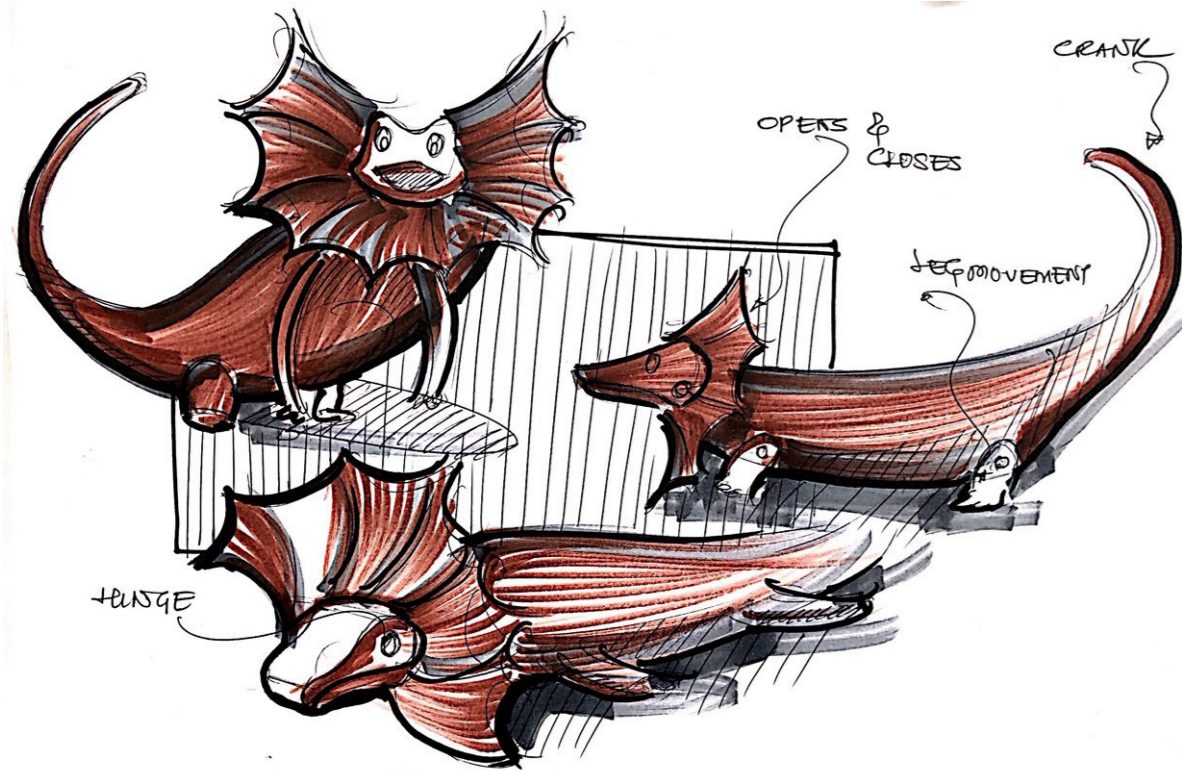
- Cohesive play environment
- Dynamism inducing the Thrill factor
- Dynamic components
- Intellectual development with equipment
- Encouragement of Imagination

Must Have's

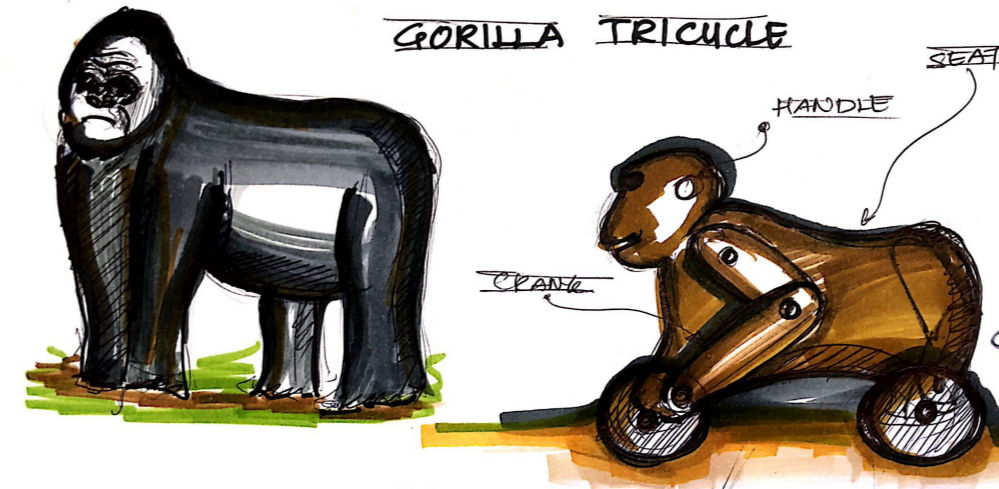
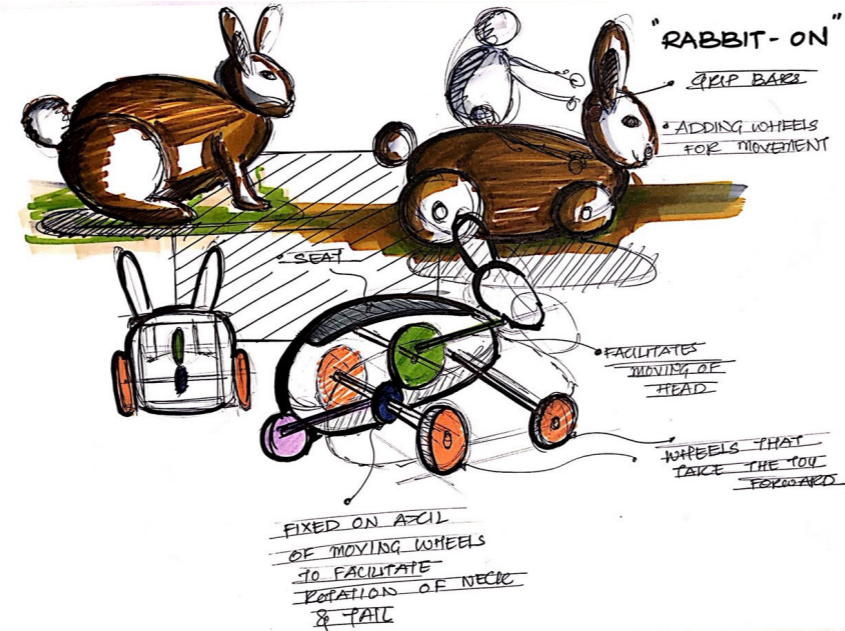
- Equipment fostering confidence in parents
- Flexibility of use / freedom of exploration
- Window for exploration
- Interactive feedback system
- Fall friendly Equipment
- The equipment should not allow over-crowding



Design Considerations

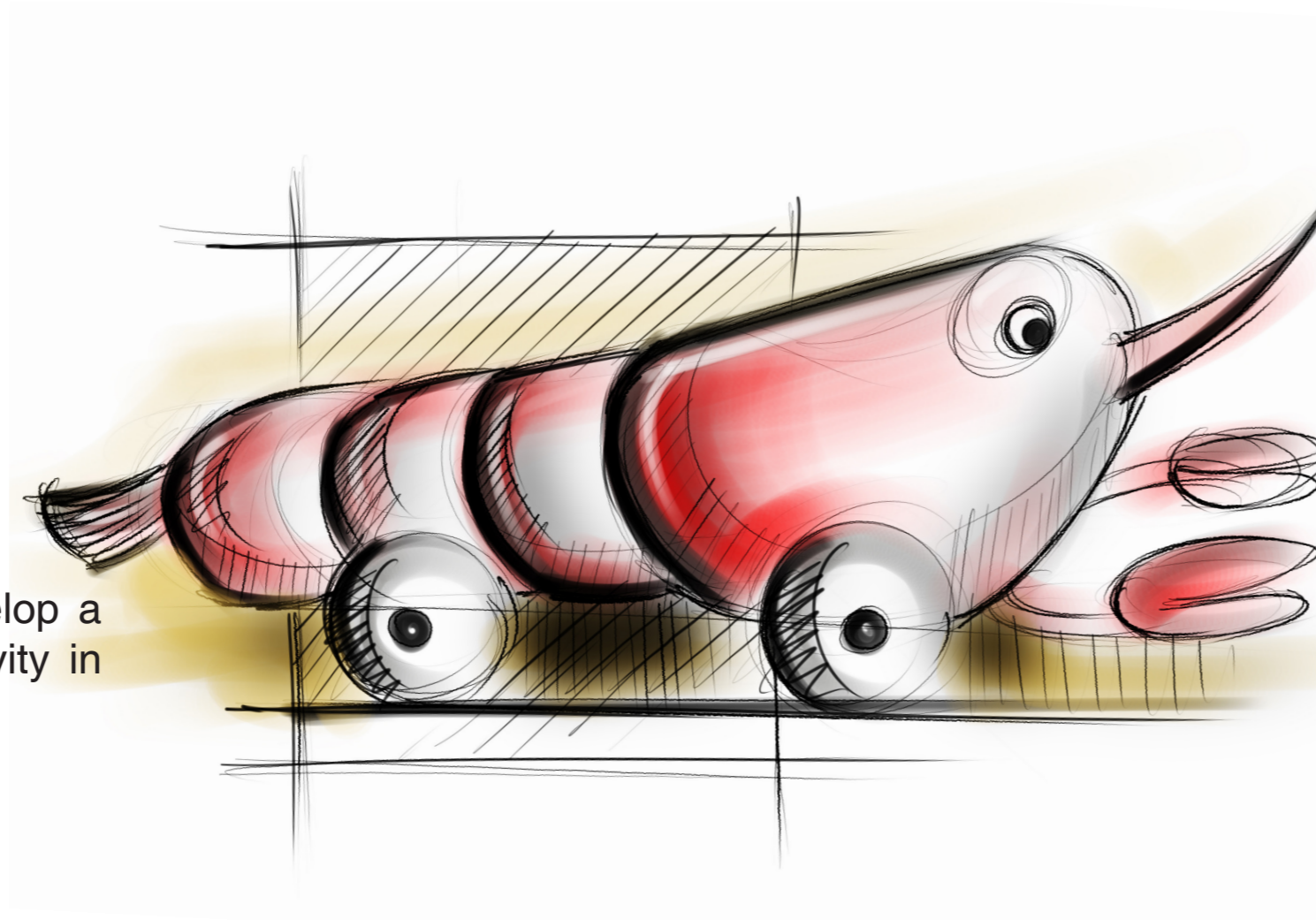


- Exploring ideas and mechanisms with various animals.



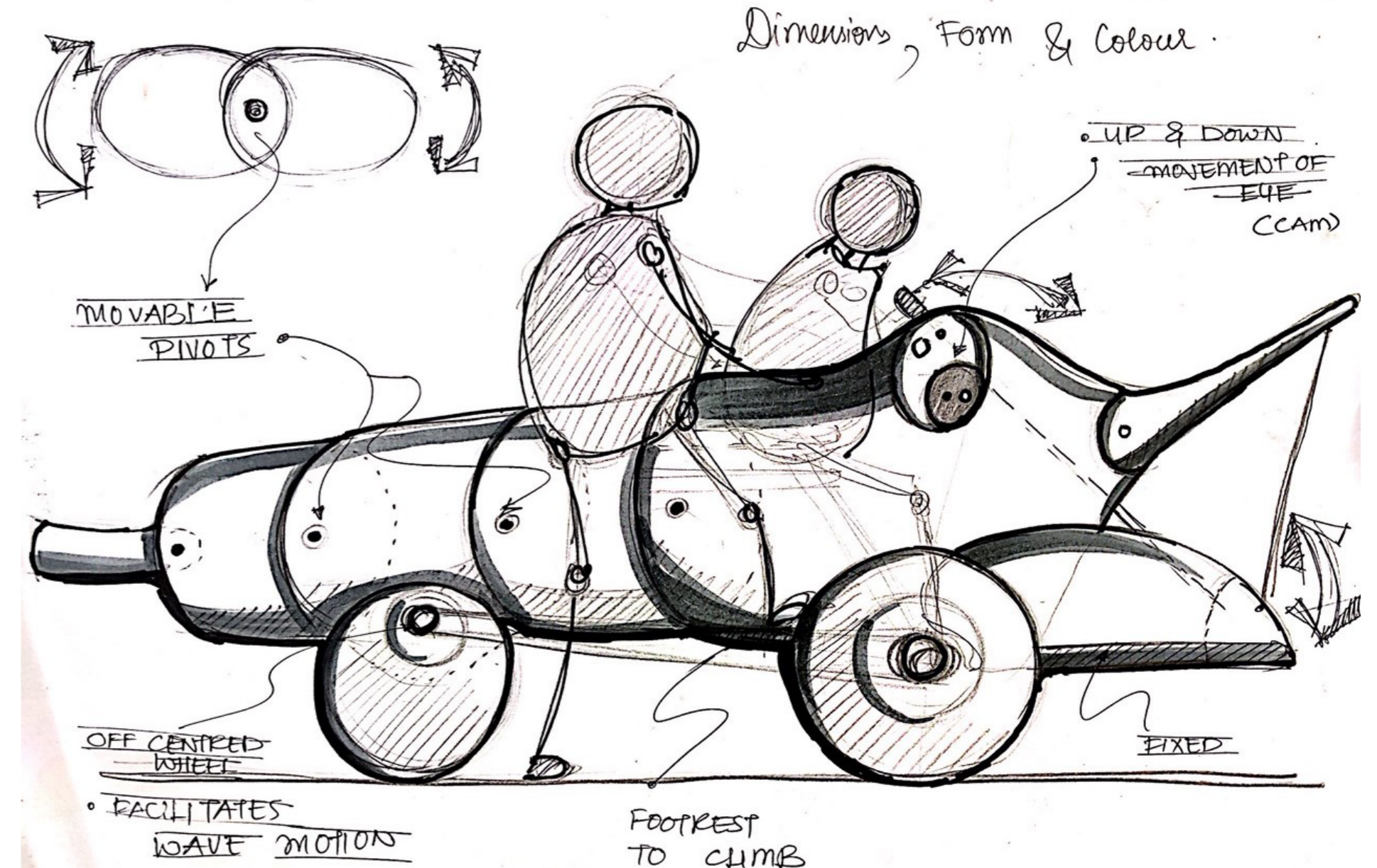
Final idea

- Taking Lobster as inspiration to develop a ride on to playfully promote physical activity in children.

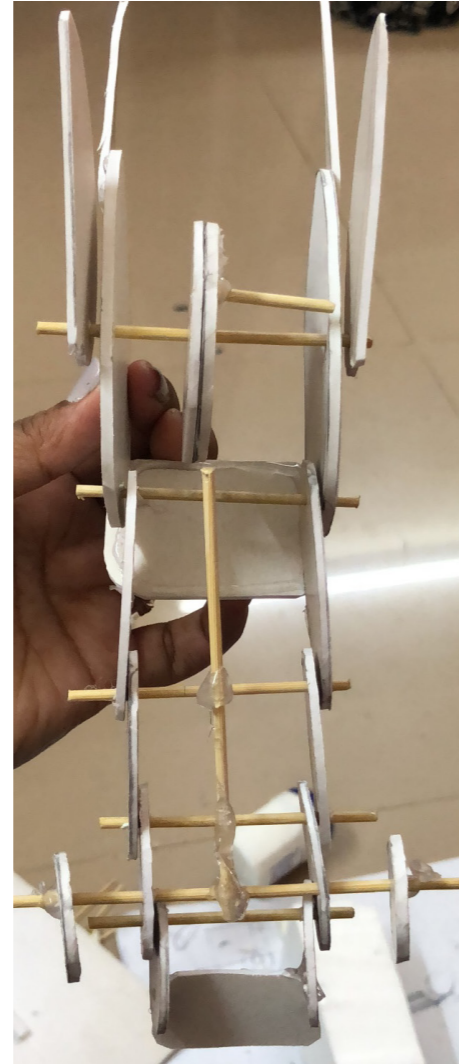
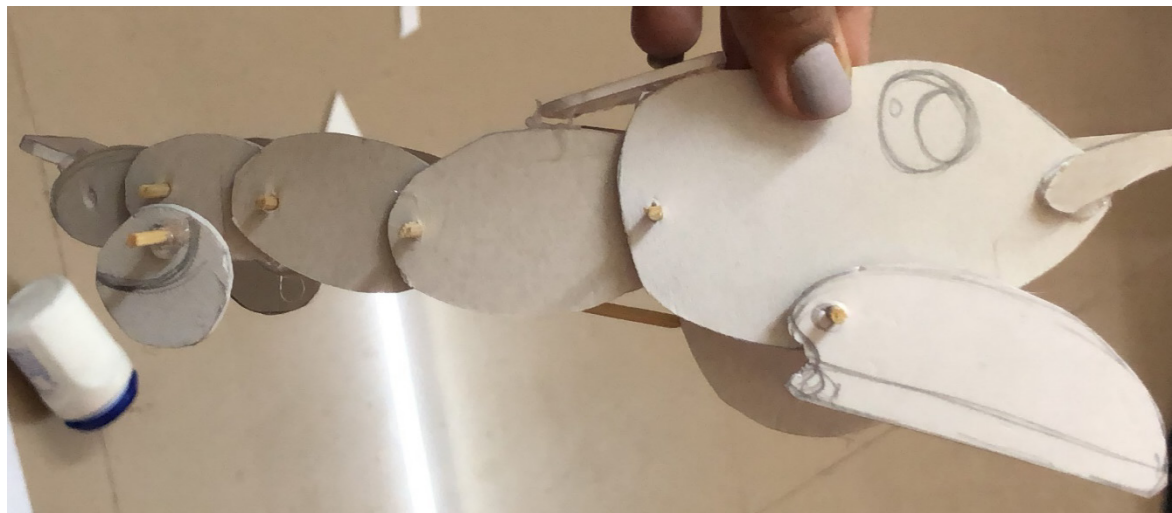
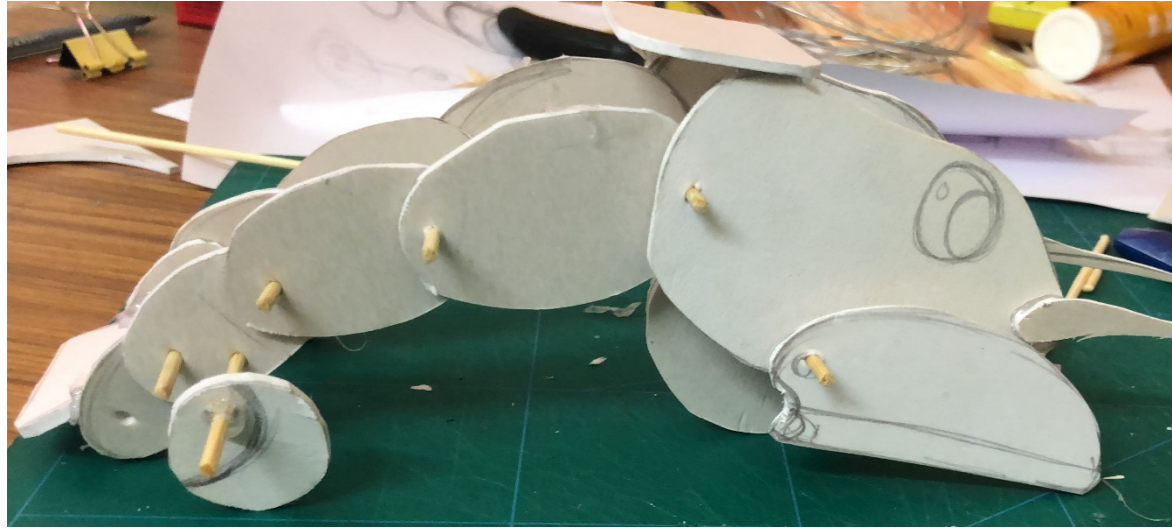


Conceptualization

- Developing the idea into a concept.
- Mechanism to provide for the wavy motion of the tail powered by pedalling of the child.
- Exercise for the legs.
- Movement of claws by to and fro motion of gripping bars held by the child.
- Exercise for the arms.

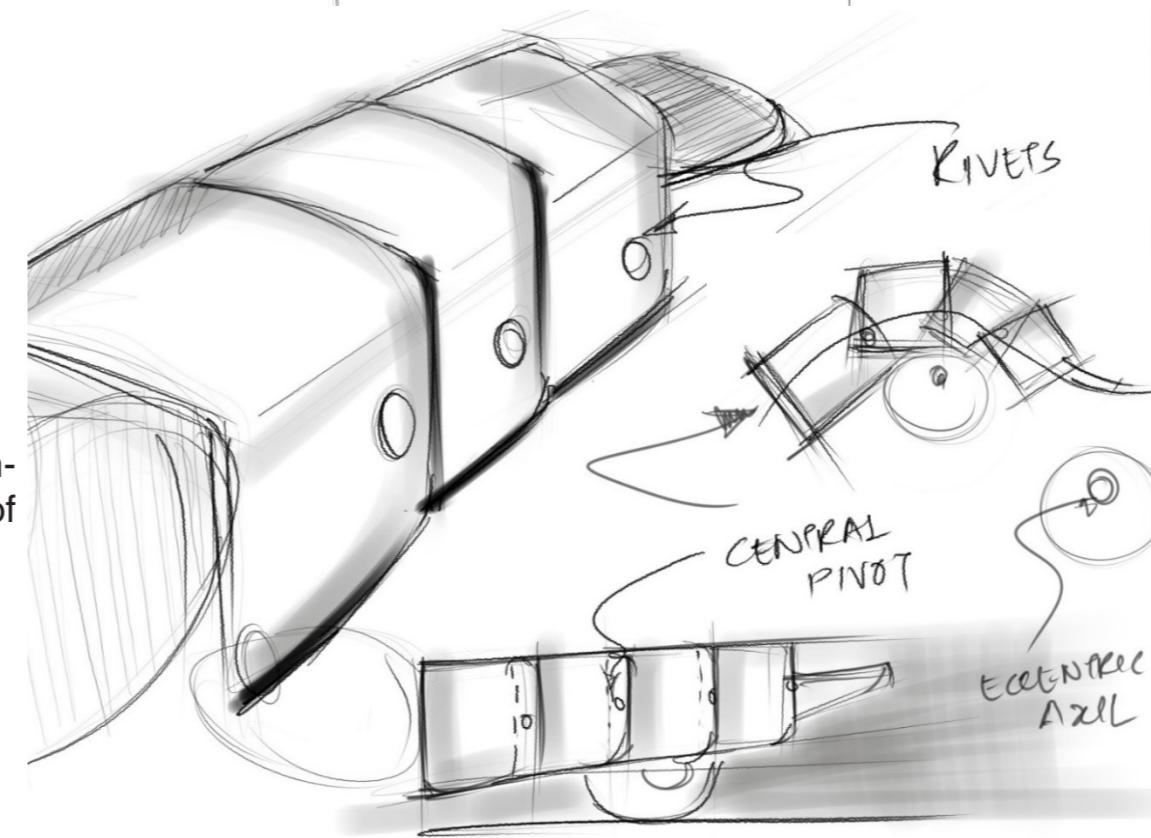
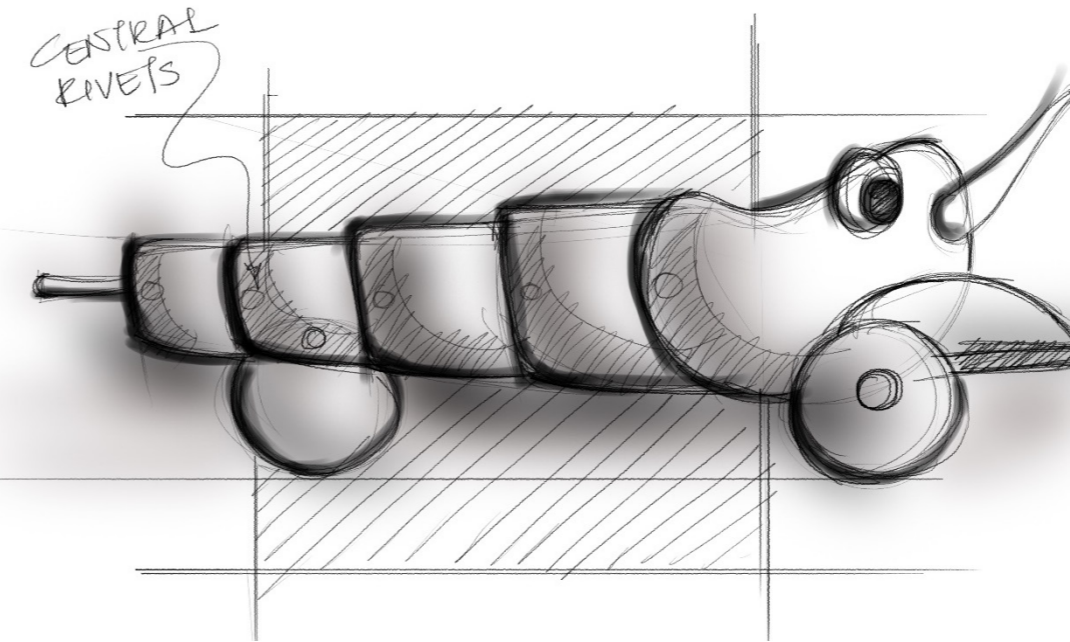


Dirty Prototype

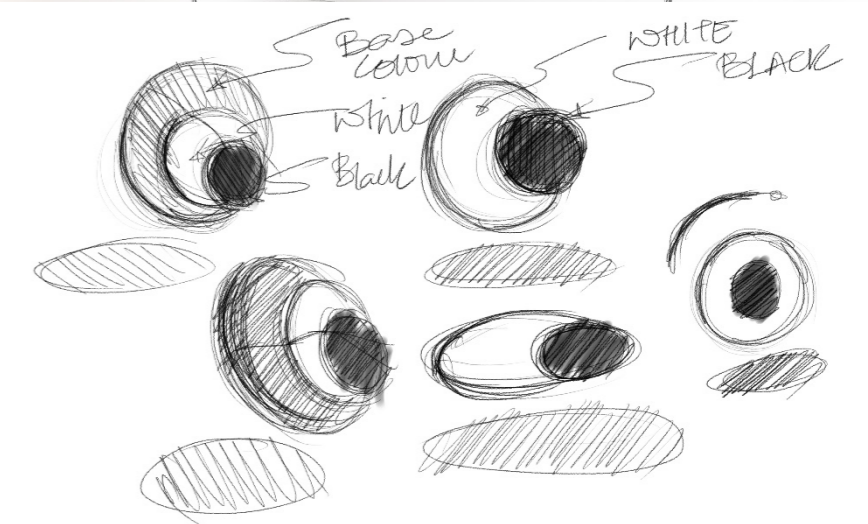
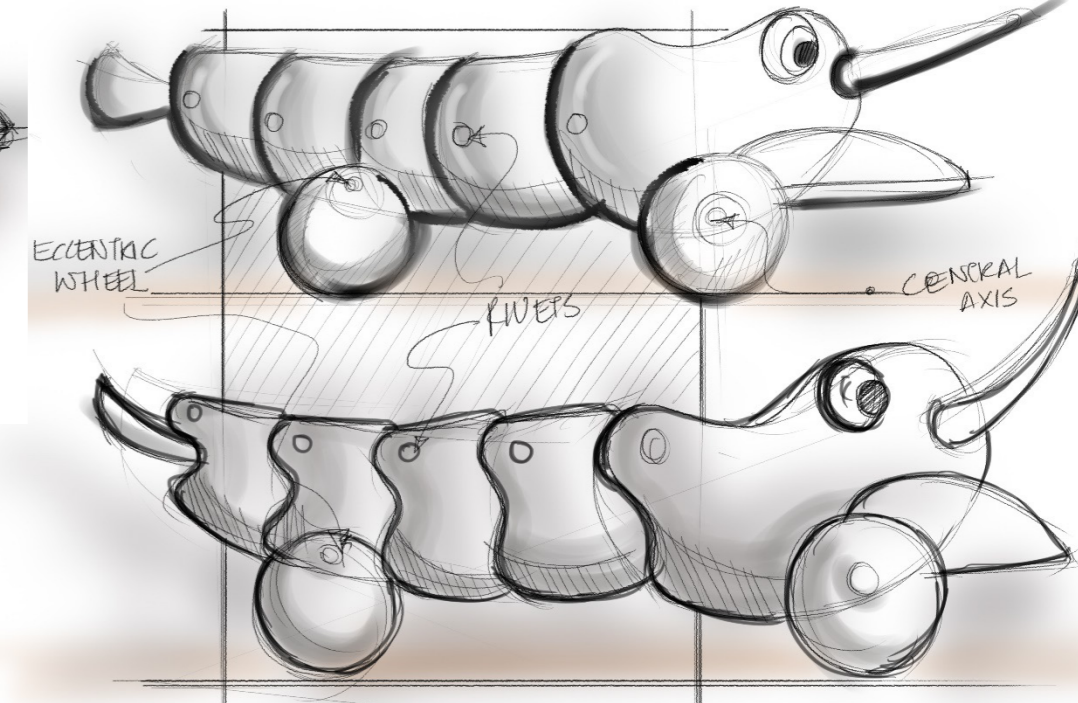


- Exploring forms for the tail to ensure free movement.
- Also visual expressions for making it children friendly.

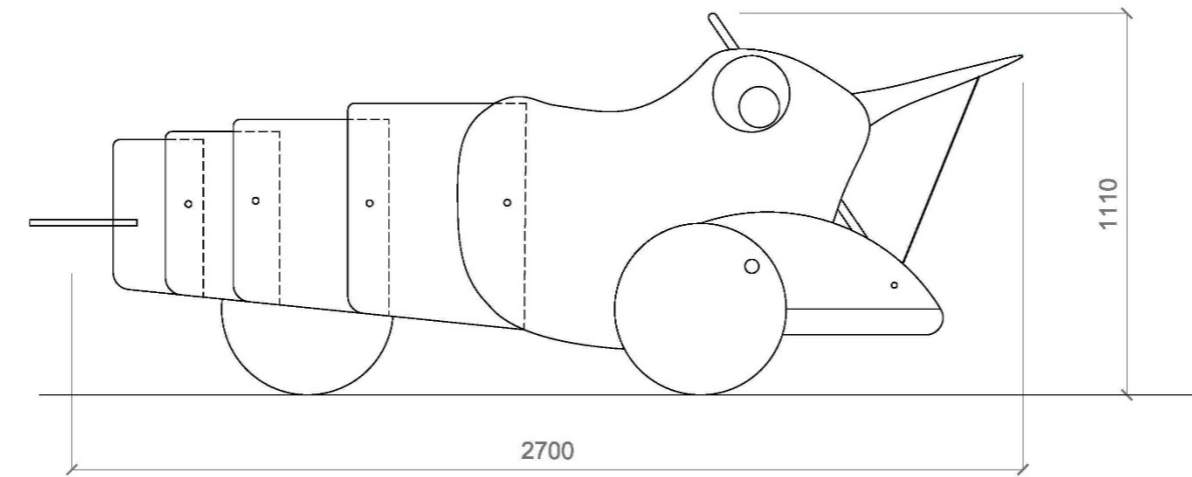
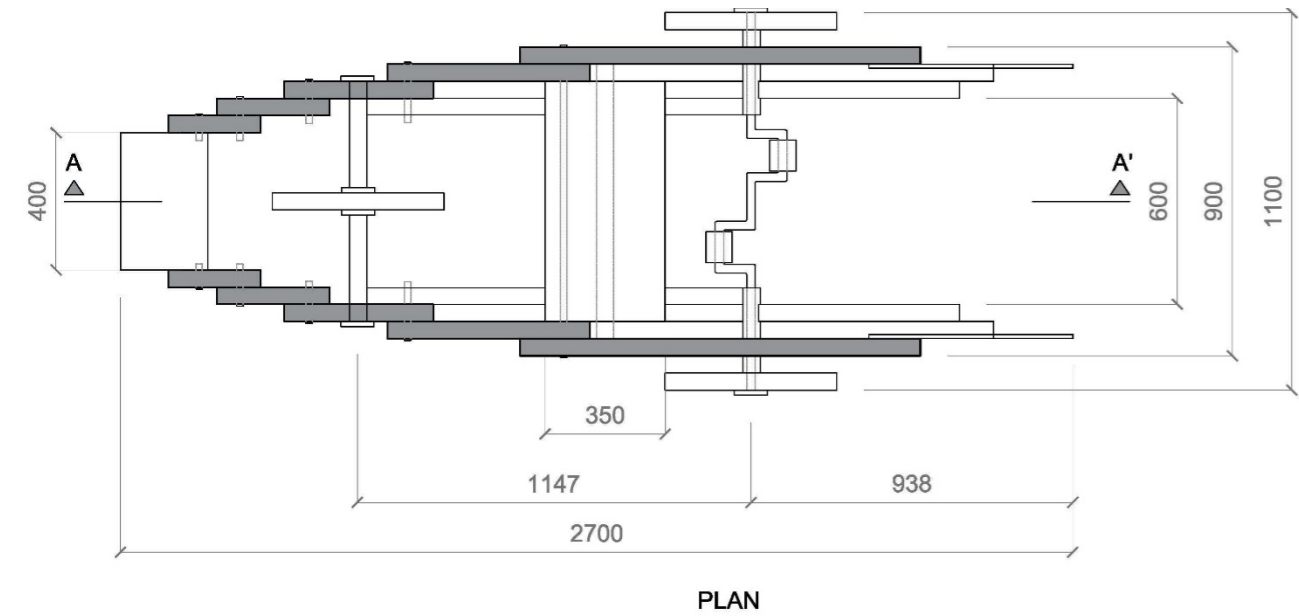
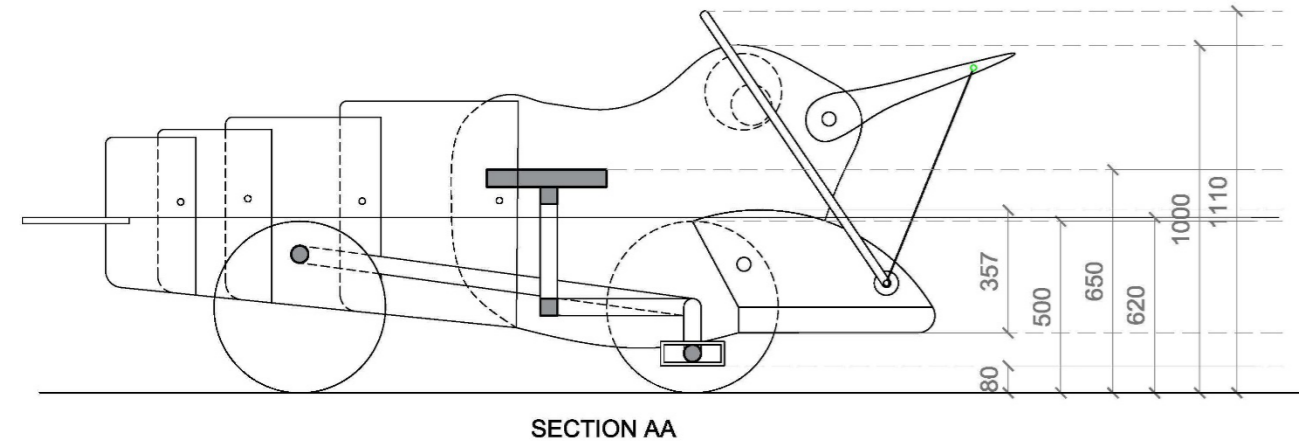
- Quick model to understand the working of the mechanism.
- Helps understand scale and proportions.



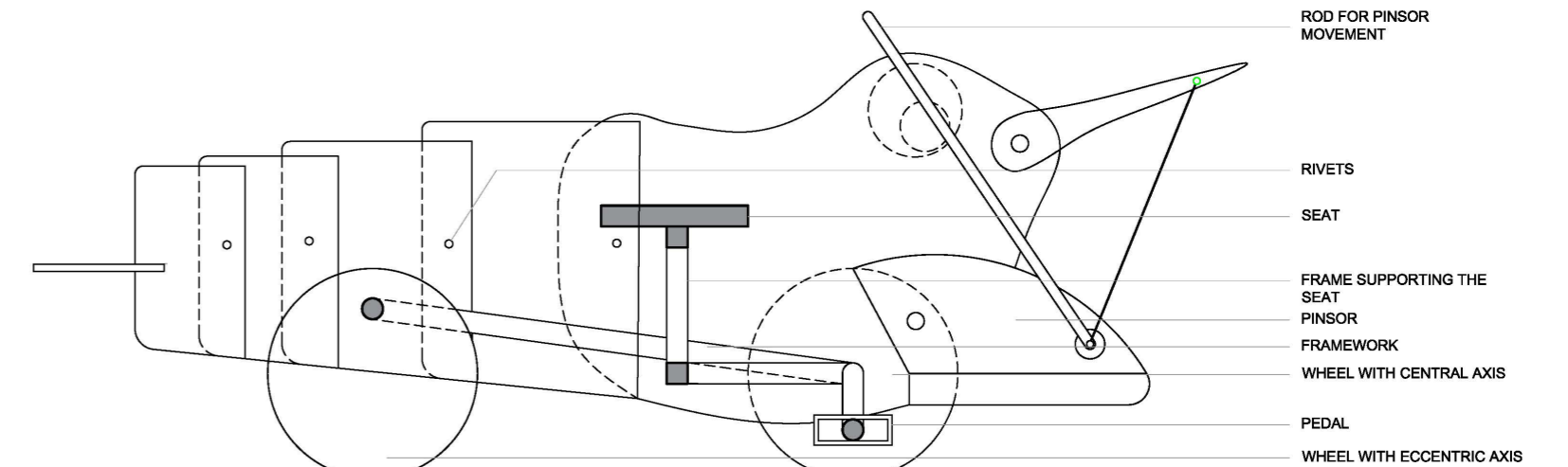
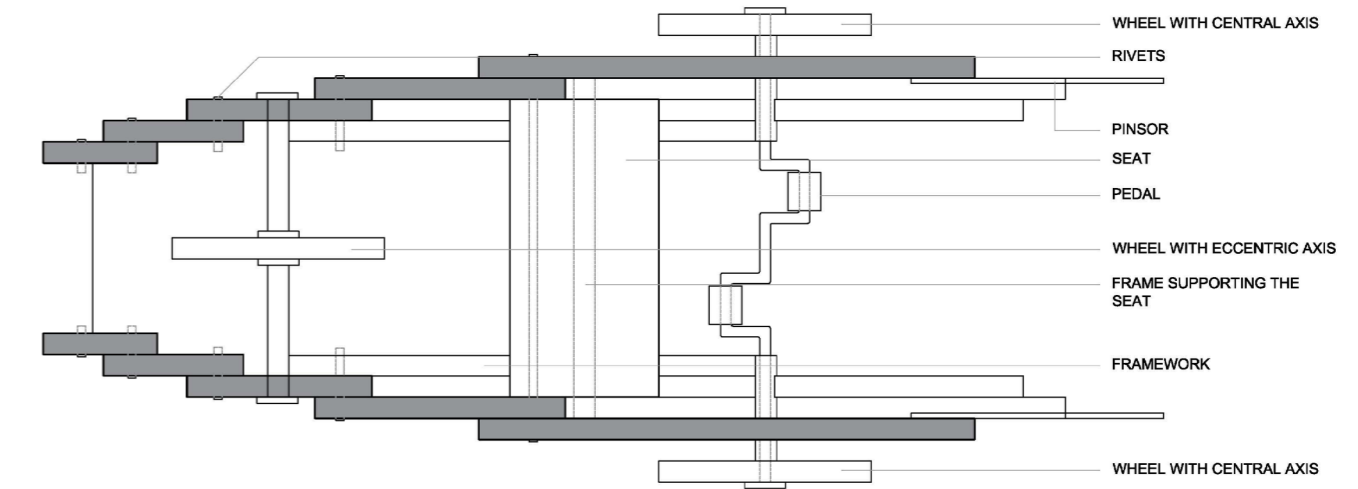
Form Exploration



Measured Drawings

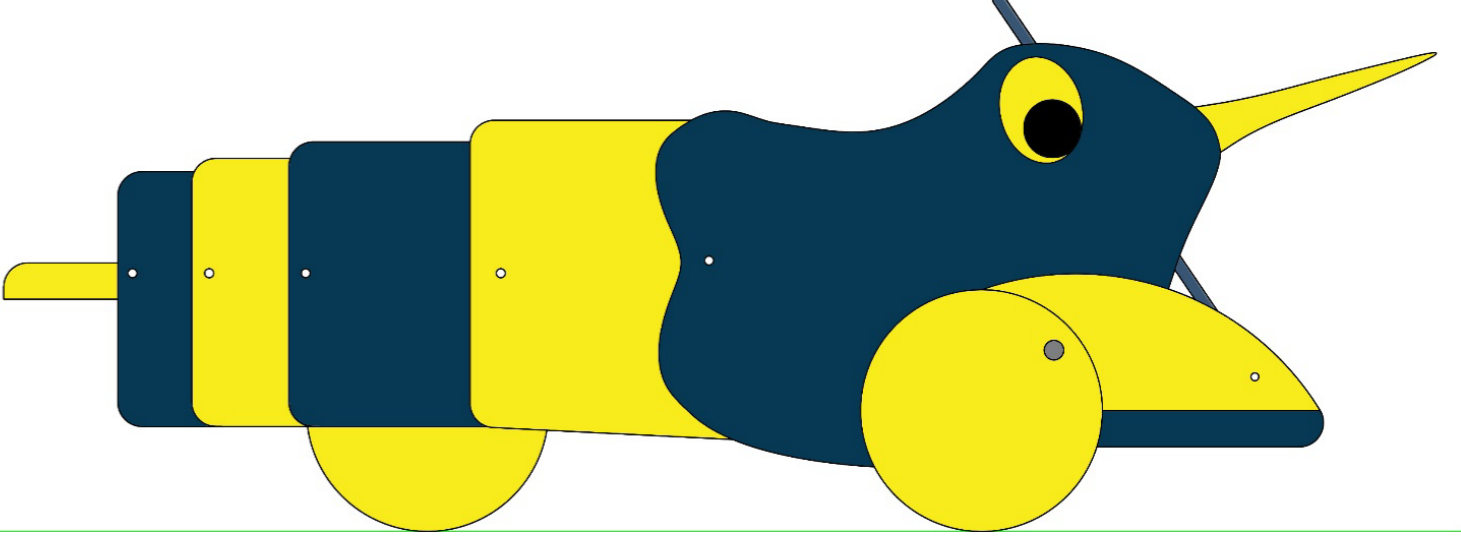
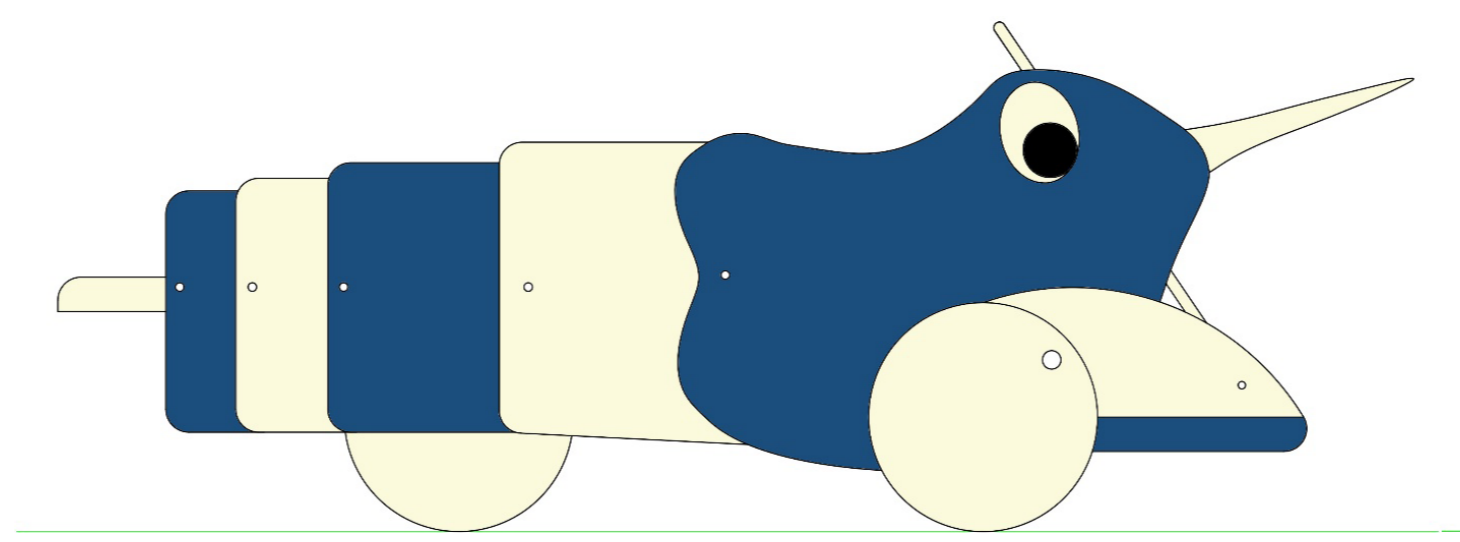
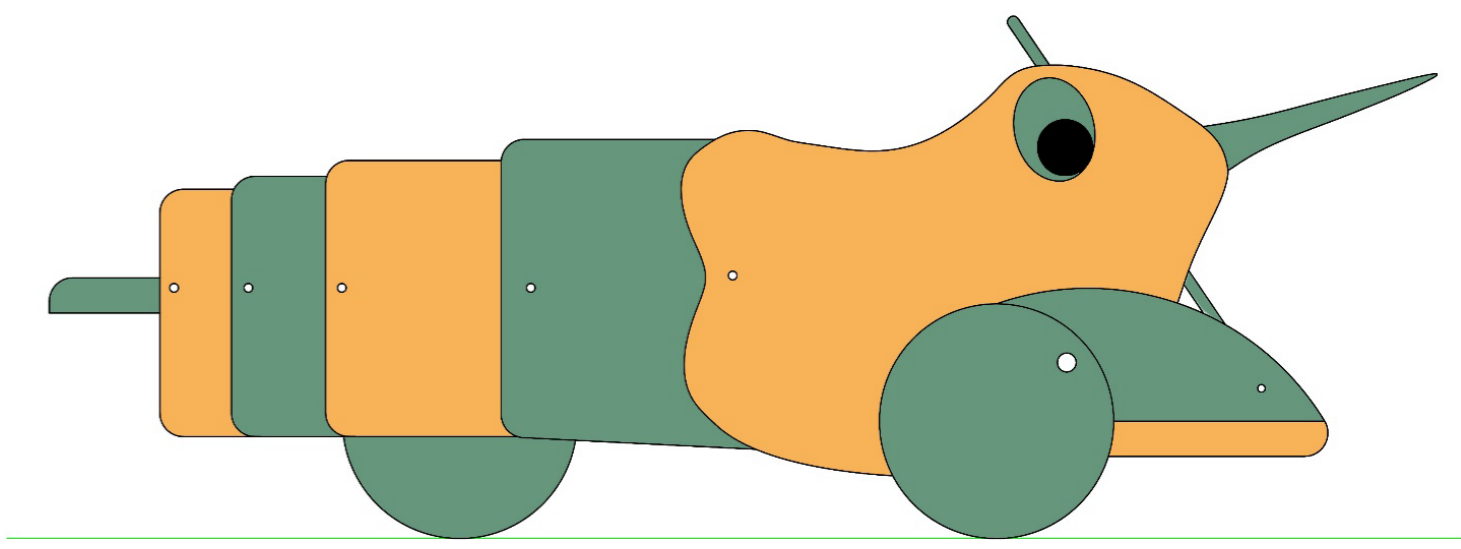
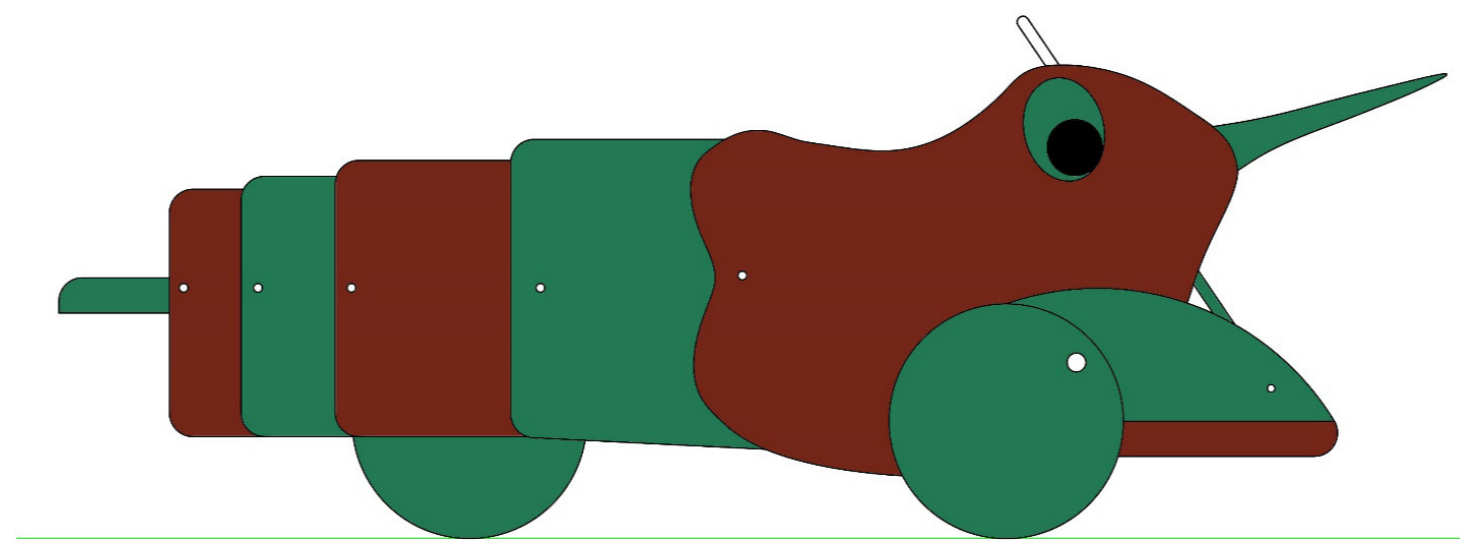


- Understanding Scale and proportions of the product at 1:1 scale.
- Enabling build of the product.

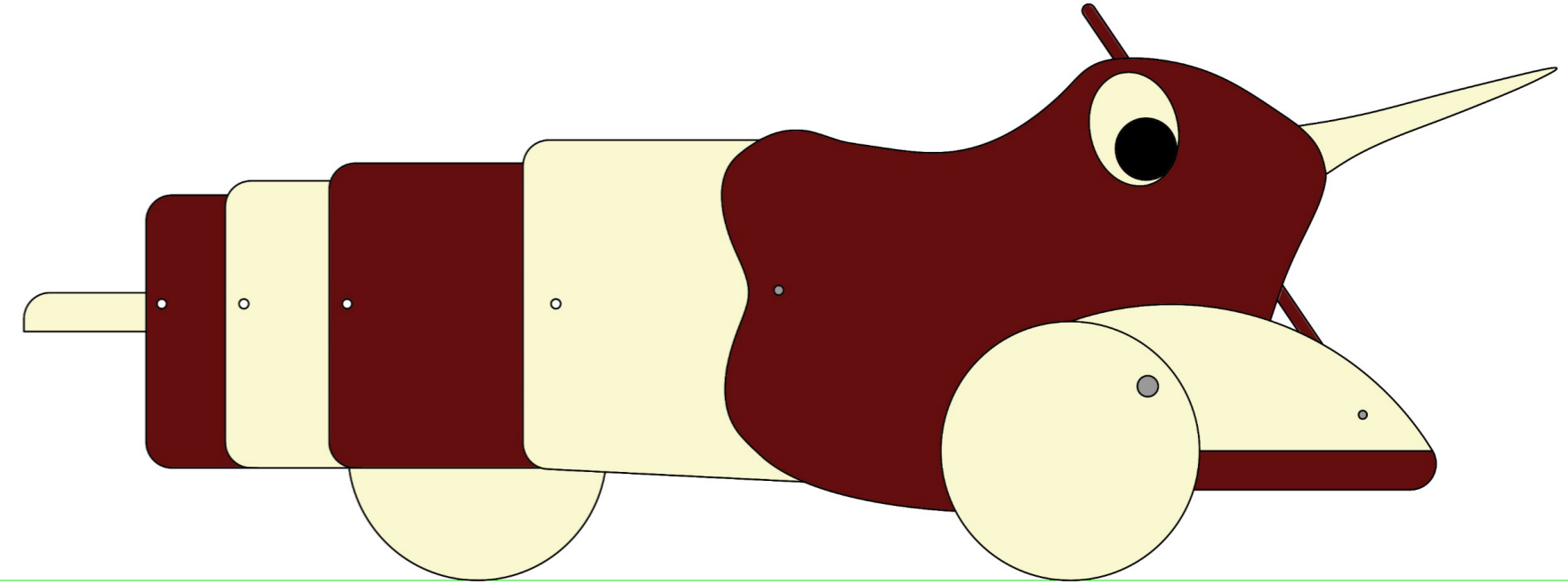
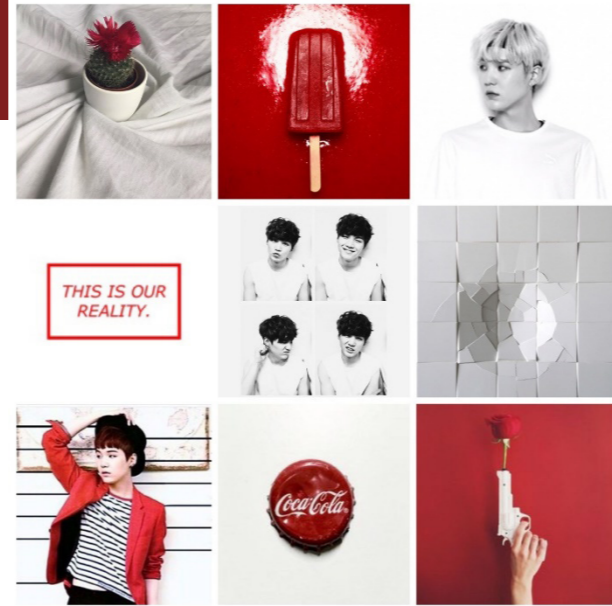
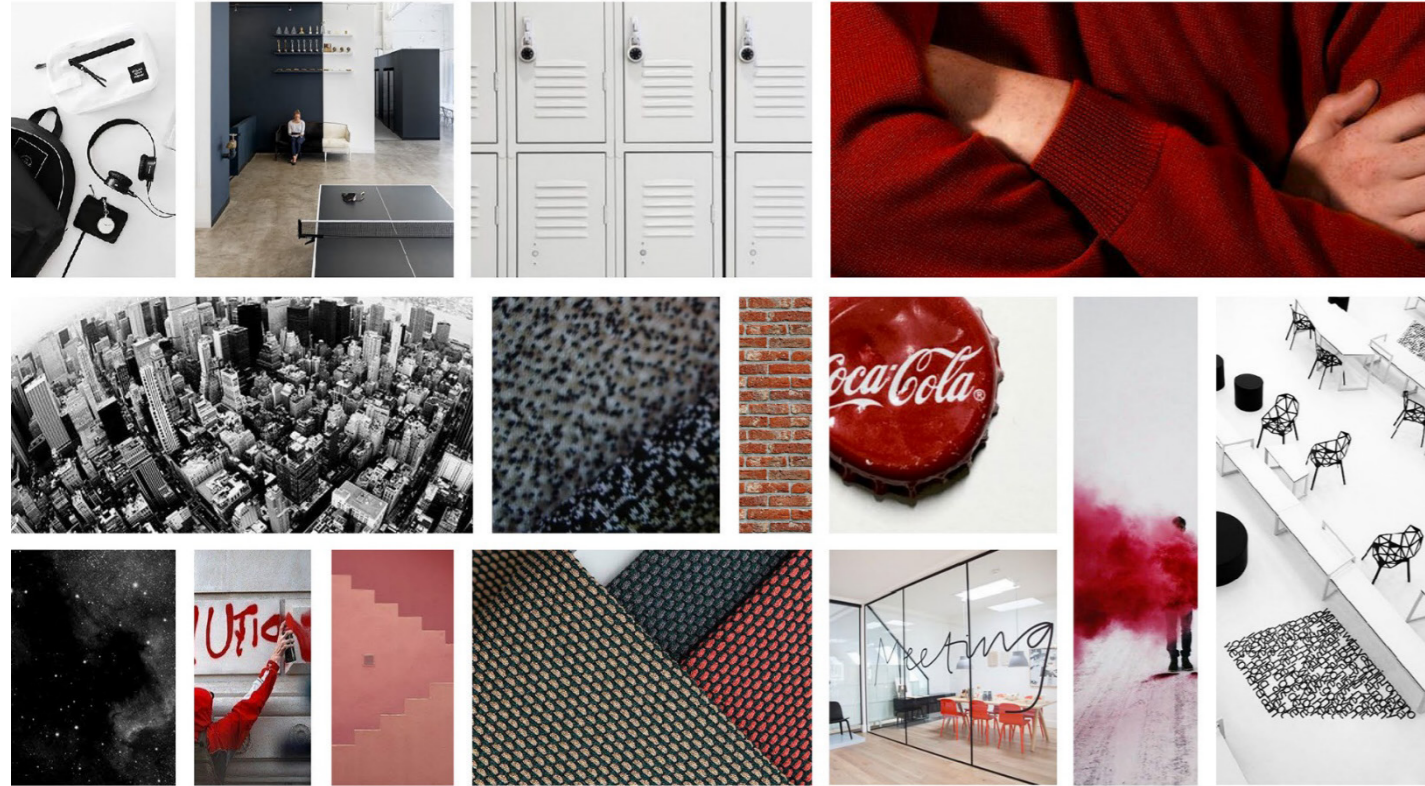




- Explorations with high contrast and bright yet sober colours to appeal to the children.



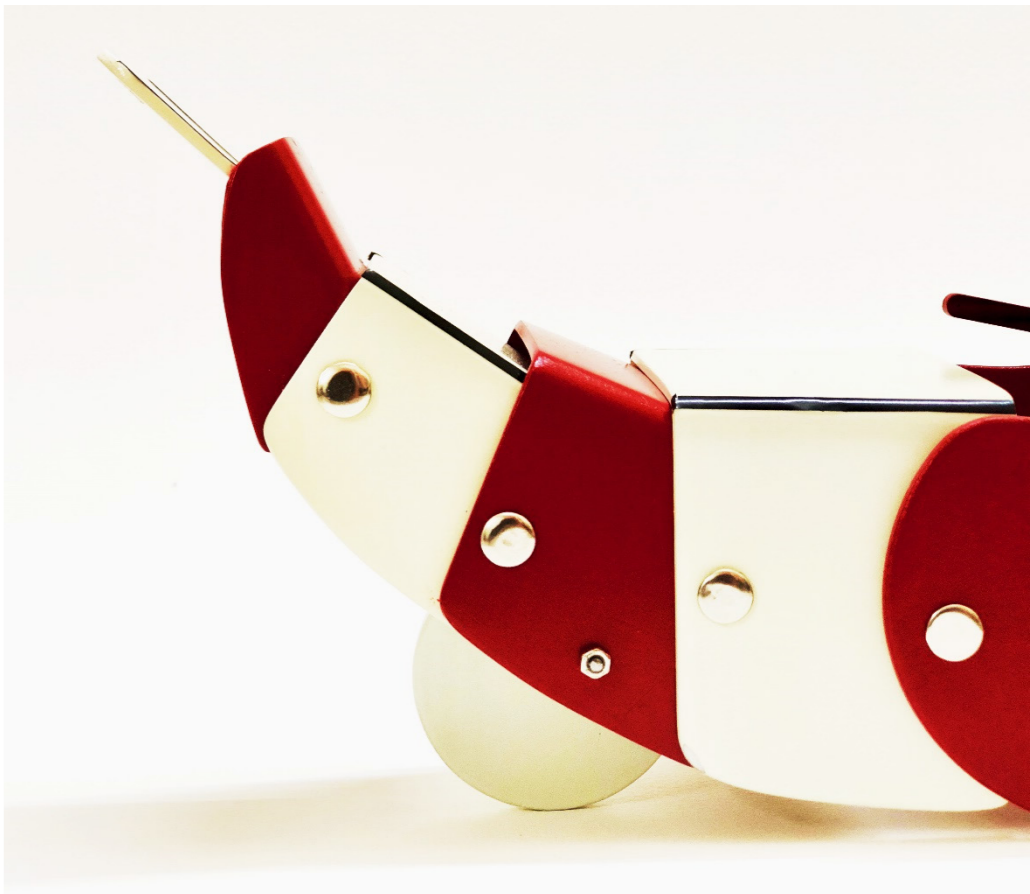
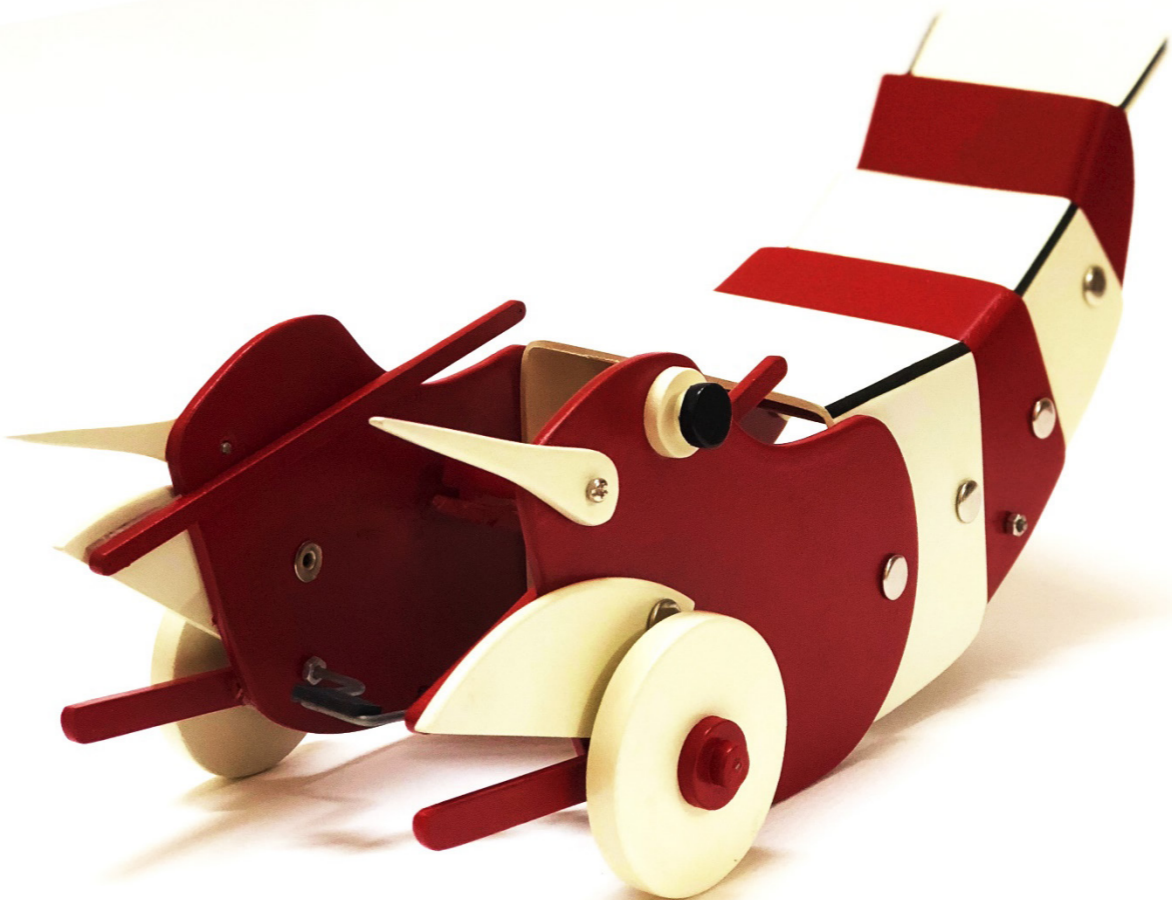
Mood Board



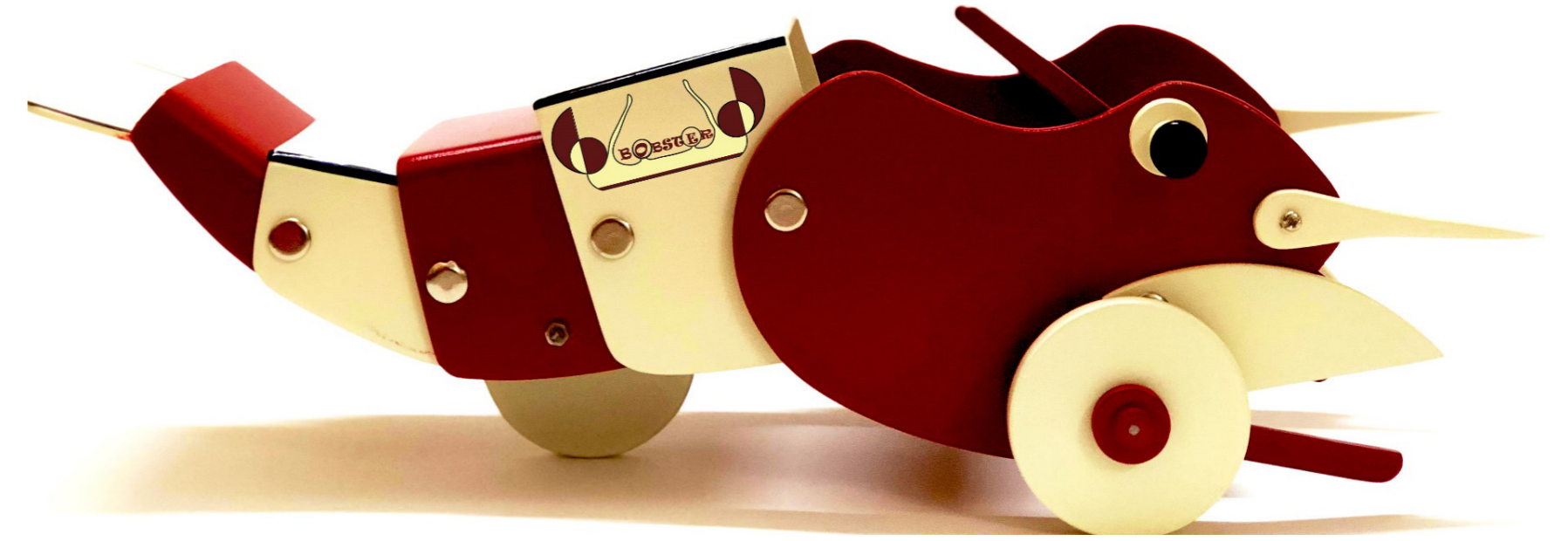
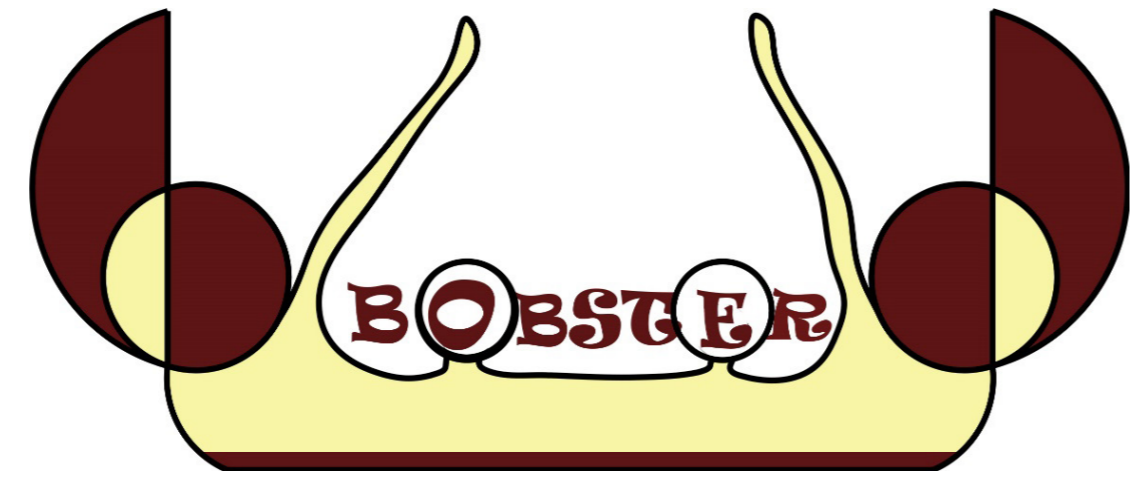
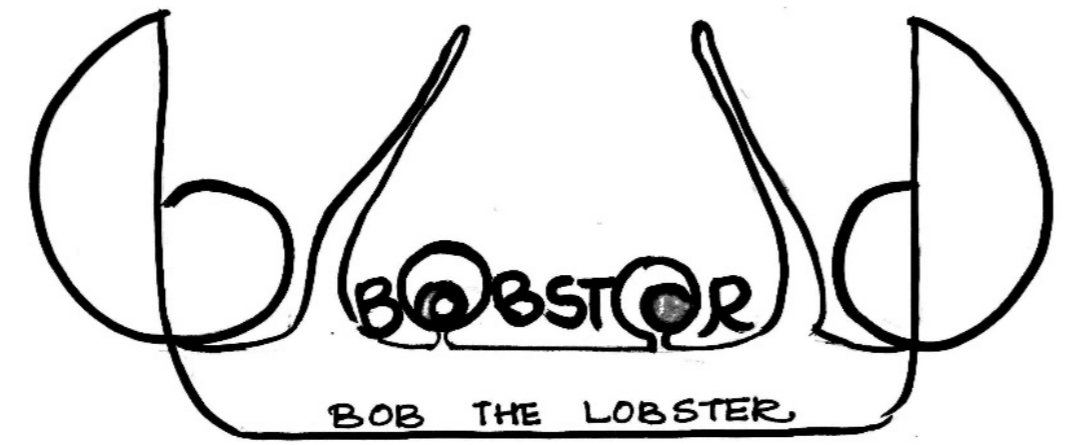
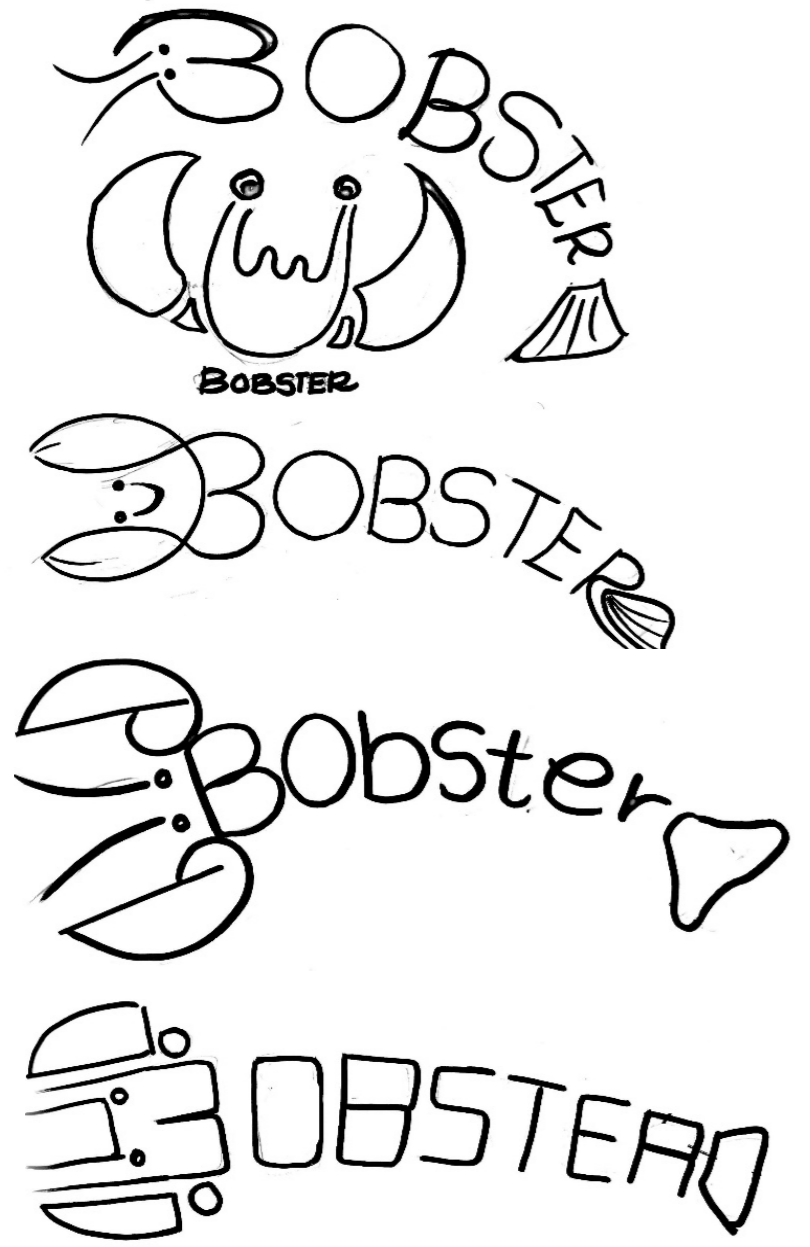
- High contrast to give clear differentiation of shades.
- Bright and inviting.
- Red has highest wavelength and is eye catching.
- Off - white gives a subtle feel to the combination.



Final Design



Branding



Bob The Lobster - B O B S T E R