

Biomechanic Toys

Product Design - 2
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Toys for babies

Target user - 9 to 15 month old baby

Things to consider:

- Babies of this age do not have sharp cognitive skills. Anything that has simple motion excites them.
- Toys need to be vibrant and cheerful.
- No sharp edges



Mechanisms to implement

Any of the following mechanisms can be implemented:

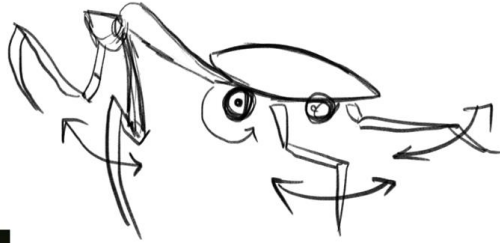
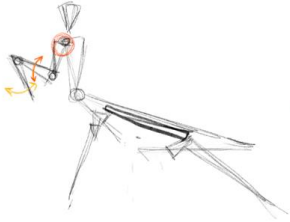
1. Cam
2. Crank
3. Gears
4. Ratchets
5. Pulleys
6. Levers
7. Link mechanism

Best toys for children come from simple biomimicry of animal motions.

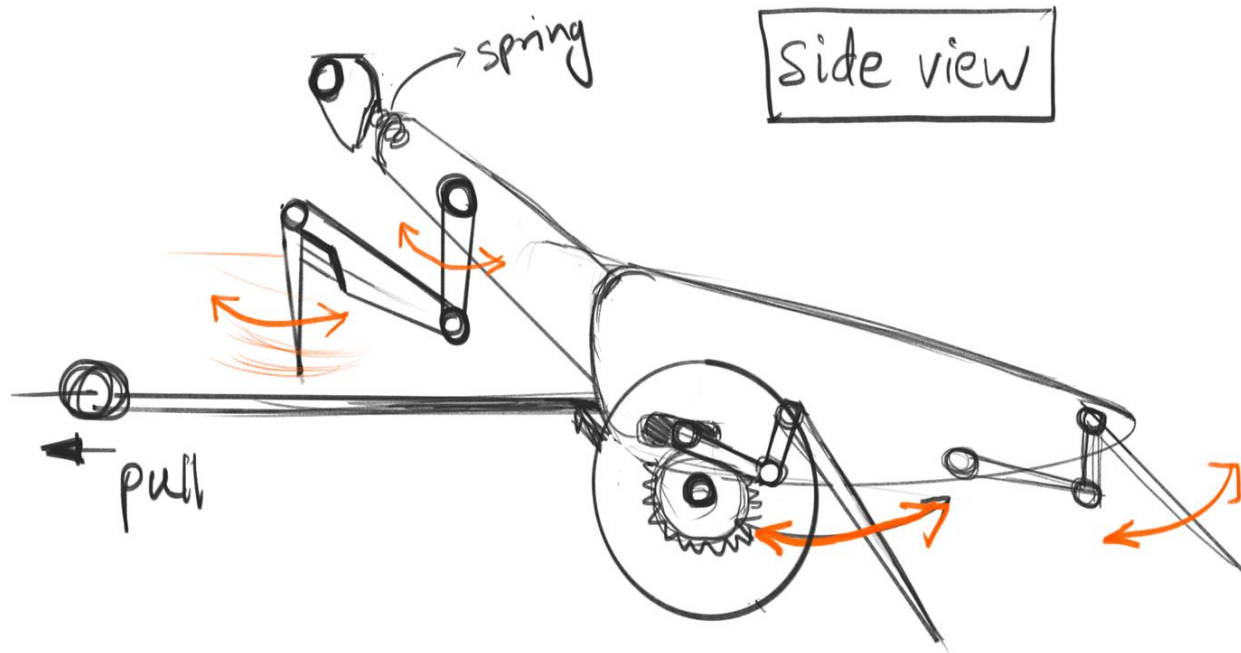
Initial inspirations for toys-

1. Praying mantis
2. Crab
3. Puffer fish

1. Praying mantis



Ideation

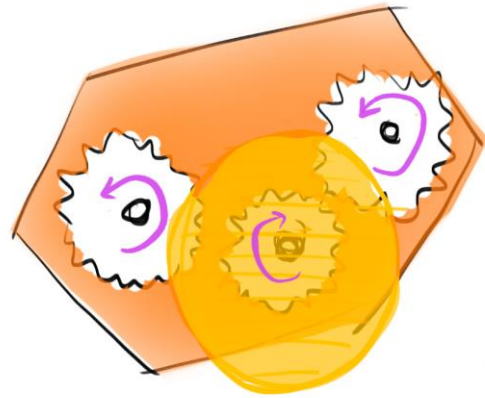
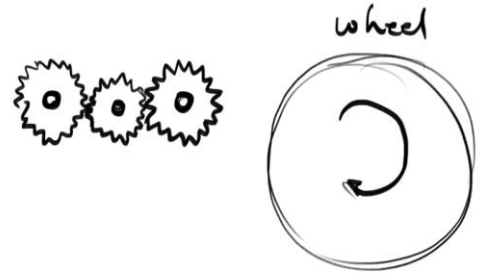


2. Crab

Sideways motion of a crab is very interesting to watch.



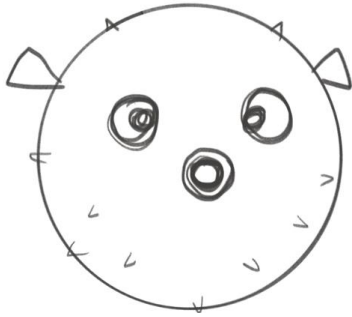
Ideation



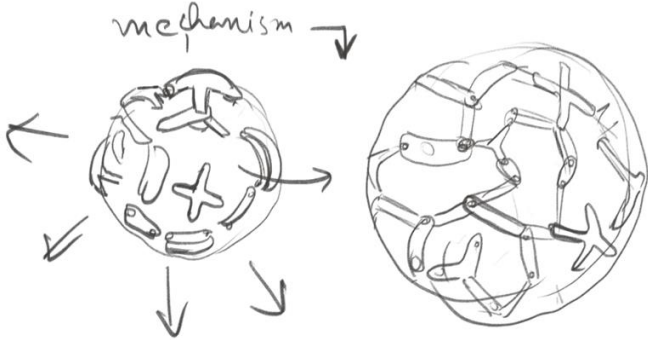
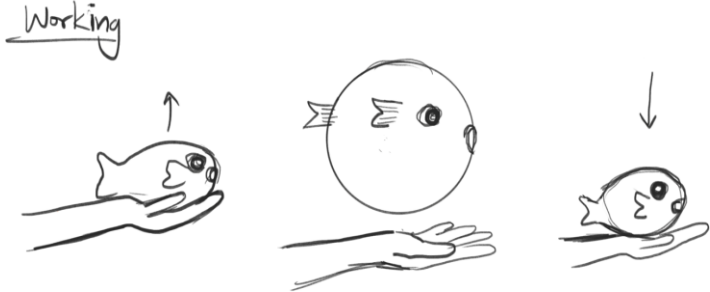
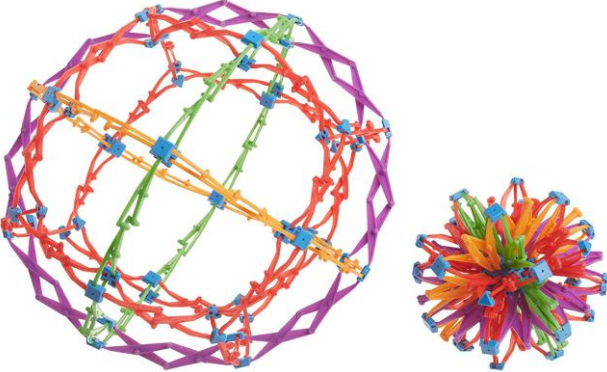
3. Puffer fish



PUFFER FISH

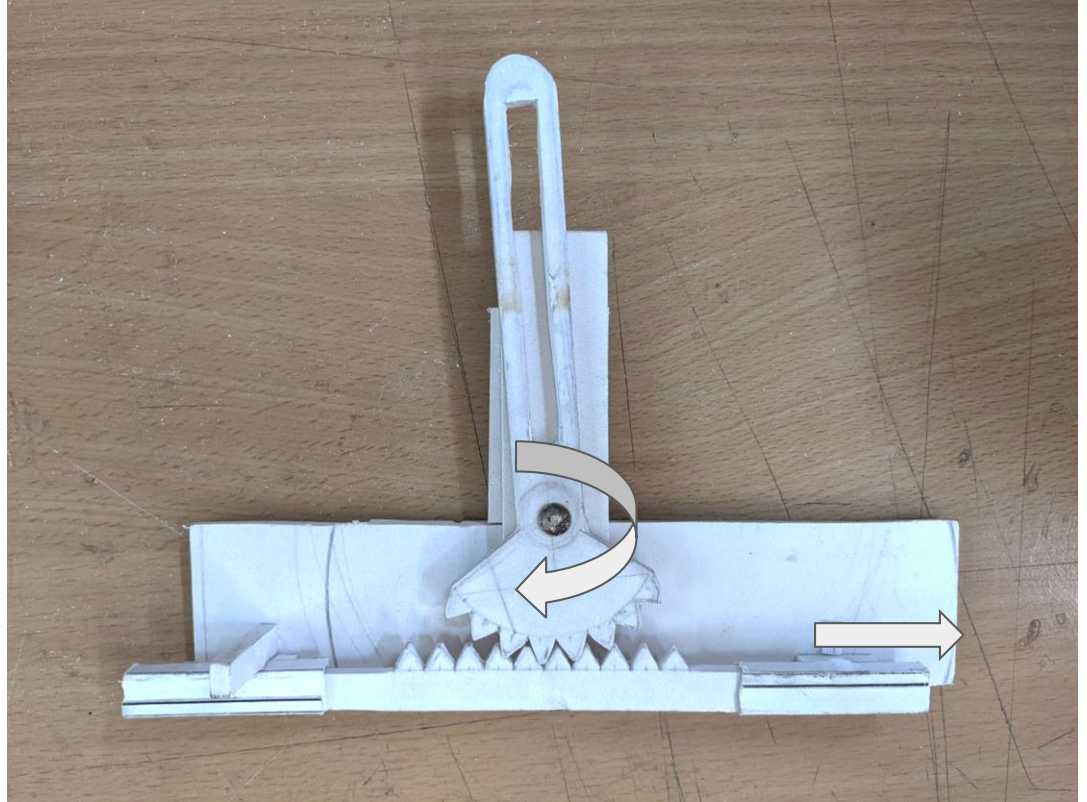


Mechanism - Hoberman Sphere

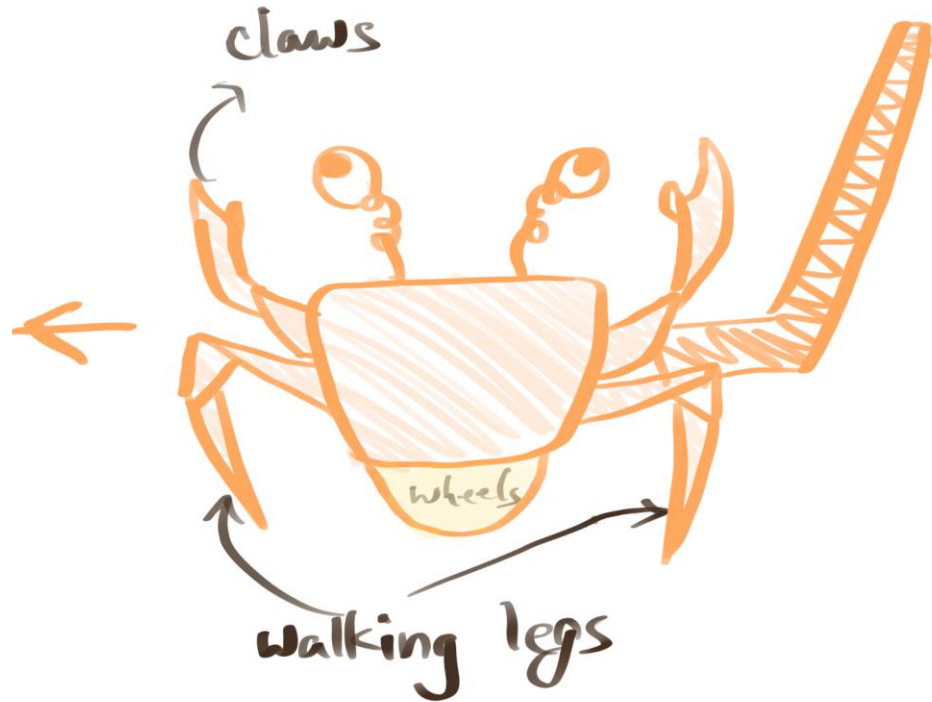


Mockup to understand mechanisms

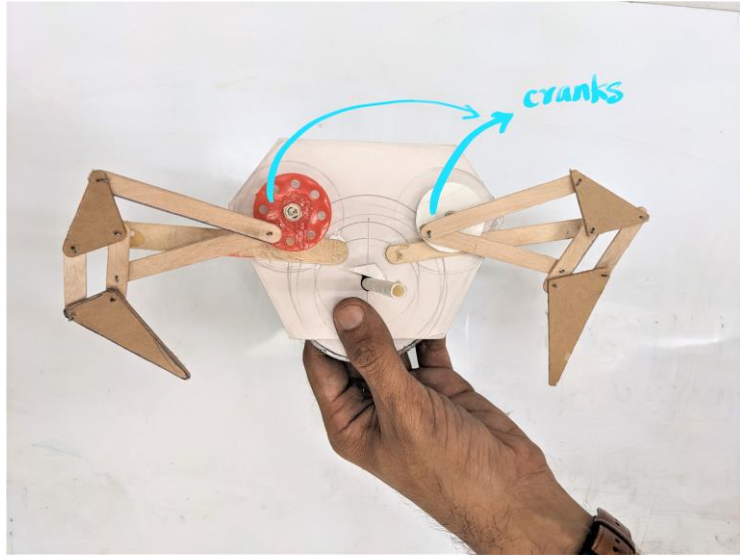
Rotational to translational



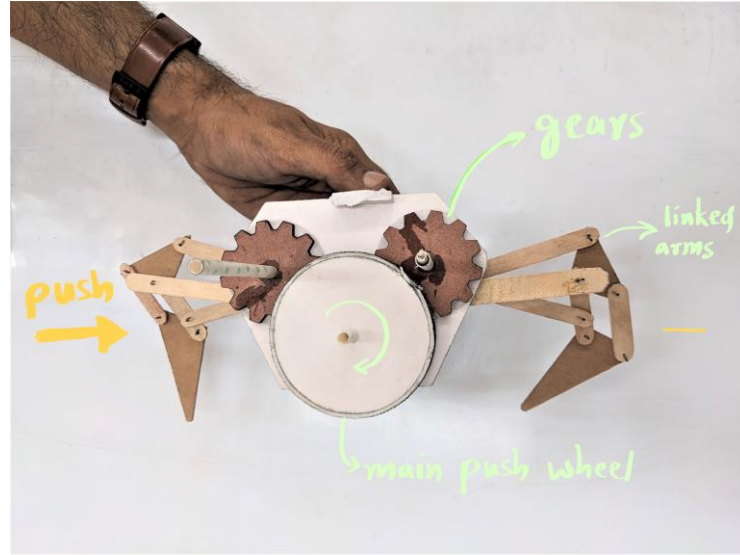
Crab toy



Initial Prototypes : Crab



front



back

