User Group

Team

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Design Process

Initial understanding of the project brief

User selection

Study, analysis & inference from users

Redefining project brief

Design goals

Preliminary concepts

Final concept

Product evaluation

User feedback

Product interaction design

Children

Early Concepts

Children

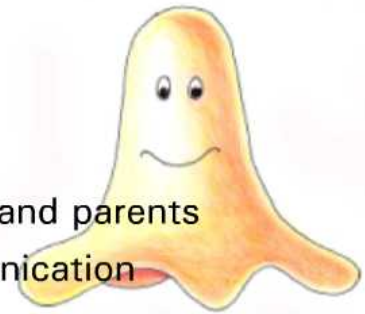
Early concepts & Marbo

Kito

- Physical meeting
- Skill
- Strategy
- Effort
- Fun

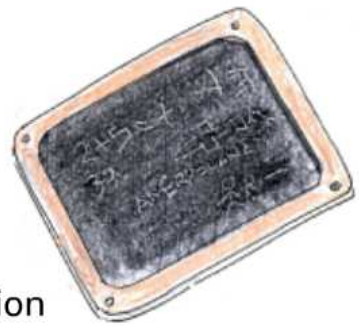
Jelly boy

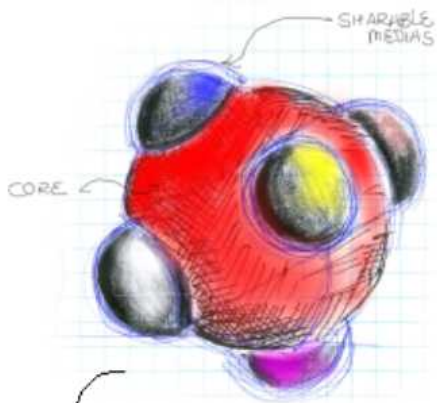
- Companion
- Sharing feelings
- Link between child and parents
- No physical communication
- User group limited



Living Memory

- Learning
- Trust
- Share
- Scribbling
- No physical communication





Children

Final Concept

Marbles – features

Personalization

Exchange of marbles

Different sizes, colors, designs

Parent and secondary marbles

Strategy for different games

The more u play, the more u learn

Entertainment for players

Children

History of marbles

3000 years old

Clay marbles found in ancient Egyptian tombs

Found in Mexico and USA dating back to100BC. .

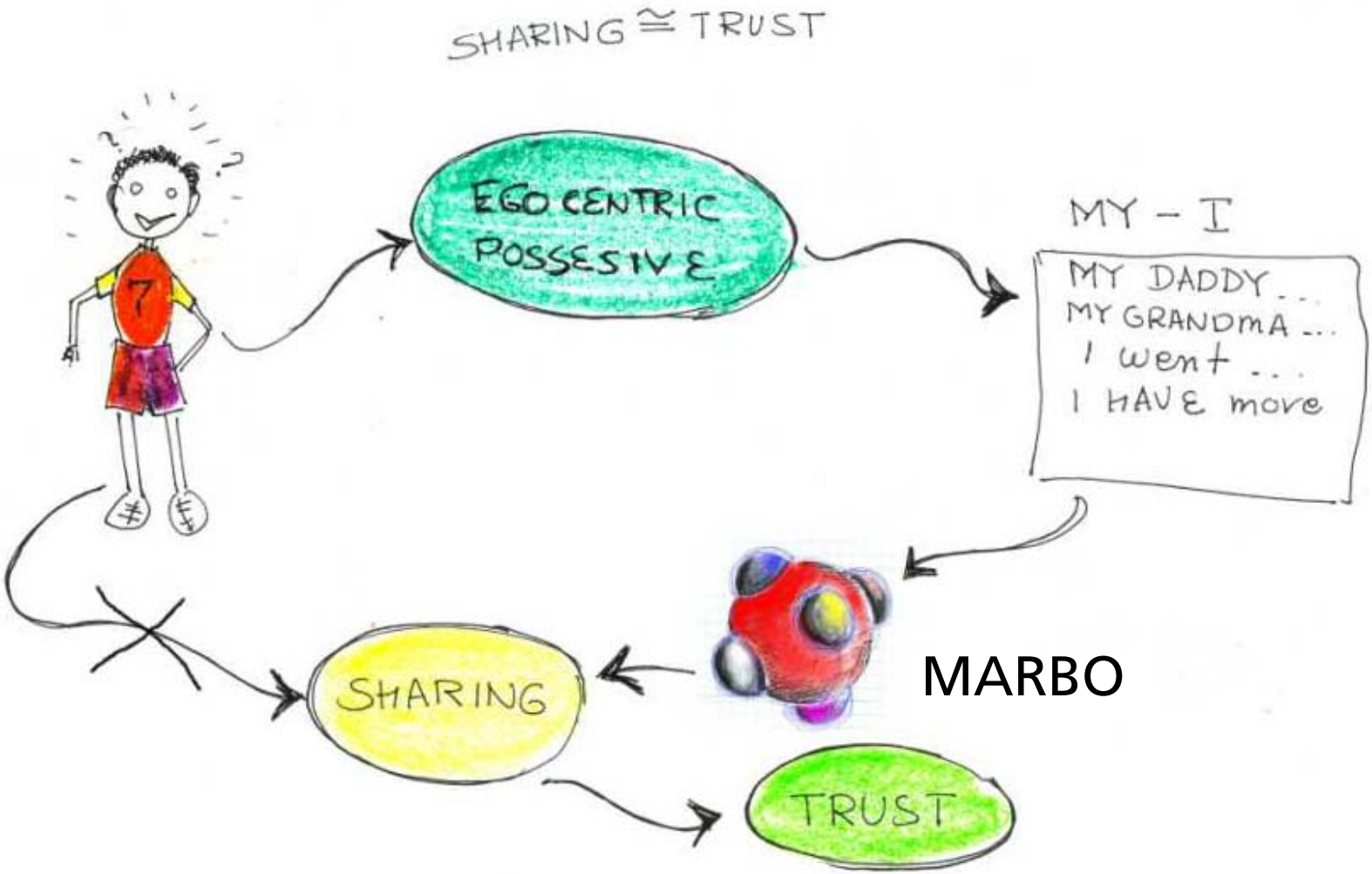
19th Century marbles were being mass produced.

Originally marbles were made of many kinds of materials - clay, bone, polished nuts and stones, and indeed marble.

Now most marbles are made of glass.

Children

& we found the solution…



marb

marbq
share your marbles

MARBO - Product features

Customization- look, color, feel

Sharing – stories, pictures, learning, …

A device to invite friends

Language building

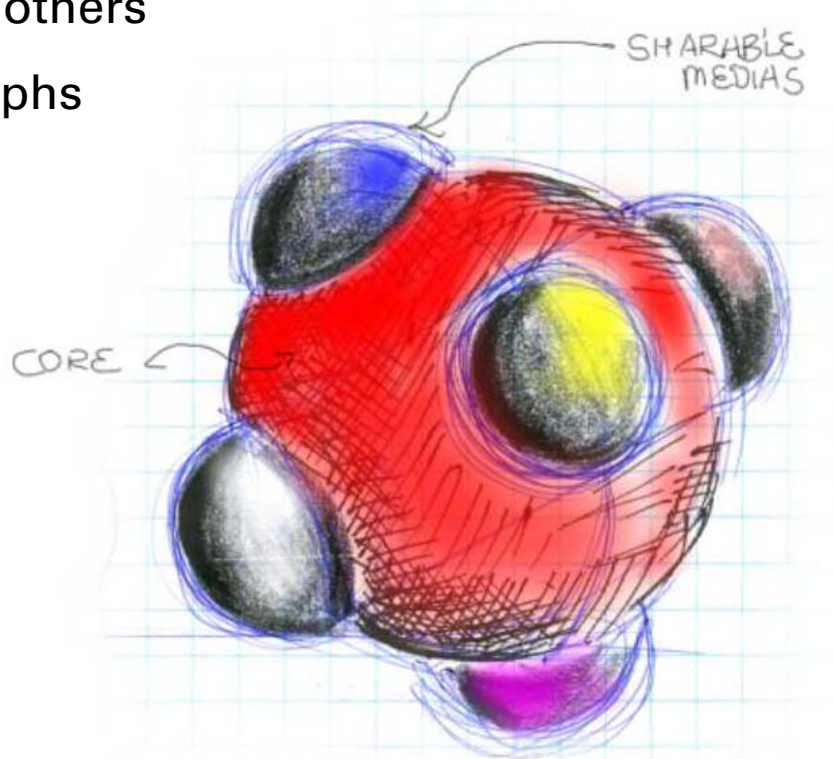
Detachable marbles that can be given to others

Sharing scribbles, doodles and photographs

Morphing of shape and skins

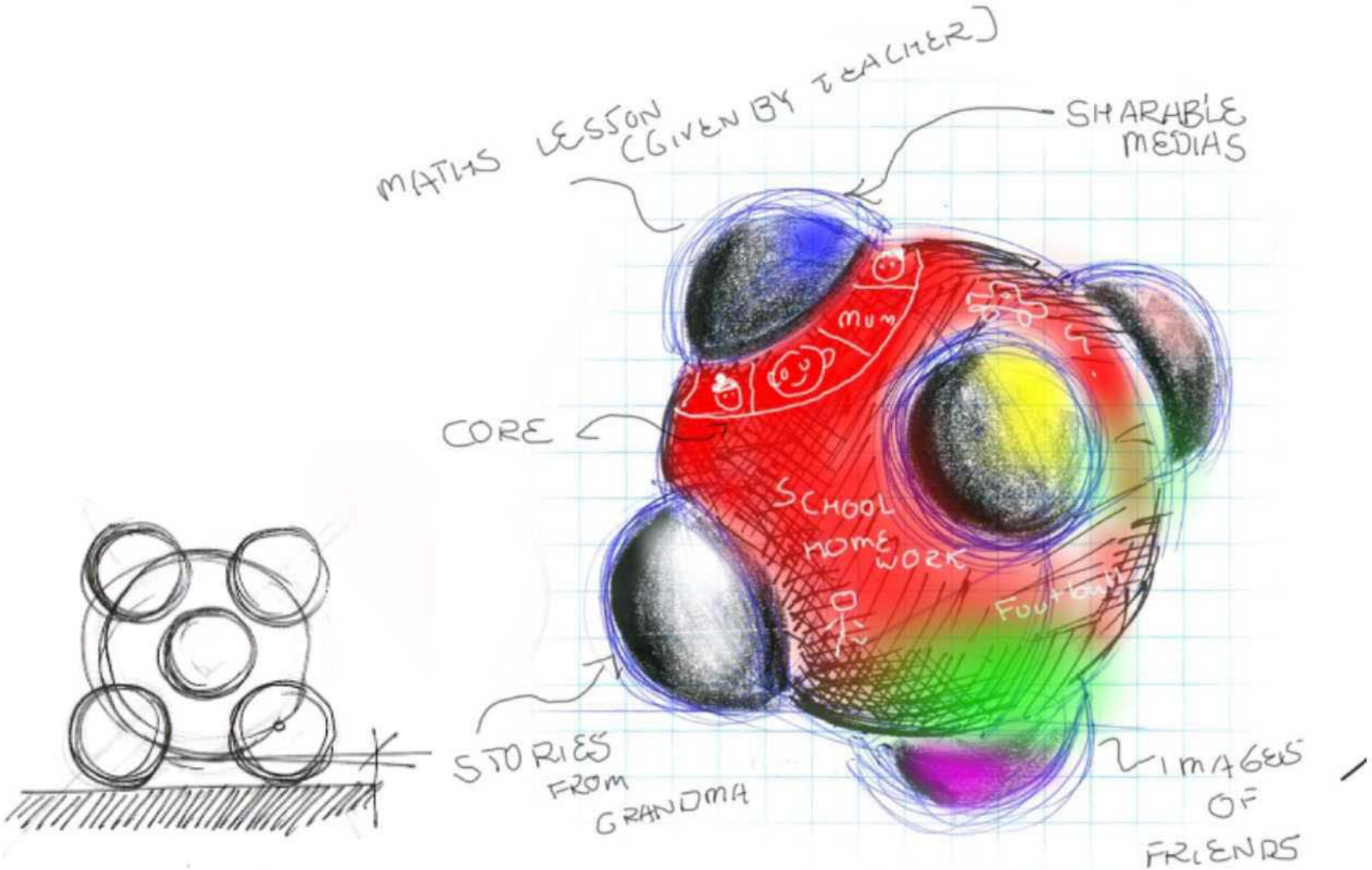
Collaborative learning

……



Children

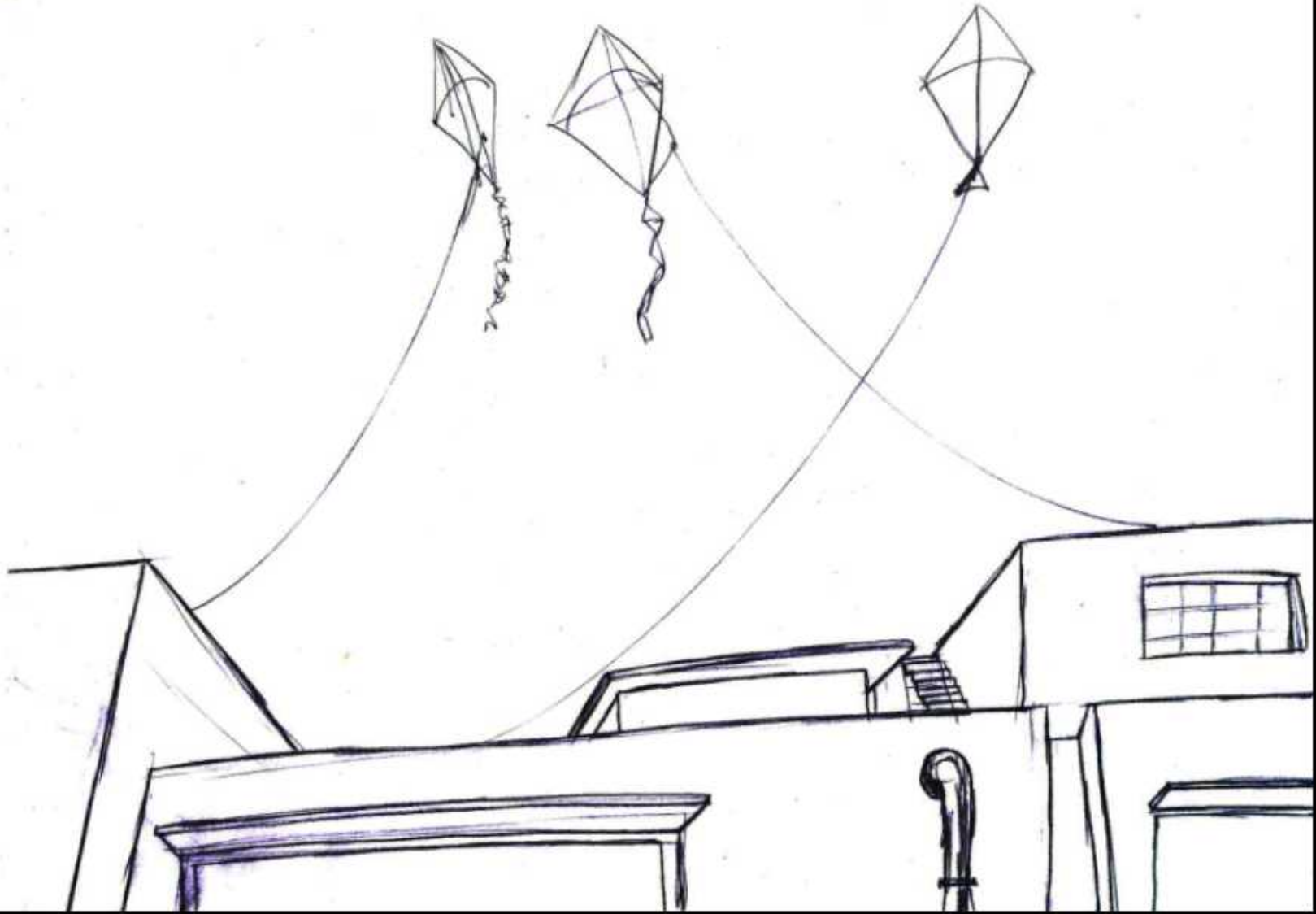
MARBO - Product features

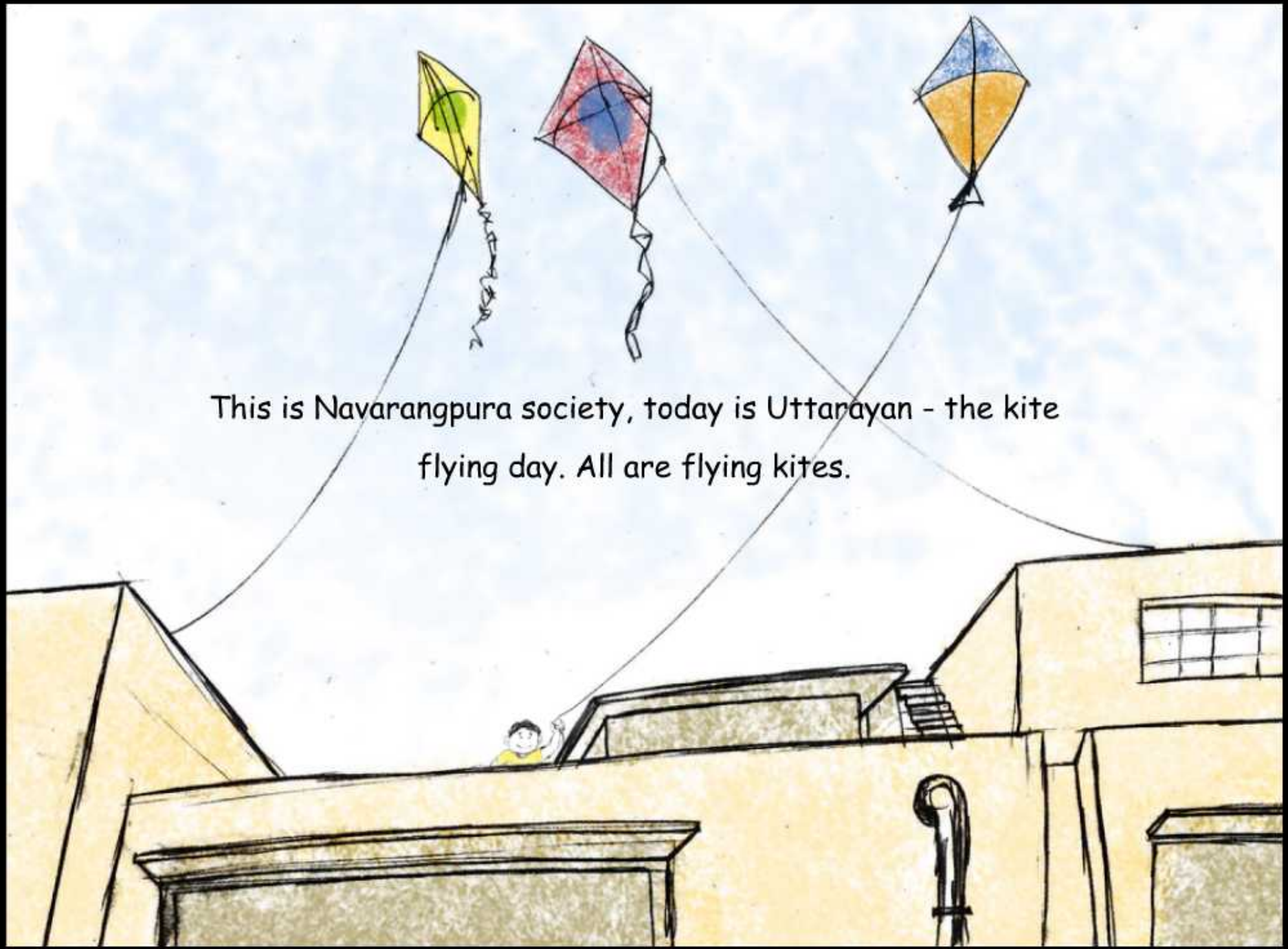


Children

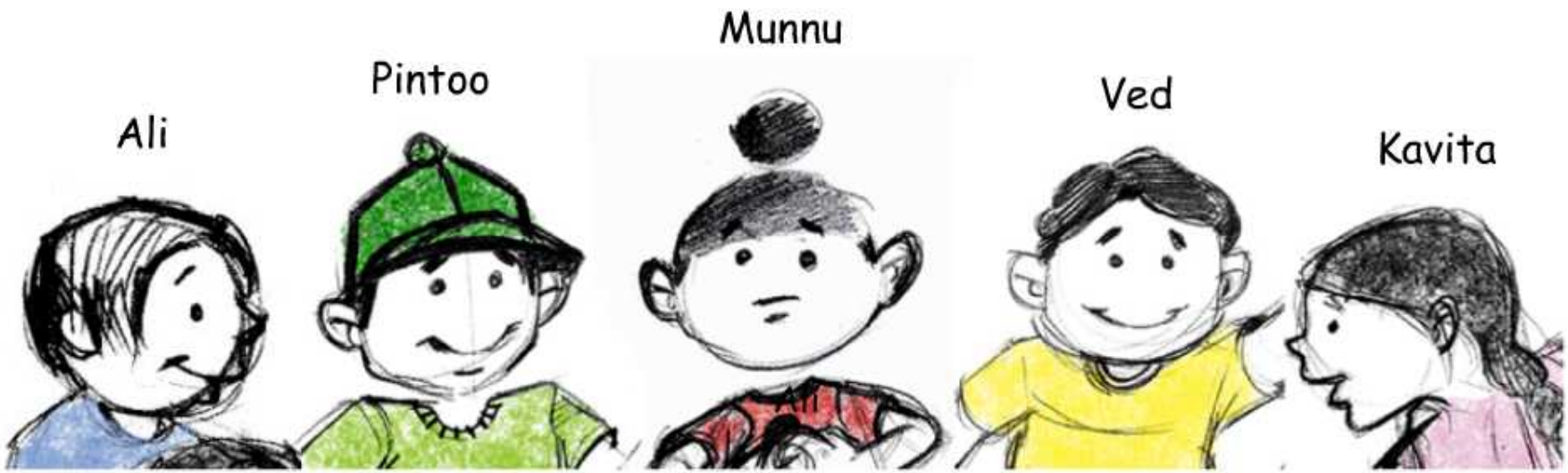
Scenario

Scenario




This is Navarangpura society, today is Uttarayan - the kite flying day. All are flying kites.

Ali, Pintoo, Munnu, Ved and Kavita are friends in the society, nowadays a fat guy called Motu is also there in the society



Jugal – the MOTU

Ved is also flying kite....

Someone cuts Ved's kite...

"No problem, i have another one"

"Even this one is flying so high"

Someone cuts Ved's kite again... this time he gets very upset

"Oh no!! someone cut my kite again"

Ved looks out at the opposite terrace, it was the fat guy motu cutting Veds kite

Hehehe!! hahaha!! hehehe!!

"You motu!! i will see you..."

Ved tries to contact his friend Pintoo with his Marbo and asks for help in cutting Motu's kite

This is Ved's friend, Pintoo, he is also flying kite in his terrace...

Pintoo has a similar Marbo as Ved, when Ved contacts Pintoo, his marbo starts ringing

"Oh Ved is trying to contact me..."

Ved scribbles a message for Pintooc on his Marbo...

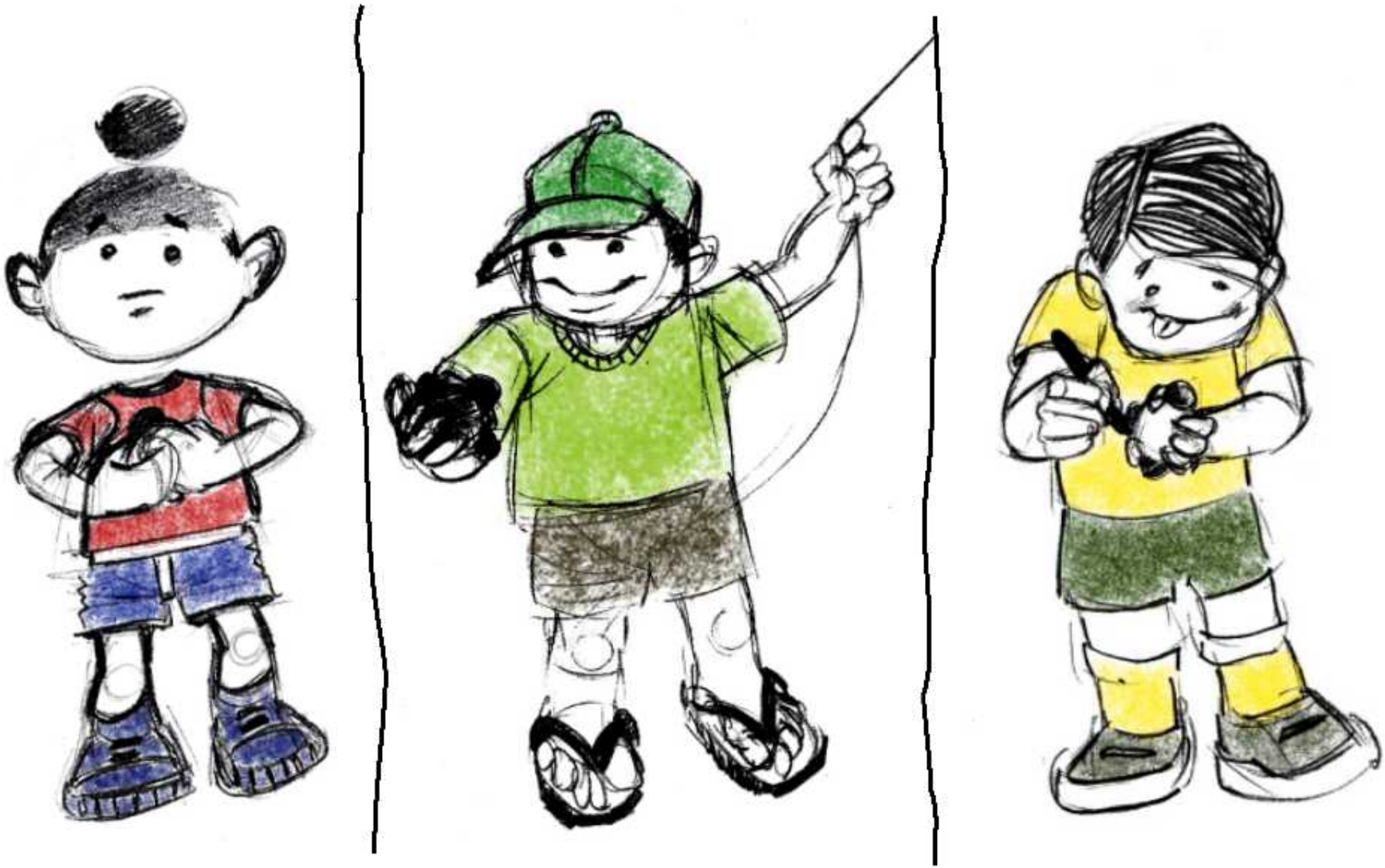
Pintoo gets Ved's scribbled messagae on his Marbo...

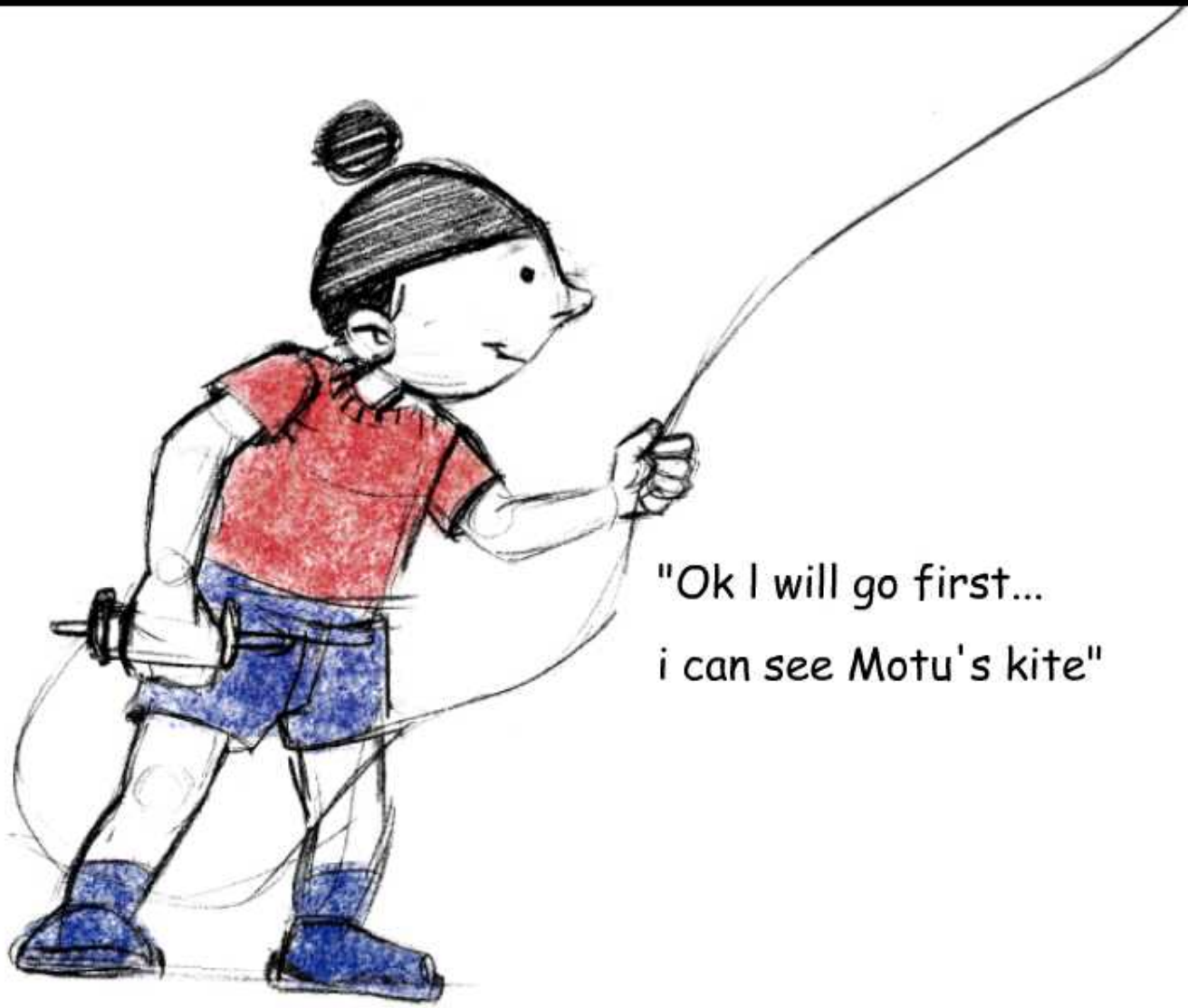
"Oh Ved needs help in cutting Motu's kite ... We cant do this alone, let me ask Munnu for help"

This is Ved and Pintoo's friend Munnu...he also has his own Marbo

"Oh Ved and Pintoo need help in cutting Motu's kite... No problem, lets together scribble a plan on on our Marbo"

Together they make a strategy to cut Motu's kite




"Ok I will go first...
i can see Motu's kite"

According to the strategy they decided on their Marbo, Ved, Pintoo and Munnu attack Motu's kite

"Ok I will go first"

"Ok I will go left"

"Me from the front"

Thats how together the three friends cut Motu's kite with help of their Marbo

"This is how we cut MOTU's kite"

MOTU is sad

"All three together
cut my kite, but how
did they make a plan?
they are all in
different terrace"

Munnu takes MOTU's picture on his Marbo

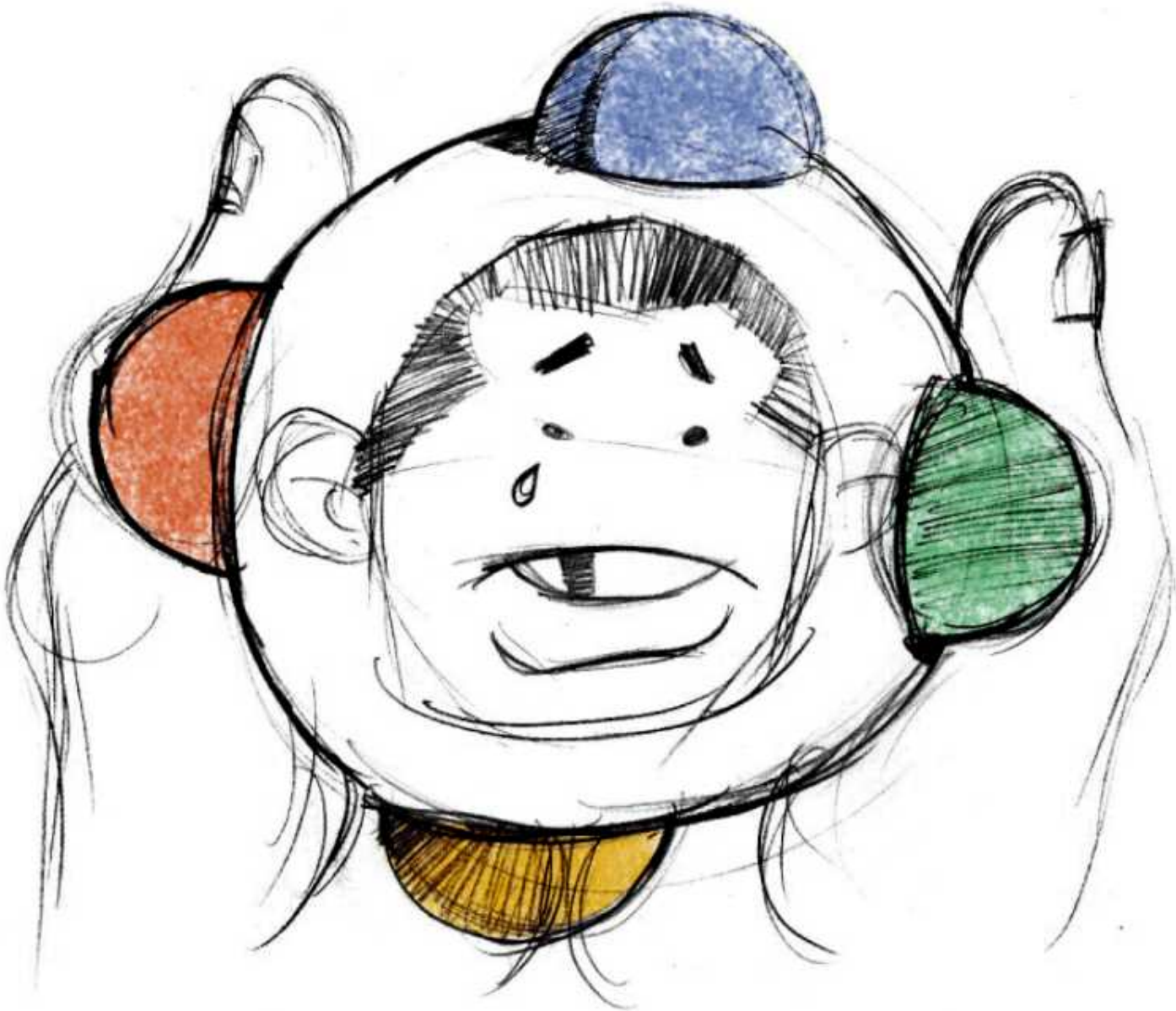
All friends have a look at Motu's photo in Pintoo's Marbo..

Munnu sharing his marble..

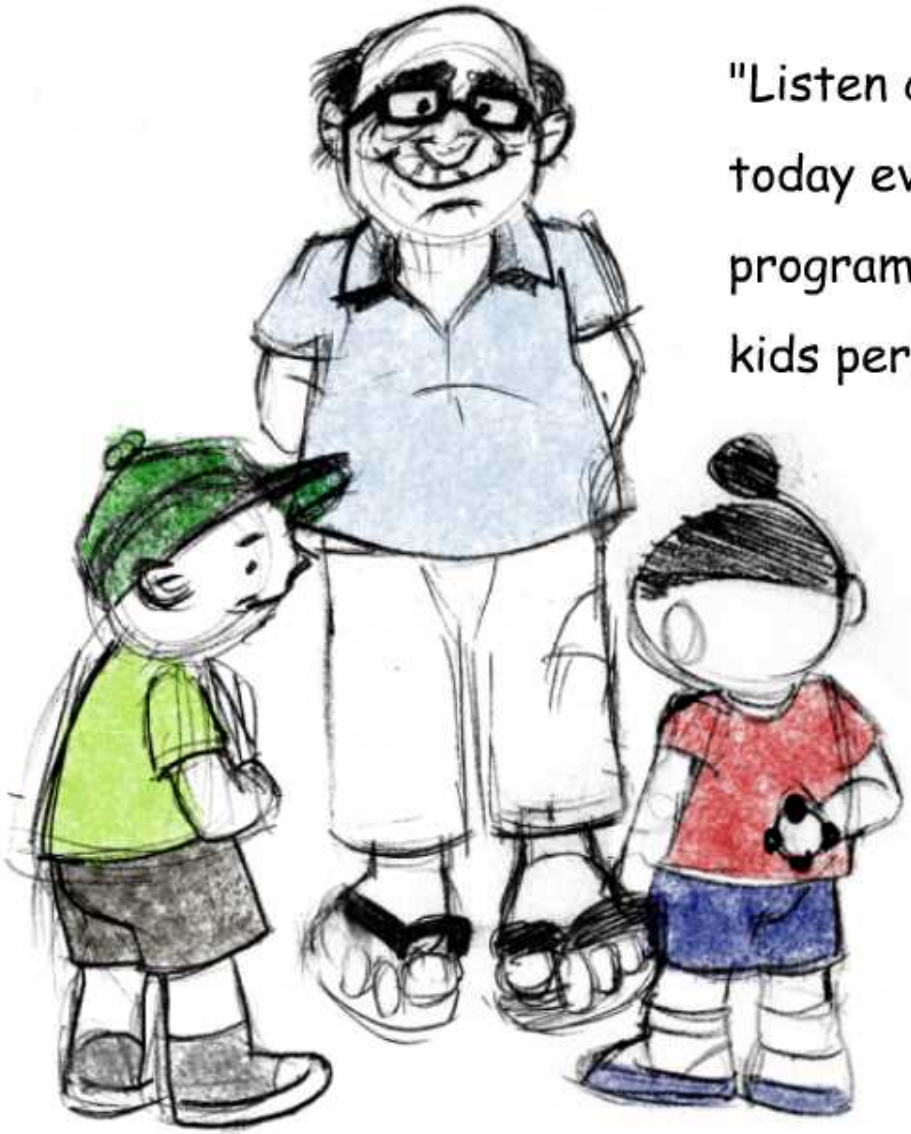
"Look guys i have the picture of Motu in my Marbo"

All friends have a look at Motu's photo in Pintoo's Marbo..

Munnu shares his marble

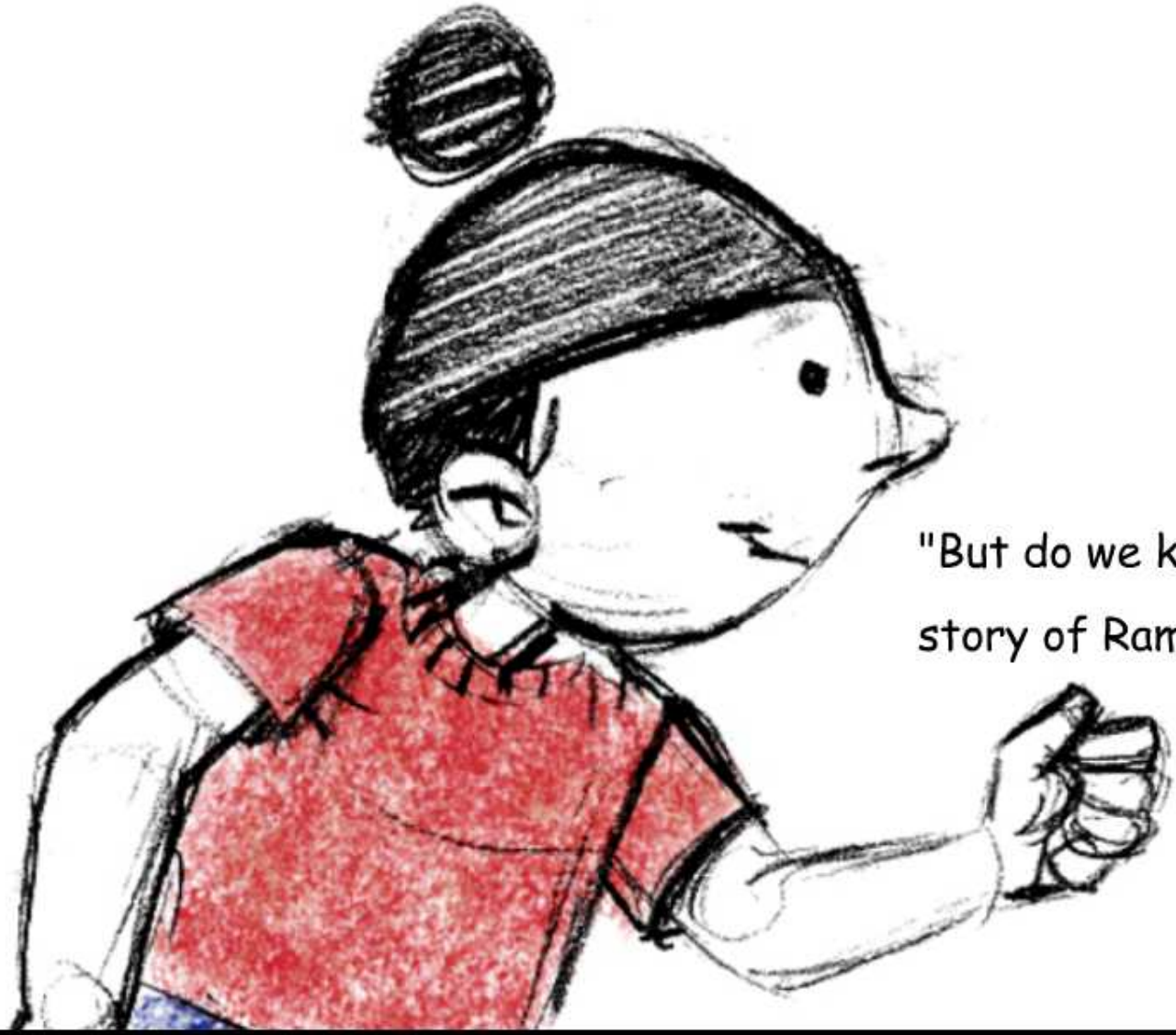


Suddenly Popat uncle comes there..



"Listen children, dont make noise today evening we have a cultural program in our society. why don't you kids perform a drama for that?"

Popat uncle suggested them to make 'Ramayan' skit...'Ramayan' is a holy Indian epic of God Rama


"But do we know the
story of Ramayan?"

Kavita had the story of 'Ramayan' in her Marbo. Her grandma told her that a day before.

"I have the story of Ramayan in my Marbo"

Kavita gives her 'Ramayan' marble to Pintoo and they all hear the 'Ramayan' story in grandma's voice

Hanuman is an important character in the story of 'Ramayan'. His face is like that of a monkey

Pintu modifies Motus face to Hanuman in his Marbo with the pen tool…

And shares it with Pintoo..

"Look, Motu looks just like Hanuman"

Suddenly Motu was also there ..

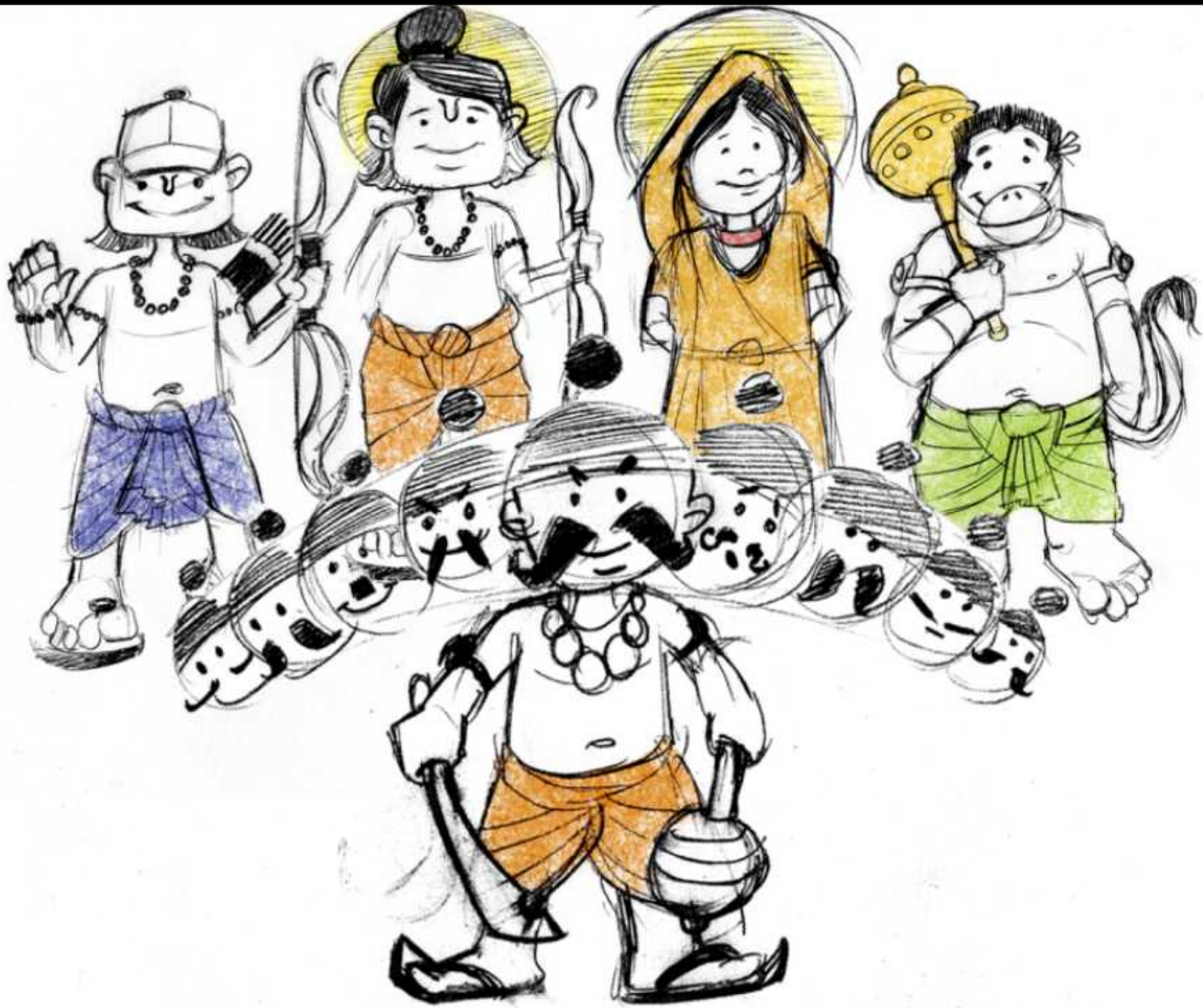
"I will become Hanuman"

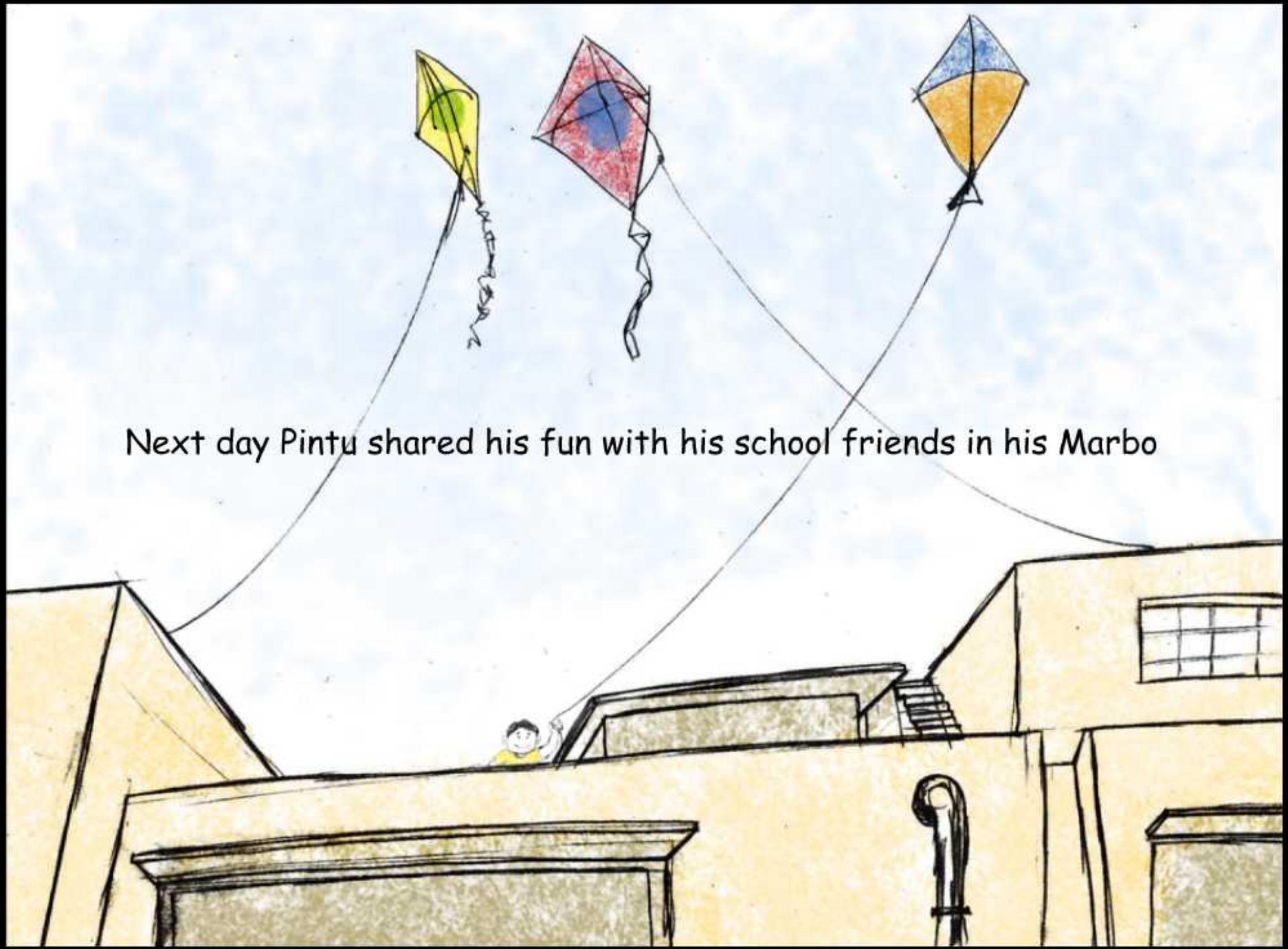
"Ye, we ll do Ramayan"

.....& they all performed skit of

'RAMAYAN' that day in society

cultural program

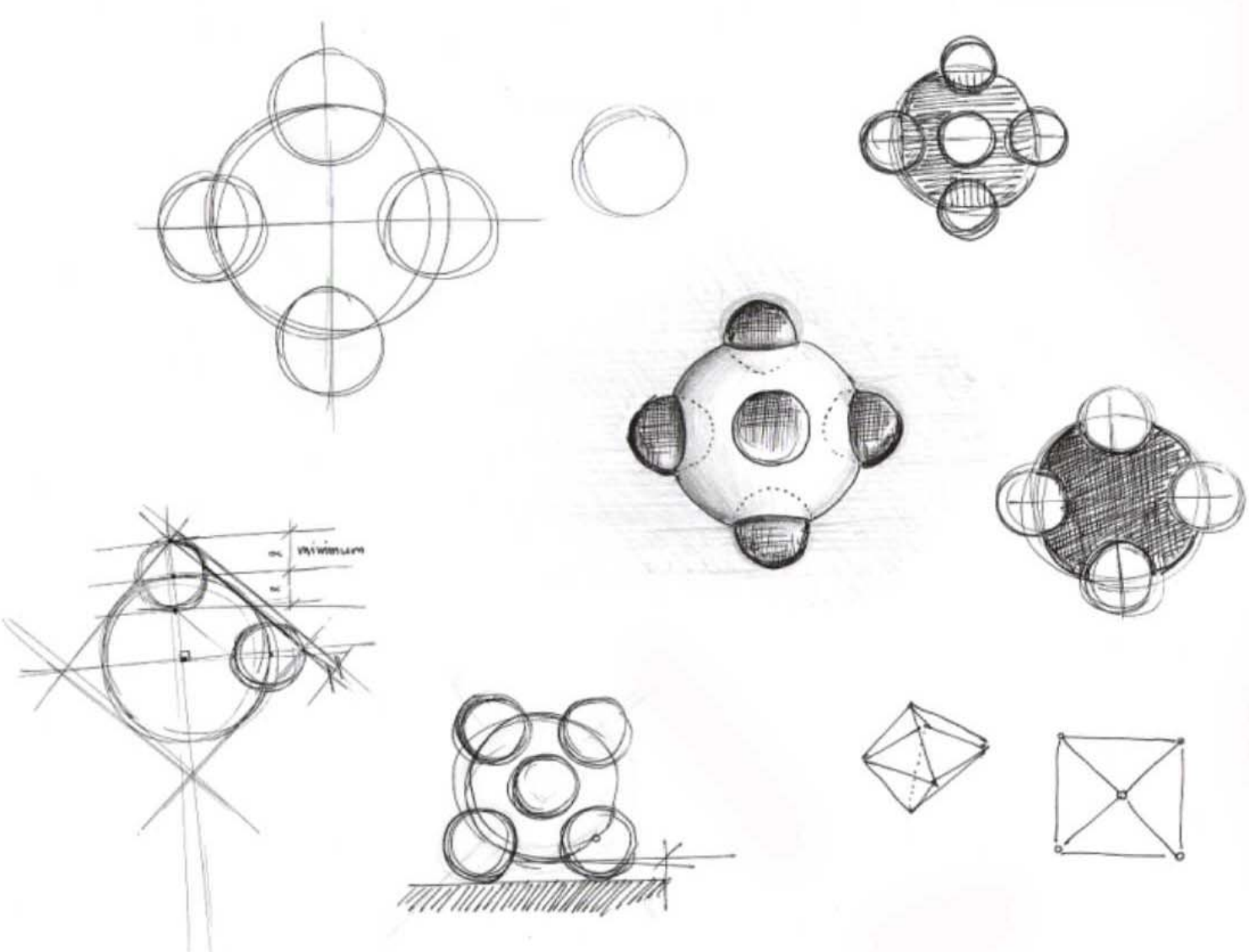



Next day Pintu shared his fun with his school friends in his Marbo

MARBO

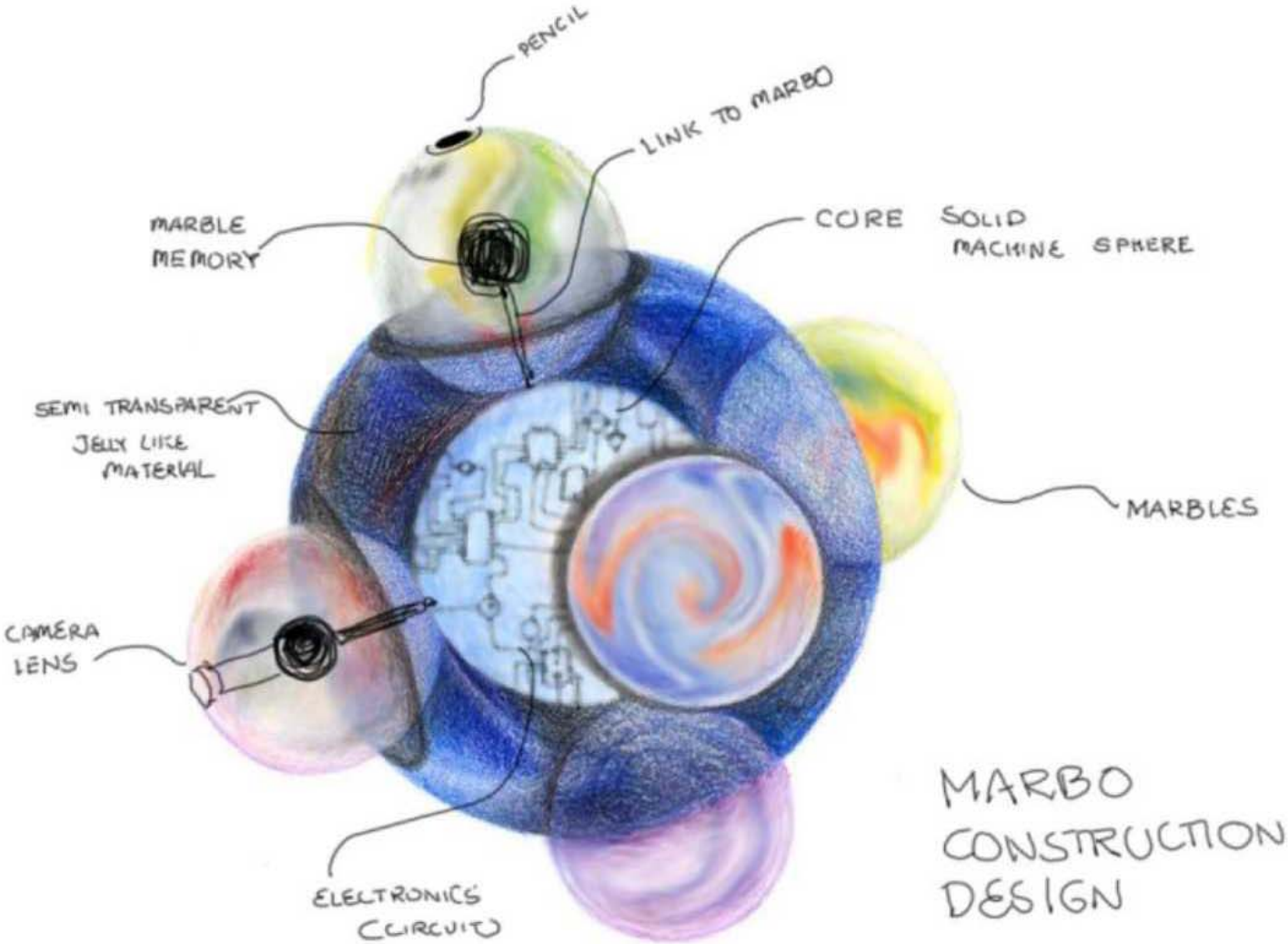
Children

Initial sketches

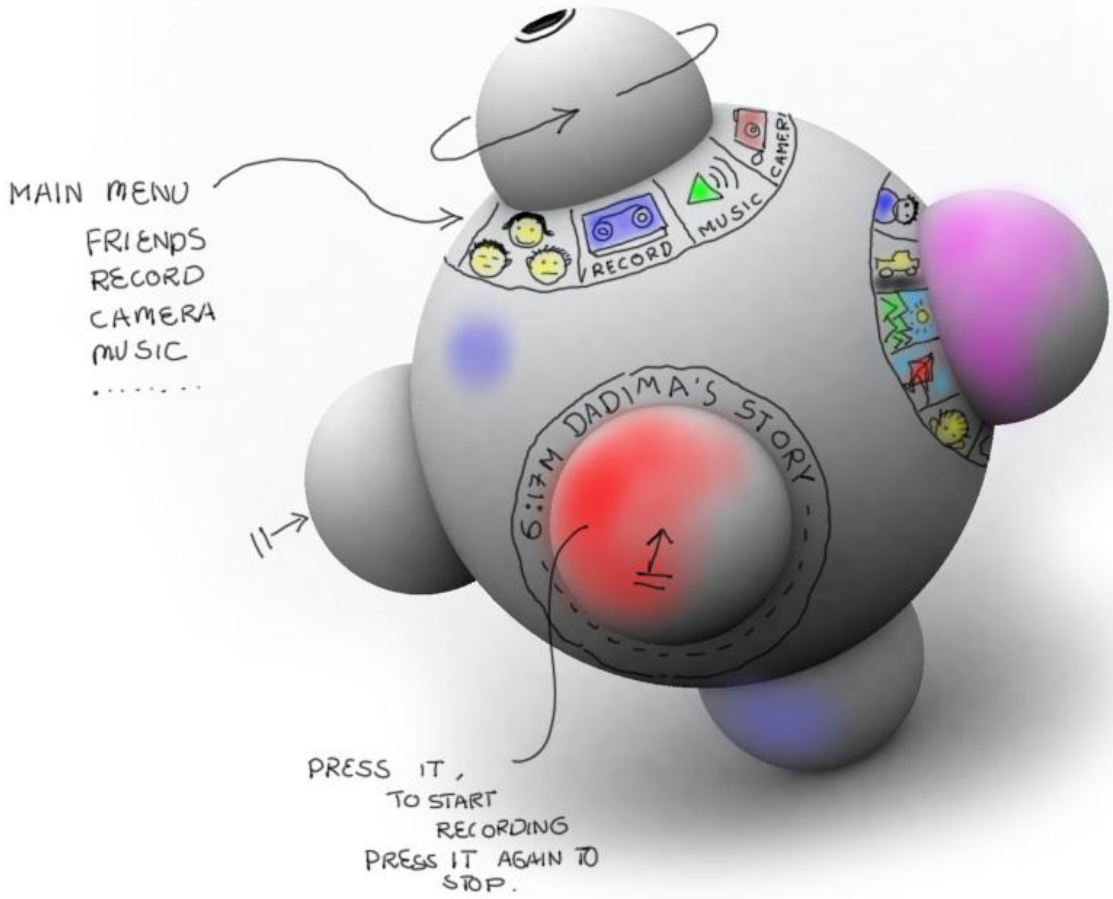


Children

Inside MARBO



Interaction with MARBO



MARBO has a main display screen, on which menus are displayed, child can doodle, draw,....

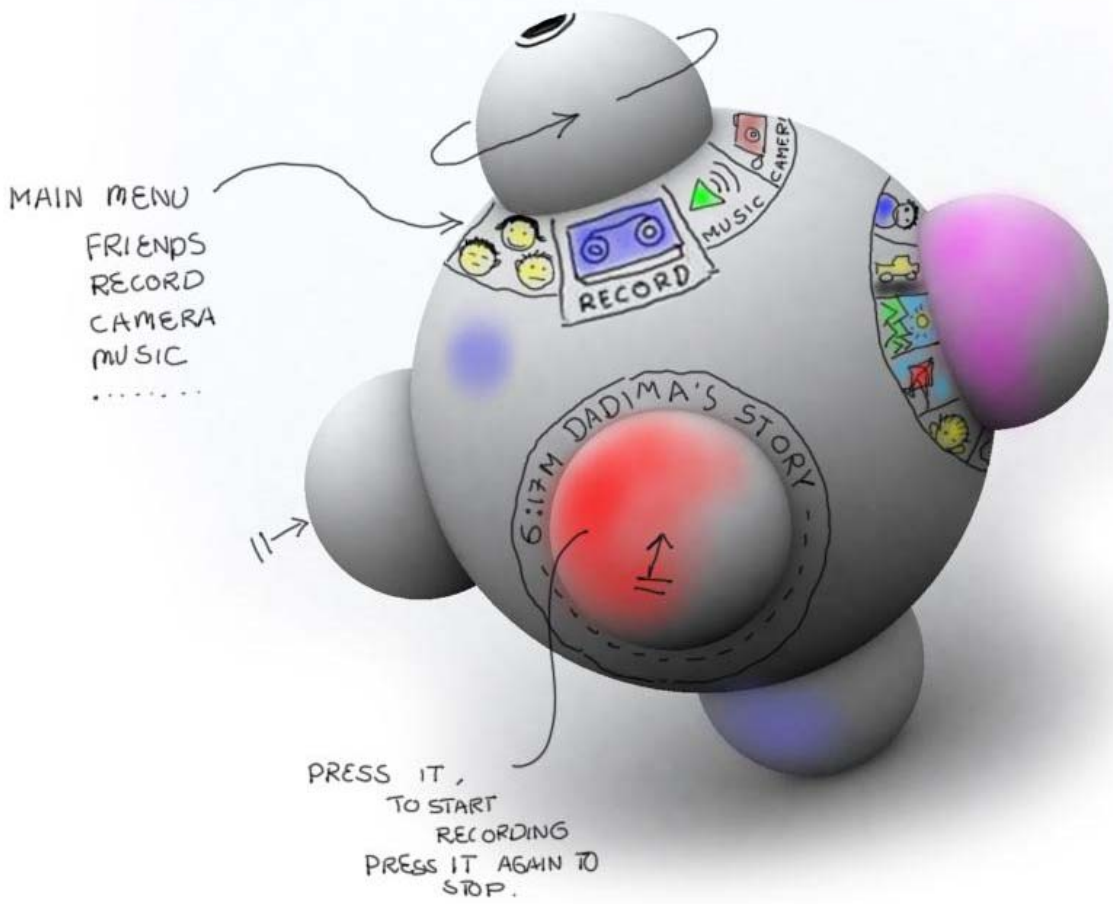
Each marble on the sides can be detachable and sharable to others. These marbles can contain stories, music, pictures,...

Children

MARBO has one main marble. The main marble represents the child. Main features of MARBO are around it, like Friends, Record, Music, Camera, Drawing ……

Children can select the feature by turning the main marble & pressing it, whatever they want to select.

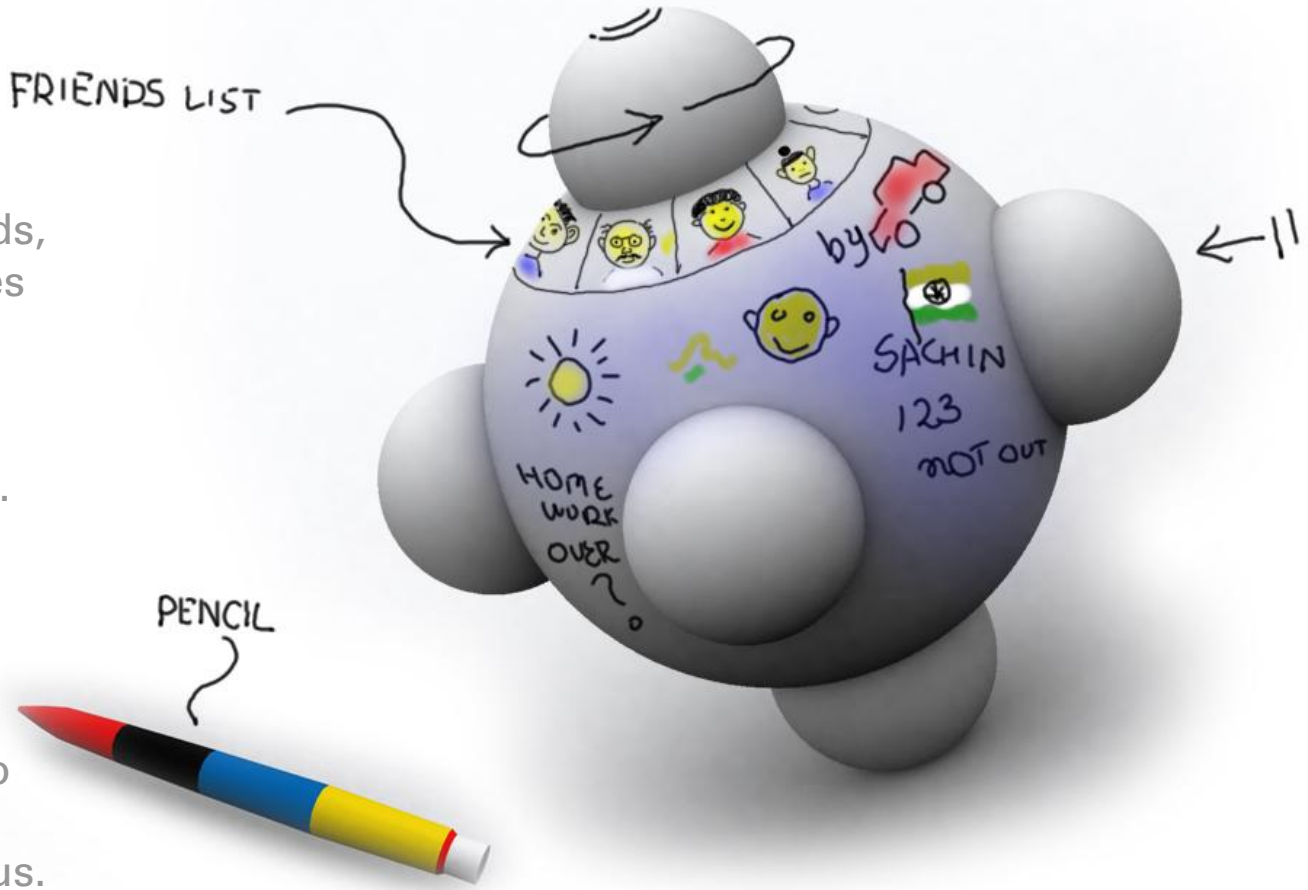
Record is selected as in the MARBO beside. Now they can record Grandma's story in any other marble.



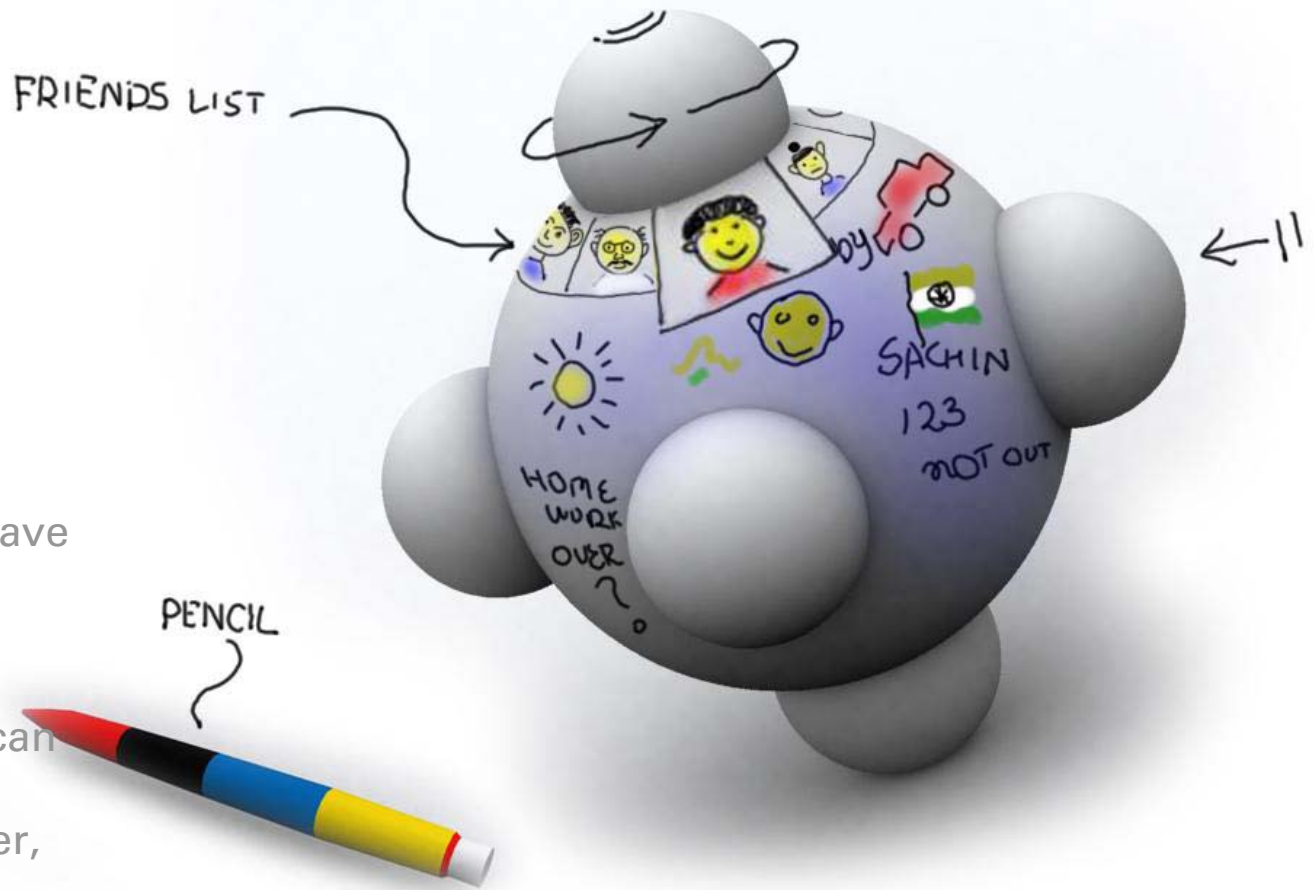
Children

Child can contact to friends, parents, teachers, relatives with his MARBO. He can doodle on the screen & share his feelings with sound, pictures, doodling. They together can plan, play, learn, ...have fun.

MARBO has a pencil also in it, contained in main marble. Child can use it to doodle, draw and even select features from menus.

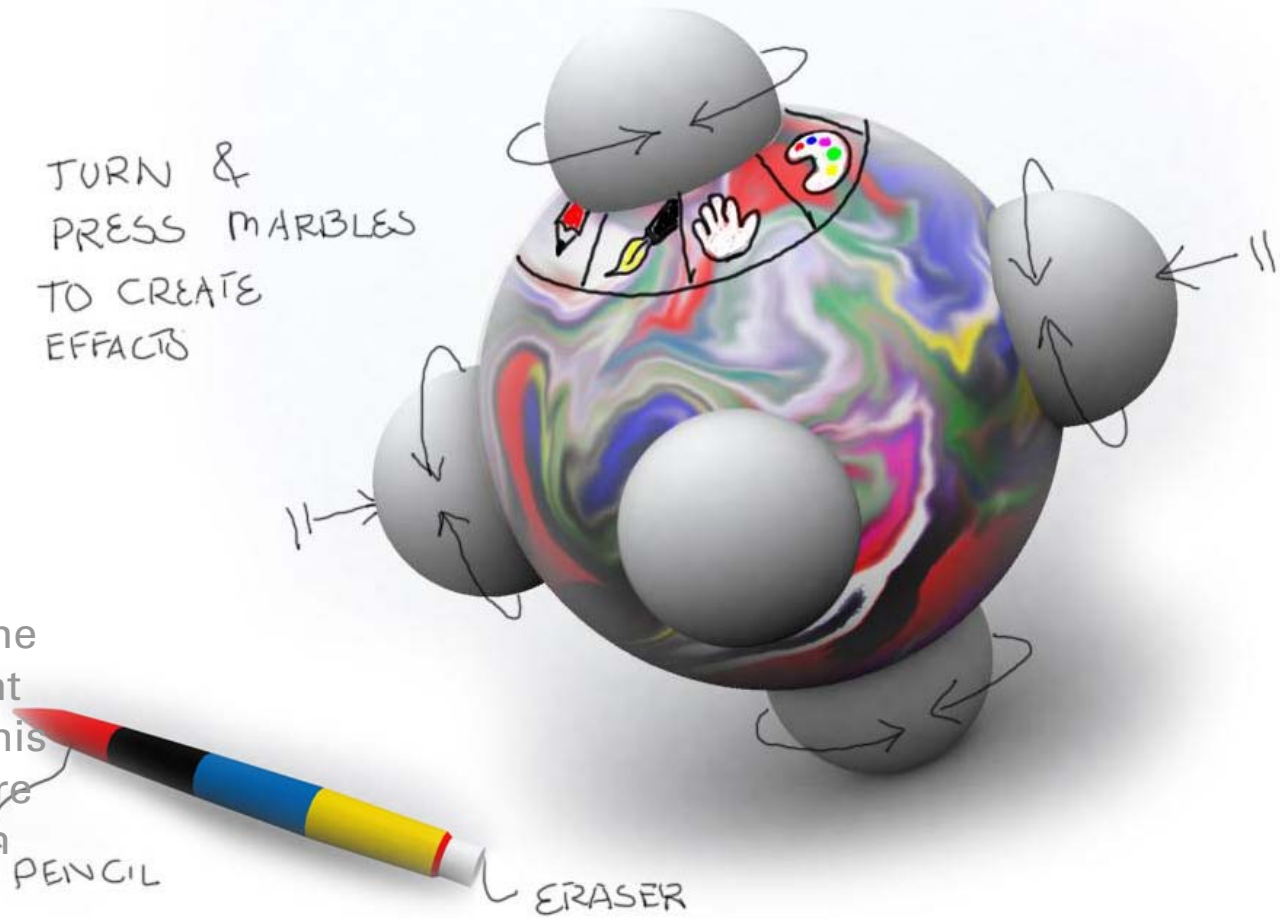


Children



With MARBO, child can have group learning, fun, planning session with friends. They can paint together on one canvas, can have a group music building, can play together, exchange their ideas.

Children



MARBO has a very good property of customizing the look & feel. Child can paint his MARBO according to his choice. He can have picture of Pokemon or Spiderman on it.

Children

Feedback

Feedbacks from children

I can detach this marble and give it to my friend!!

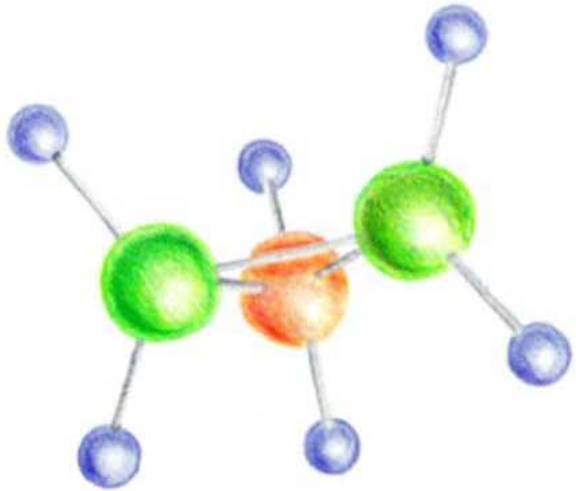
Oh we can scribble on it!

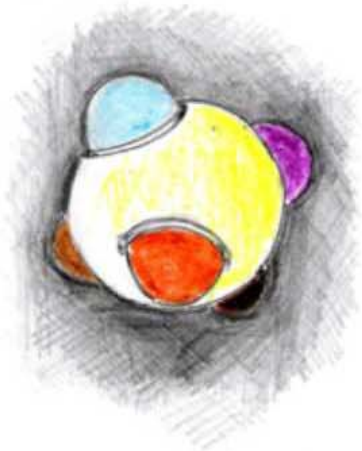
Can I change the way it looks?

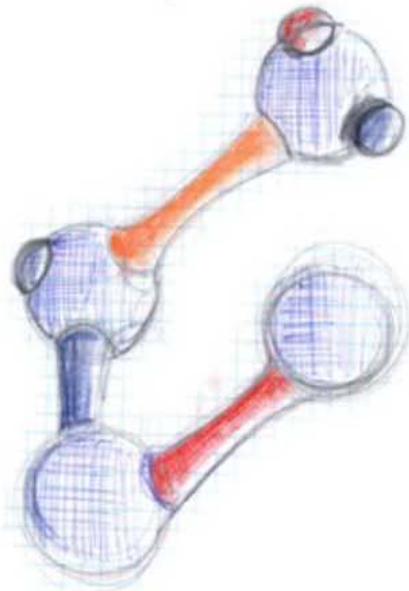
We want it!!

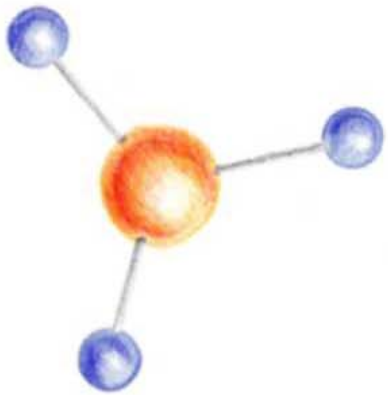
Children

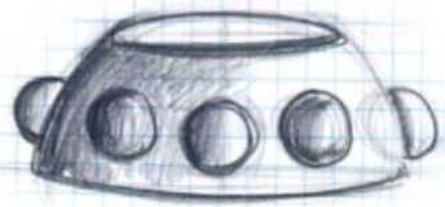
MARBO variations











Extended scope of MARBO

Education

Construction

Parent child relationship

Teacher child relationship

School and MARBO

Learning

....

marbo
share your marbles

Acknowledgement

Prof. Ravi Poovaiah

Dr. Ajanta Sen Poovaiah

Shounak

Sachin

Smita Gupta

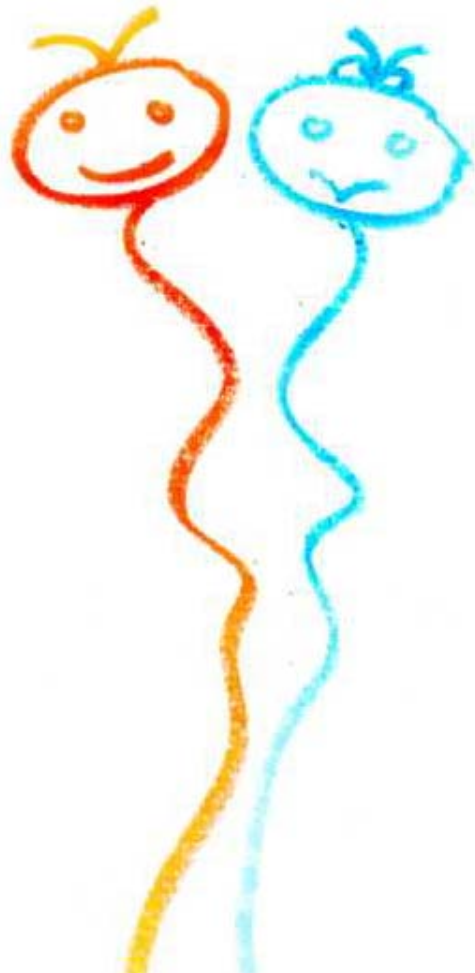
Prof. M. Malshe

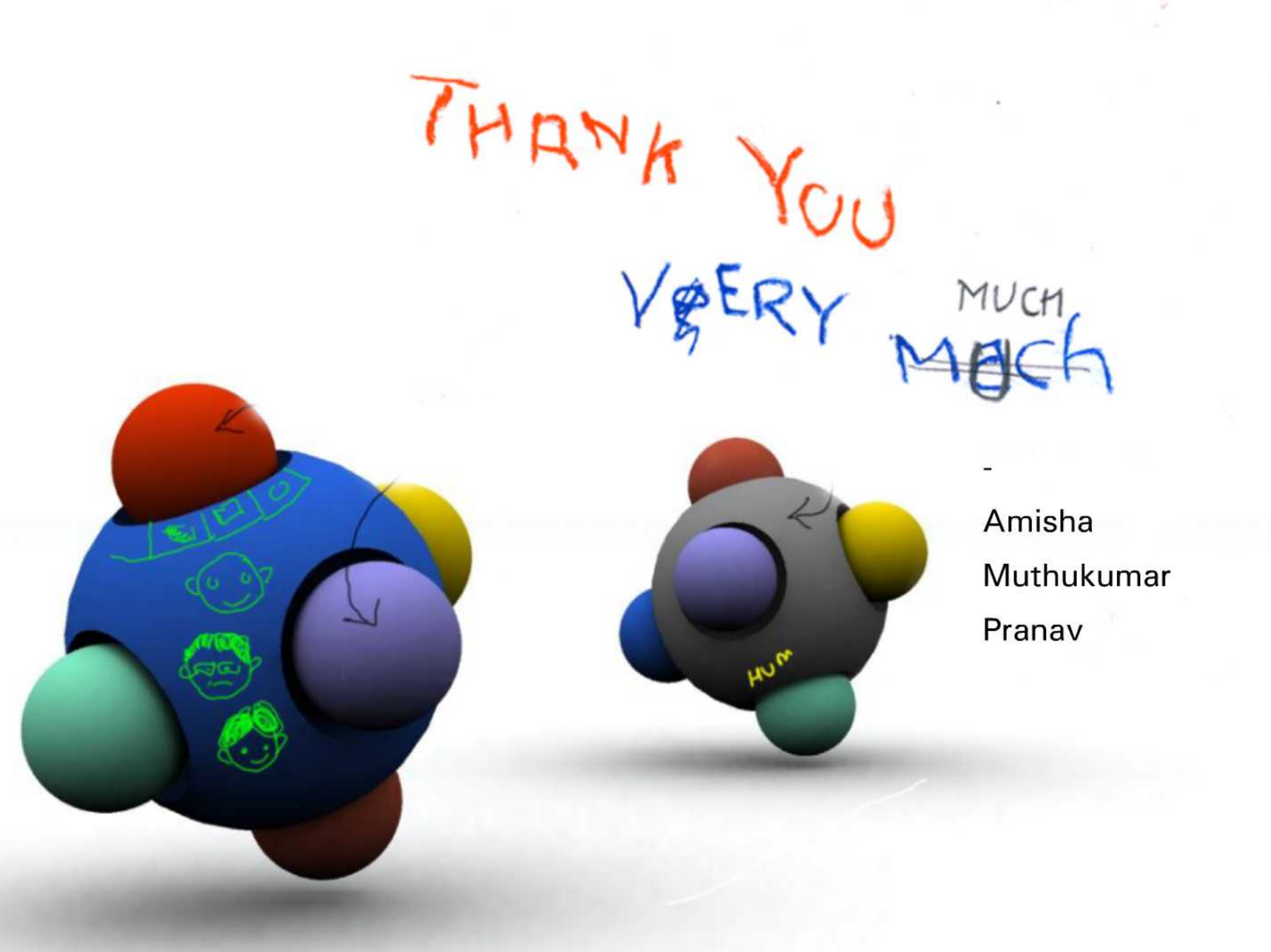
Principal, Kendriya Vidyalaya, IIT Bombay

Principal, New Era School

NAVNIRMITI

To all the kids





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