



ignite
2013



Honey Bee Network



National Innovation Foundation - India
राष्ट्रीय नवप्रवर्तन प्रतिष्ठान - भारत





NATIONAL INNOVATION FOUNDATION
India

IGNITE '13

Curiosity Compassion Creativity
February 2014

Copyright © 2014 National Innovation Foundation - India

National Innovation Foundation - India
Department of Science and Technology, Govt. of India
Satellite Complex, Prem Chand Nagar Road
Near Mansi Crossroads
Ahmedabad 380015
www.nif.org.in
info@nifindia.org



Learning gives creativity
Creativity leads to thinking
Thinking provides knowledge
Knowledge makes you great

- Dr. A. P. J. Abdul Kalam



Foreword

It is a matter of great satisfaction that the response to the IGNITE campaign for scouting innovative ideas of children in and out of schools has grown so much in the last few years. Beginning with less than 1000 entries five years ago, the numbers have crossed 20000. The geographical coverage has also expanded manifold. Several state governments have given enthusiastic support to IGNITE campaign. It is difficult to thank CBSE adequately for the kind of earnest support they have extended. I realize the complexity involved in screening so many ideas. Young team of NIF with the help of the experts has tried to select some of the most interesting ideas of the children. It is natural that when hardly 44 students are selected for 26 ideas out of so many entries, many children might feel excluded. However, I want to assure all those who have participated in the contest that the purpose of NIF campaign is not to single out only a few.

The real purpose is to spread the message that there is no specific age at which one can try to be creative or innovative. In the previous years, children from class one and two got awards. I hope that the joy of participation will overpower the feeling of not making it to the final list among thousands of participants.

I urge the NIF team to make reinvigorated efforts to discover creative children in hitherto untouched regions of the country. Creativity abounds everywhere and I am most certain that in all such areas, there will be equally inquisitive, imaginative and innovative children as in other areas.

I am very pleased to notice that many of the ideas/innovations selected for recognition this year address everyday problems. This sensitivity in our children towards their social context has to be preserved and nurtured today so that India of tomorrow will be more inclusive, innovative and imaginative. My heartiest congratulations to all the award winners from 25 districts of 17

states of the country. This, in fact, underlines the pervasiveness of creative culture among the children in the country. What one needs is just an eye to spot an innovation. NIF, I hope, will continue to spot the empathetic young talent of our society and nurture them to be a responsible leader in future.

With my best wishes and blessings to all

A handwritten signature in black ink, appearing to be 'R.A. Mashelkar', with a stylized, cursive script.

R.A. Mashelkar

F.R.S.,

Chairperson, National Innovation Foundation

National Research Professor



Introduction

Responsiveness of an innovation eco-system can be judged by the extent to which creative solutions emerge with alacrity for persistent social problems. Ignite has added a unique dimension to this measure. The extent to which ideas emerge from younger children can be considered a measure of longer-term sustainability and as well as of agility of the innovation eco-system. Unprecedented response to IGNITE-13 competition evident from 21000 entries from school students in 301 districts proves that young India is changing. Its far more impatient than our generation has been. We knew about the problems, often in greater detail and yet we learned to live with them, rather indefinitely. Our children are not willing to live with the unsolved problems any more. And that is the most redeeming thing we can say about our future.

Should not we adults thus take a cue

from the impatient and innovative children? The IGNITE competition, over the years, has been urging the children to be more curious about the unsolved social or domestic problems around them so as to find creative ways of solving them. The increasing rate of participation in the competition is a testimony to the heightened social sensitivity of our children and consequent desire to bring about a change. The recognition at the hands of Dr. A.P.J. Abdul Kalam, former President of India, touches their lives in an unforgettable manner. The inspiration hopefully lasts for life.

Honey Bee Network stresses that feasibility should not be the enemy of desirability. It is for this reason NIF encourages children to imagine solutions without feeling handicapped in terms of implementing the same. To make creative children feel proud of their imaginative ability, NIF tries to get the prototypes fabricated for feasible ideas. It also files patents in the names of the students in all applicable cases.

When children come to receive the awards, they see the models of their ideas and get a copy of the patent application. Then they don't have to be told that their ideas matter. And that the country cares for them.

It may be worthwhile to mention that with the help of National Innovation Council, the Government of India has conceptualized National Innovation Scholarship scheme to provide 1000 scholarships to children for their creative ideas. With the support from different reputed national academic institutions, NIF would play a key role in taking this scheme forward.

It is very gratifying to mention that the IGNITE campaign originally started in partnership with the Central Board of Secondary Education (CBSE) is finding support of various state educational boards as well. CBSE has continued to support the campaign very enthusiastically. The state education boards in West Bengal, Punjab, Haryana, Goa, Meghalaya

and Chhattisgarh participated in the campaign this year and helped in mobilizing ideas from children even in remote areas.

An area which needs further strengthening at our end is increasing the participation of school dropouts in this competition. I hope that with the active participation of volunteers and civil society members, we should be able to bridge this gap.

I congratulate all the award winners, their families, school teachers and friends for the recognition that has come their way. Their real responsibility actually begins now. They not only have to continue with their creative and compassionate spirit, they have to also help NIF in reaching out to less-privileged children in municipal or government schools or even out of school. The contribution of the grassroots innovators, most of whom are school dropouts, shows that the current educational system does not increase the creative quotient of our society with the increase in educational attainments.

We have to overcome this bias in the education system. We have not yet succeeded in embedding creative ideas of children, informal sector and young innovators in the text books of any class so far. But we are convinced that this will change some day. How long will educational planners quarantine the mind of millions of children in school from the humanistic influence of empathetic innovations.

A stylized, handwritten signature in black ink, consisting of several fluid, overlapping loops and a final horizontal stroke.

Prof Anil K Gupta

Executive Vice Chairperson, National
Innovation Foundation
Professor, Indian Institute of Management,
Ahmedabad

I would also like to appreciate the untiring efforts of the young team at NIF led by Dr. Vipin Kumar, Director and Chief Innovation Officer and Dr. Nitin Maurya, Senior Innovation Officer, for making IGNITE campaign and award function successful. I am sure that they will remain motivated in the service of unsung heroes of our society.



7 point oath for students

-- I realize, I have to set a goal in my life. To achieve the goal, I will acquire the knowledge, I will work hard, and when the problem occurs, I have to defeat the problem and succeed.

-- As a youth of my nation, I will work and work with courage to achieve success in all my tasks and enjoy the success of others.

-- I shall always keep myself, my home, my surroundings, neighbourhood and environment clean and tidy.

-- I realize righteousness in the heart leads to beauty in the character, beauty in the character brings harmony in the home,

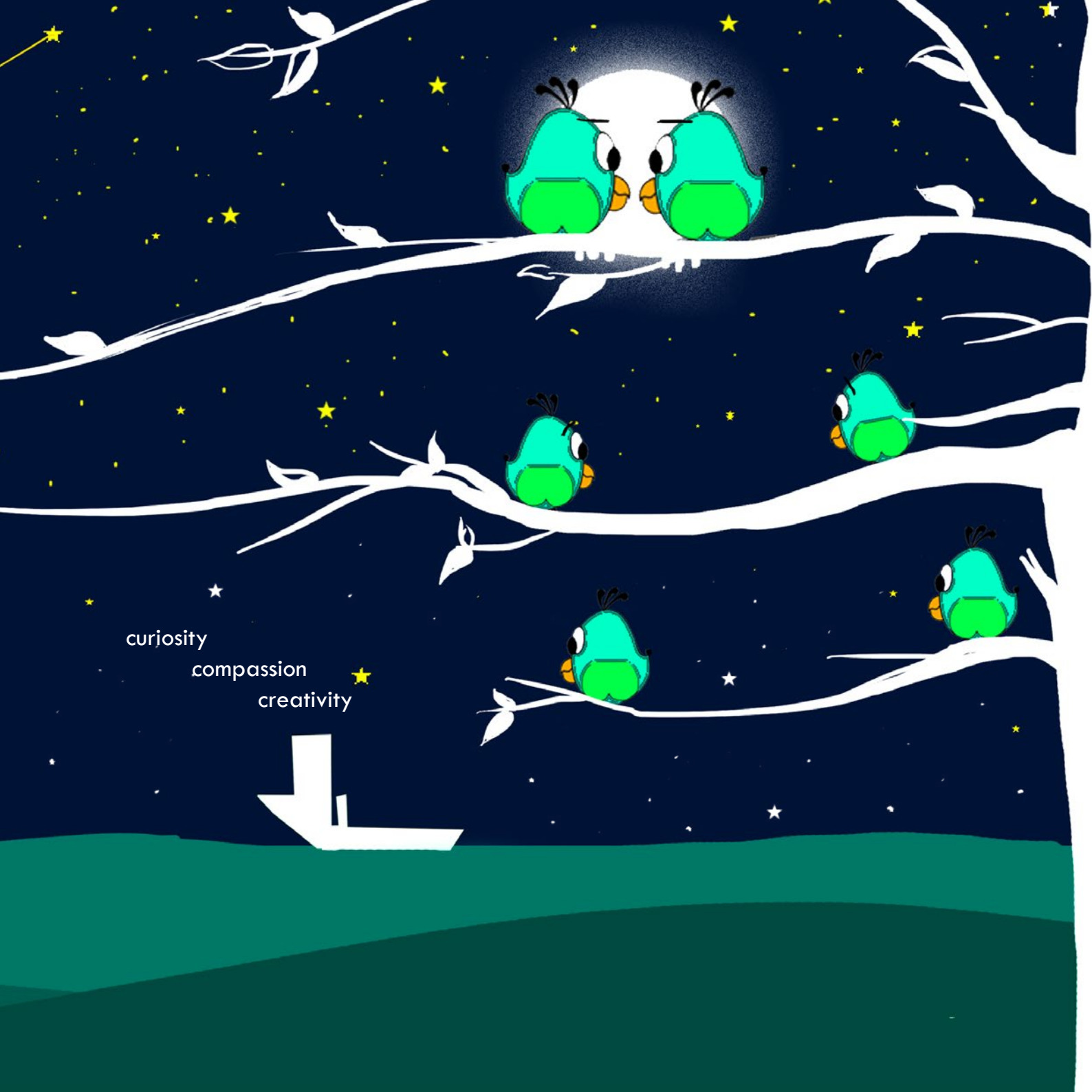
harmony in the home leads to order in the nation and order in the nation leads to peace in the world.

-- I will lead an honest life free from all corruption and will set an example for others including my home to adopt a righteous way of life.

-- I will light the lamp of knowledge in the nation and ensure that it remains lit for ever.

-- I realize, whatever work I do if I do the best, I am contributing towards realizing the vision of developed India 2020.

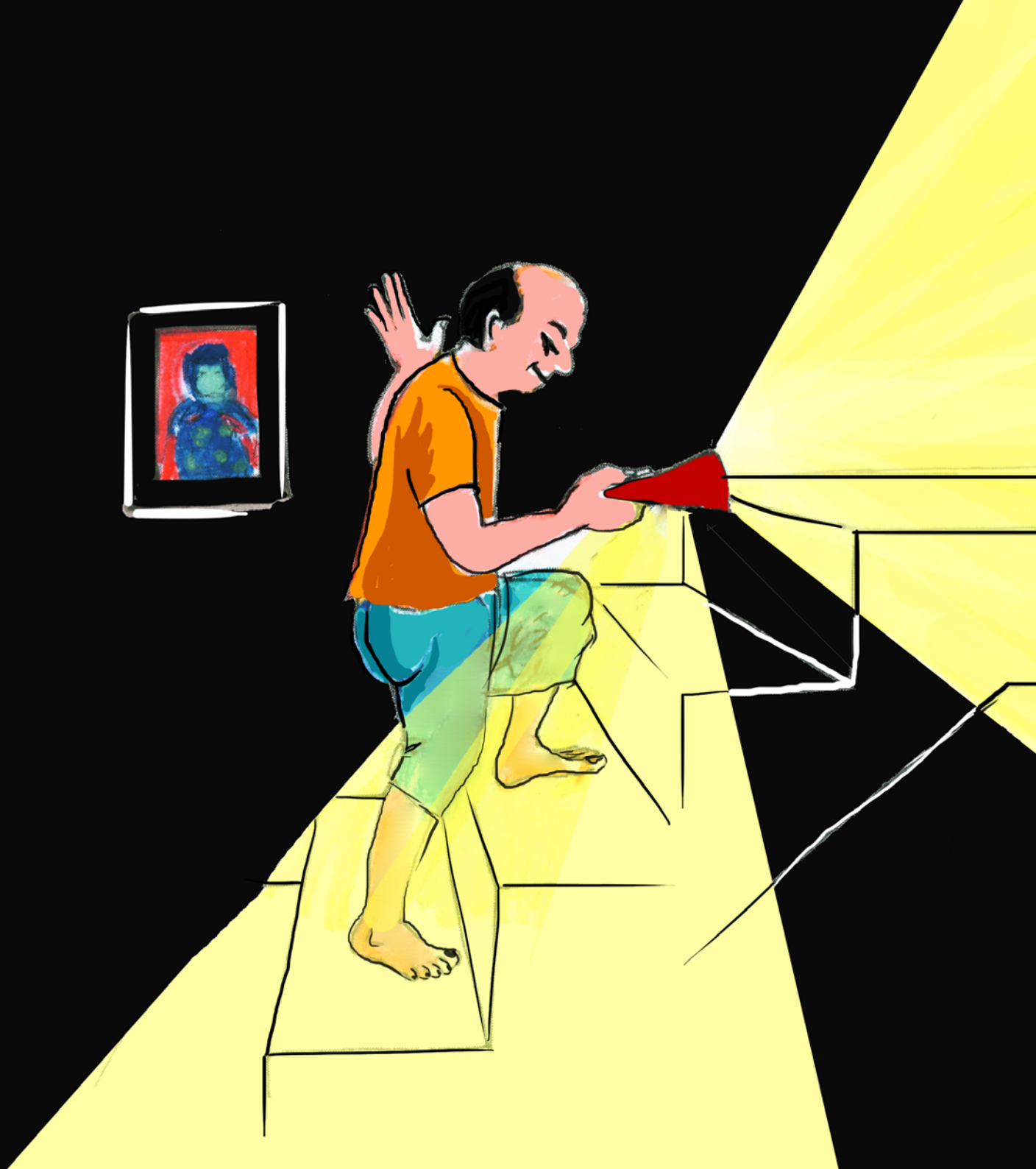




curiosity

compassion

creativity



A torch with an additional bulb

Md. Alisher, class 12, KSS College, Lakhisarai, Bihar

The idea is to have another bulb below the main bulb of the torch so that light is available near the feet of user and also for people following the user. Once Alisher was returning home with his grandmother at night. As he was using his torch to show his grandmother the way, he could not see a pit himself and fell into it.

Idolising Abraham Lincoln, he likes writing stories and wishes to join CBI to rid the country of corruption.



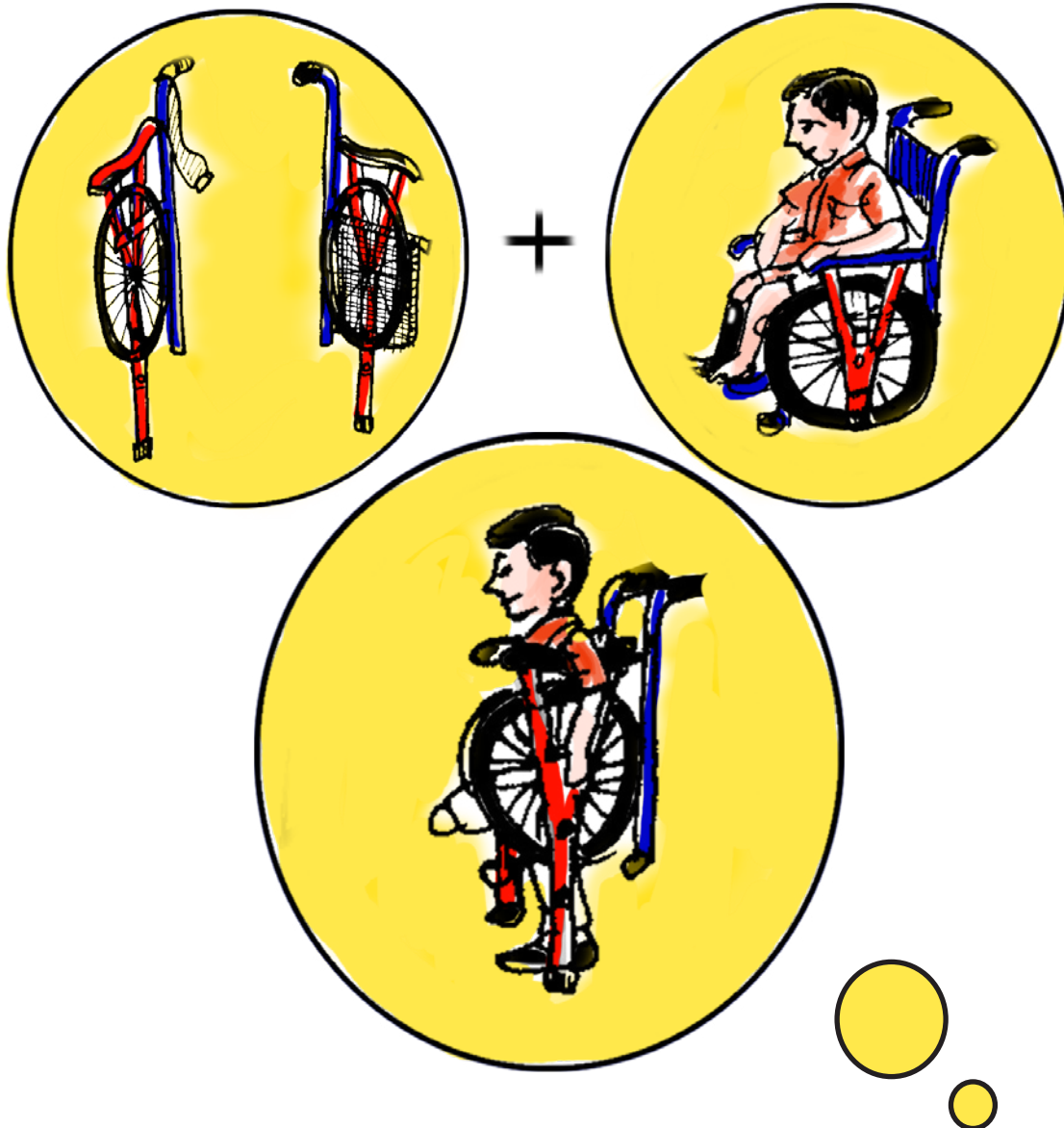
Wheel chair convertible to crutches

S Ramakishore, Sanjay Srinivas, Tamil Selvan
class 10, Maharishi International School, Chennai,
Tamil Nadu

The idea is to have a modified wheelchair that can be folded and converted into a crutch so that it is easy to take on stairs as well use on flat surface. The three friends had gone to celebrate one of their friend's birthday in an orphanage. They were moved by the plight of lower limb physically challenged.

Sanjay likes reading novels and listening

to western music, Ramkishore likes drawing, reading novels, and playing video games. Crazy about computers, he wants to become a computer engineer. Tamil Selvan, who wants to become aeronautical engineer, likes reading non-fiction, watching animation movies and day dreaming, as he mentions.





Pen to check concentration

Rudra Prasad Goswami, class 11,
DAV Kapildev Public School, Ranchi, Jharkhand

A pen with pressure sensors on the grip to indicate loss of concentration when the grip loosens. Once Rudra was summarizing notes of a Physics chapter, however, somehow he could not concentrate and his attention kept diverting from one topic to another. It is then that he thought about such a pen.

Rudra likes solving Physics numerical and playing chess and cricket. He wants to get into IIT and become an engineer.



Bulb/CFL remover/ connector

Gautham Praveen A, class 11, SJSSGJ Matriculation
HS School, Tirunelveli, Tamil Nadu

Shweta Sharma, class 11, Police DAV School,
Jalandhar, Punjab

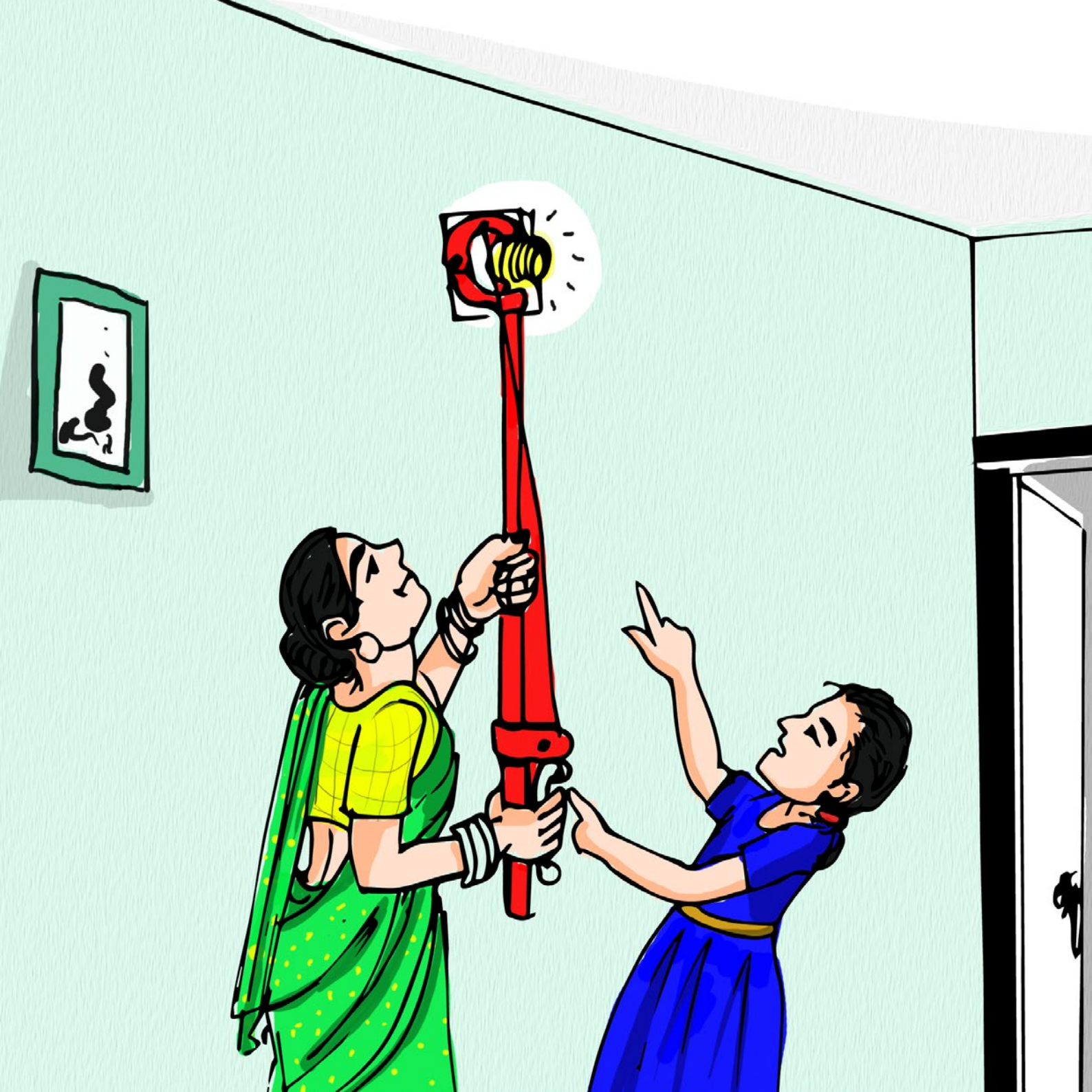


Hand held rod with a clutch at the grip and a clasp at the further end to hold the bulb, making is easy for anyone to change the bulb without needing a chair or a ladder for it. Gautham came up with this idea when his father asked him to help him change a few bulbs at the house.

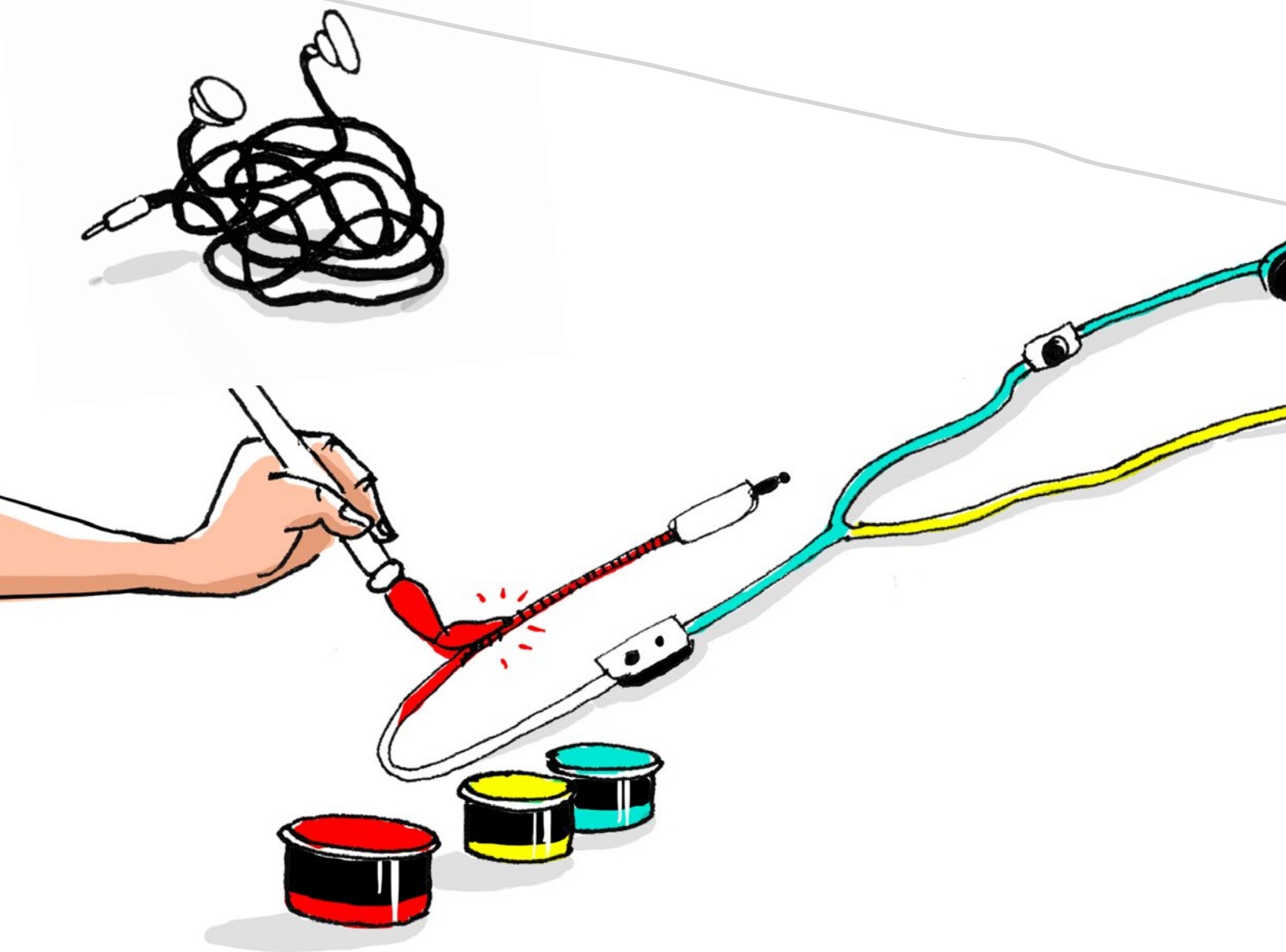
Gautham has been a good scholar and had secured 98.8% marks in his class 10th last year. He plays keyboard and also composes music, and has won a number of awards at the district/ state level. He often works on different projects showcases them in various science exhibitions, where his scientific temperament gets well recognised. He wants to be a Chartered Accountant and also wants to be remembered as a good

musician. Interestingly he says that students should be multi-talented like ‘Swiss Army Knives’, which are multi-utility objects.

Shweta is a young school girl whose mind keeps buzzing with new ideas. She says that she otherwise has loads of patience but when it comes to problem solving, she becomes impatient and starts to think of probable solutions. “If we learn to live with ten problems unsolved, living with next ten problems becomes easier and after that we do not even notice many of the problems,” mentions Shweta. This is the third consecutive time she is getting an IGNITE award and for two of her ideas, the other one being a kite flying idea mentioned later.



oh crap!!
not again!!

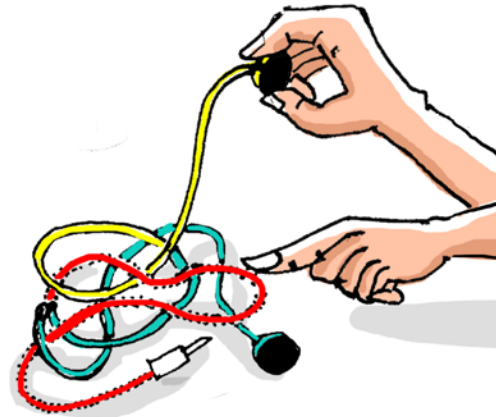
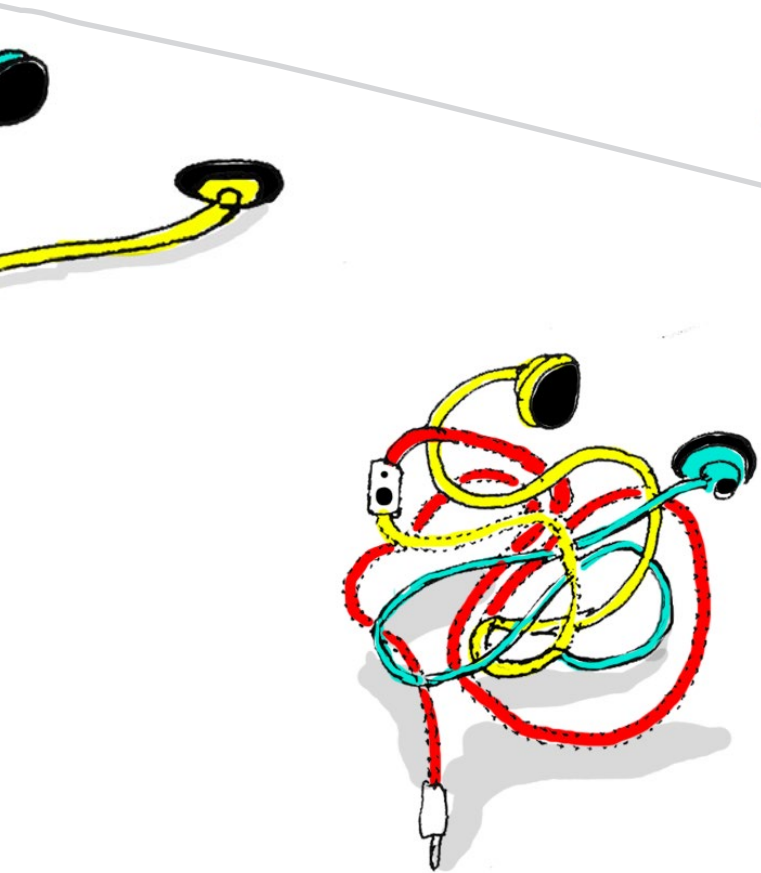


Multicolor headphone wires

Swetleena Zenith, class 11, Army Public School, Allahabad, Uttar Pradesh

The cords/wires of the headphone may be of different colors so that untangling them becomes easy. A simple solution to an everyday problem faced by many of us.

In free time, Swetleena likes to be with herself, sitting quietly in a corner and contemplating on various things. Since writing acts as a stress buster for her, she sometimes writes long poems. She wants to be a doctor and serve the society. She strongly feels that as one learns from oneself the most in life; his/her inspiration should come from within i.e. one should be self inspired. Her motto: To dream of a person you would like to be is to waste the person you are..



Adjustable electricity extension board

Tenith Adithya, class 11, The Hindu Higher
Secondary School, Virudhunagar, Tamil Nadu

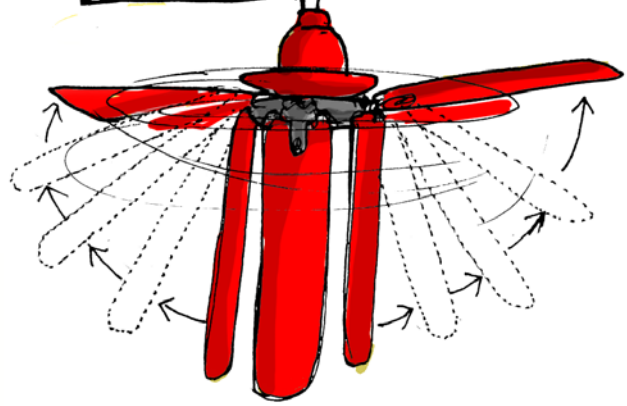
Electricity extension board with flexible plug points so that one can put any type of electric plugs wherever space is available. Tenith needed a good number of electricity plug points to run various devices at a time while pursuing various experiments. Using many extension cords/power strips was cumbersome, thus the idea.

He is an avid computer buff and has two Guinness World record attempts to his credit viz. most software and games created at youngest age (8 games and 5 software at the age of 12 years) and world's longest running computer program (Power mind, which can run for 570 years, written at the age of 13 years). His hobbies are collection of coins, antique, currency notes and rear pets. He has over 5000 coins and 250

currency notes. He also claims to be a bird tamer and enthusiastically participates in science expo, chess tournaments, essay competitions, debates, painting and drawing competitions etc. He is a serial innovator and has a number of innovations to his credit. He wants to be an inventor and develop solutions that make life easy for the people. He mentions that he works late till night on his projects and many times misses his classes in the morning as he often gets late. He recalls once during a chemical experiment, he had inhaled dangerous fumes, after which he had to be hospitalized. But even at the hospital bed, he told his parents, 'Science needs sacrifice', which frightened his parents so much that they never allowed him to work with chemicals thereafter.





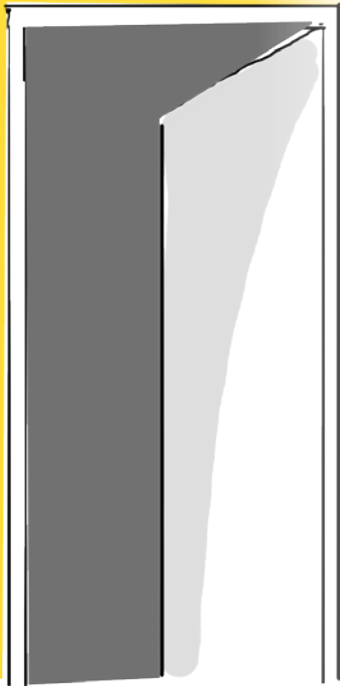


Automatic blade swinging ceiling fan for easy cleaning

Atheerth Chandran, class 11, AMHS Thirumala,
Thiruvanthapuram, Kerala

When switched-off the blades loop downwards so that they can be cleaned and when switched-on they become horizontal as in other ceiling fans.

Atheerth likes to work on a number of electronic projects and helps his friends with their science projects. He likes to work with electronic components like resistors, transistors, capacitors etc.. He plays cricket and badminton, and wants to become a scientist.



Oxygen / carbon dioxide level indicators in car

S R Valava, class 12, AEHSS, DAE Township, Kalapakkam, Tamil Nadu

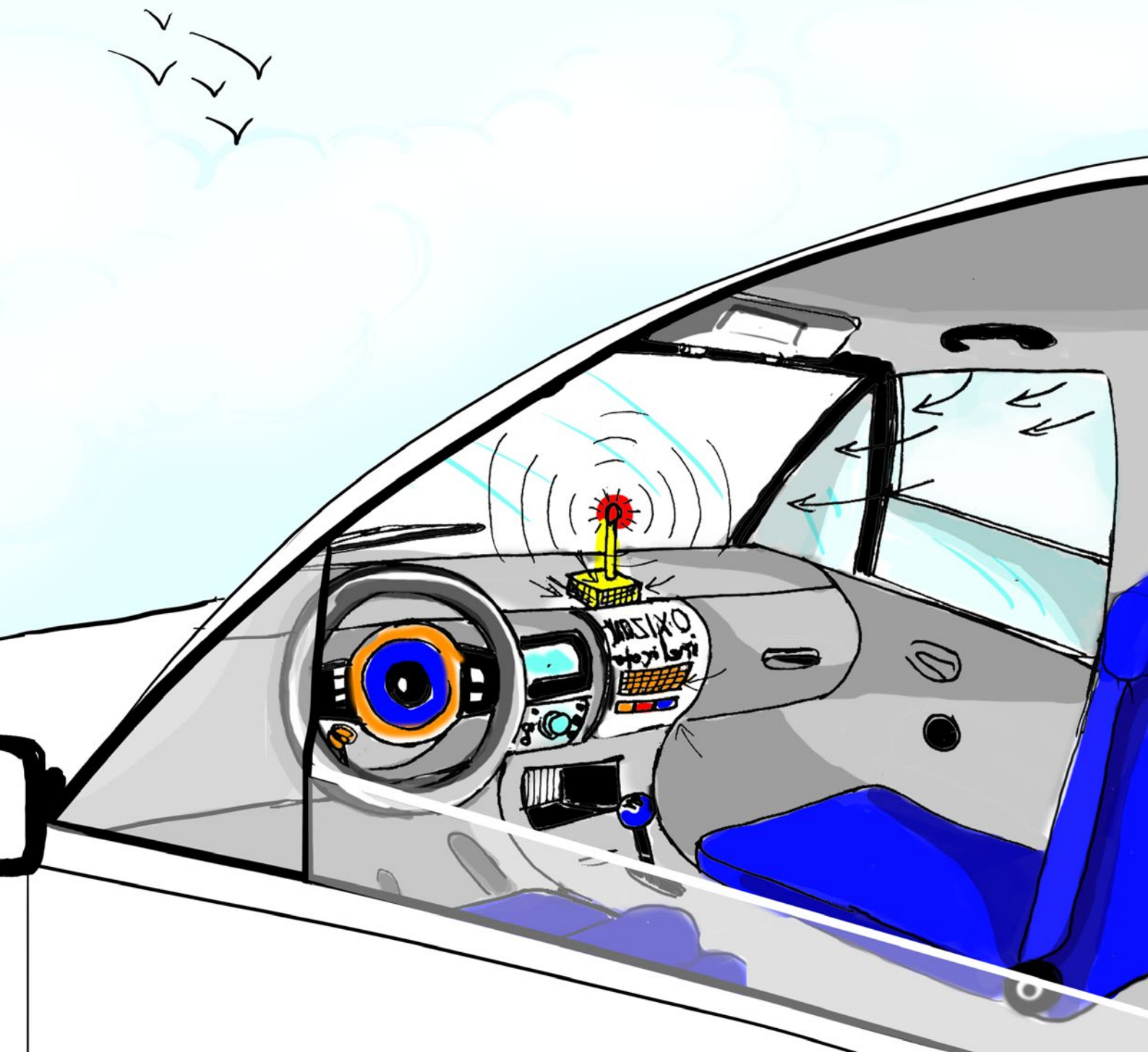
Pratyush Kumar Sahoo & Bikash Kumar Mallick, class 10, Mother Public School, Khurda, Odisha

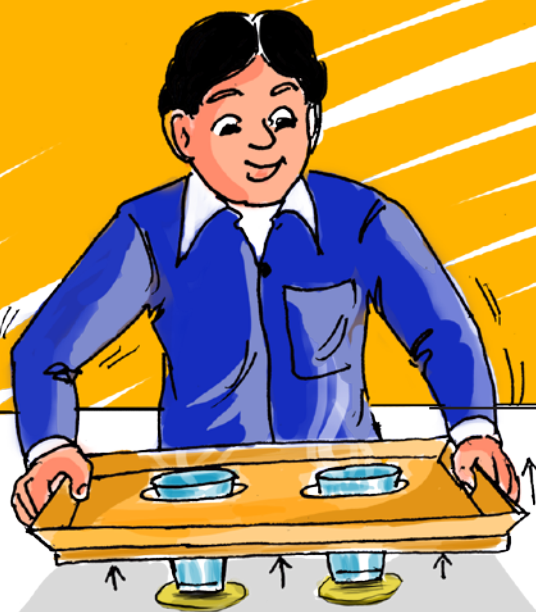
System to detect levels of oxygen/ carbon dioxide in the closed car and open windows when oxygen level drops or carbon dioxide level rises, thereby preventing accidental deaths of children or pets locked inside the car.

All the students thought about this idea after reading/ hearing news about accidental deaths in cars due to suffocation. Valava, who plays football, has interest in junk art i.e. making useful items from waste and wants to become an entrepreneur so that he can give job to others.



Pratyush plays basketball and computer games. He also reads story books, paints and plays keyboard. He wants to become an IAS officer. Bikash, who also plays basketball, believes that he has the capacity to break a bigger problem into small ones and then solve them. He also aspires to be an IAS officer and feels that, 'success is not something one is born with, rather it is something one has to strive for.'



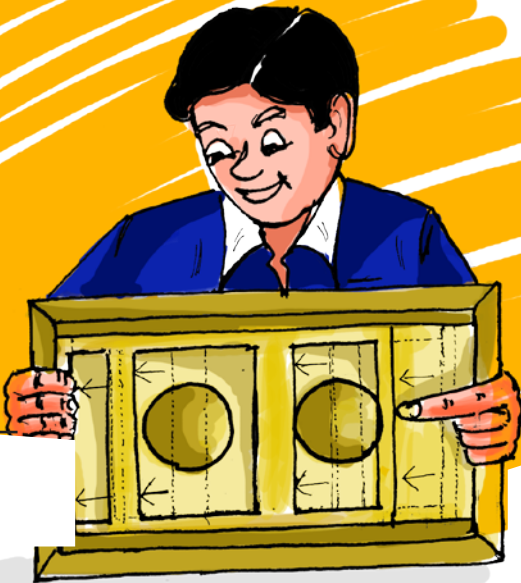


New design of serving tray

Alok Singh, class 12, Shah Faiz Public School,
Ghazipur, Uttar Pradesh

Serving tray with a release mechanism to put cup/ glass on the table along with a coaster without touching it. Once while serving tea to a guest, Alok spilled over hot tea over him resulting in some burns to his hands and stains on his cloth and the sofa. After this incident he started thinking how such a problem could be avoided and came up with this idea to make serving easy and 'stylish'.

He plays table, sings songs, knows seven different techniques in swimming, learns martial art and is also into athletics. He likes narrating stories to his younger cousins and penning down poems.



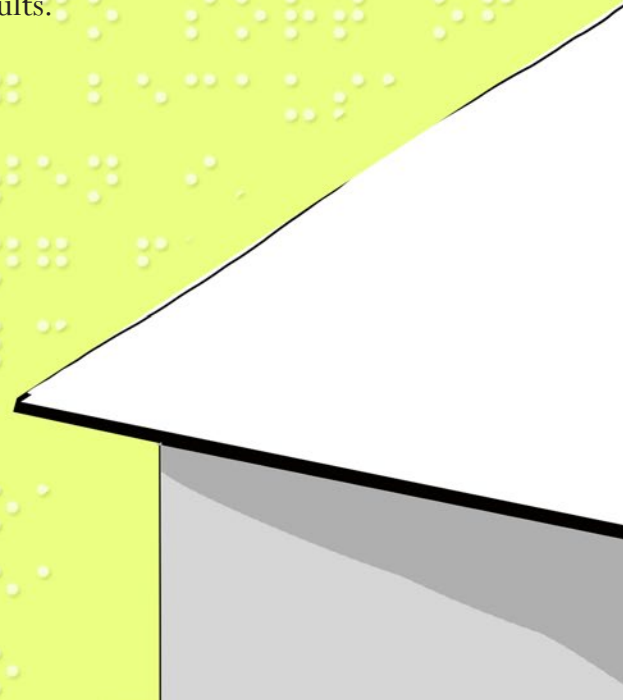
Low cost Braille printer

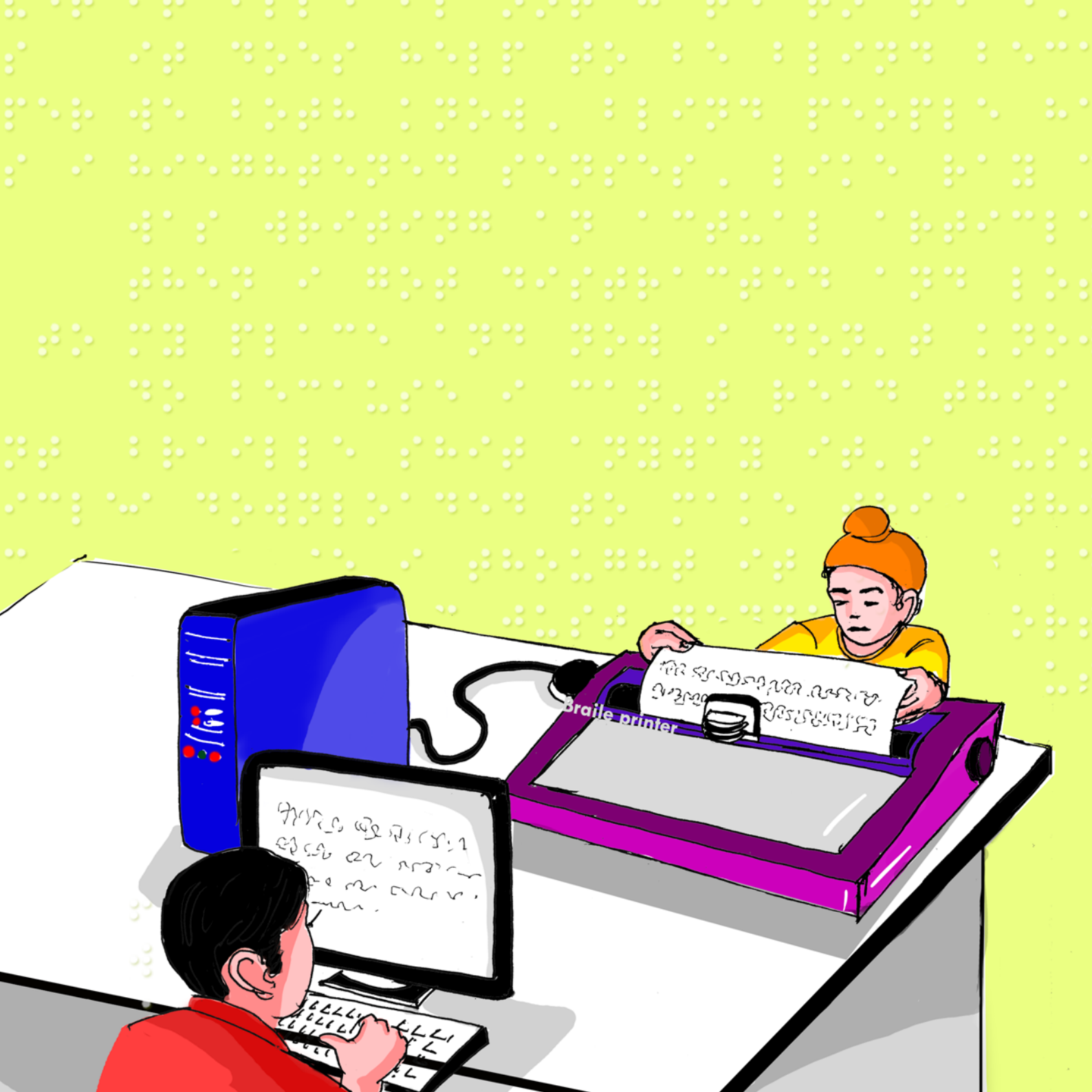
**Santokh Singh and Khushwant Rai, class 12,
Police DAV School, Jalandhar, Punjab**

A dot matrix printer modified at a low cost to work as a Braille printer. Both the friends once visited a blind school for a school project where they saw much of the printing work done in a time consuming manual manner. Challenged by a teacher there they came up with their own Braille printer using a dot matrix printer.

Khushwant likes to play cricket and chess. He also enjoys surfing the net and making electronic gadgets like electronic stethoscope, water level indicators, LED displays etc. He wants to become an astronaut and undertake space exploration. Santokh likes learning new things.

Mathematics and Physics are his favorite subjects. He also writes poems on various topics and things that inspire him. He also wants to become an aeronautical engineer. About the Braille printer, he recalls a problem with the roller while modifying the printer.. There was not enough friction on the roller to catch the rubber tube so he and his friends used it as football for a while, which made its surface rough and thereafter it started giving desired results.





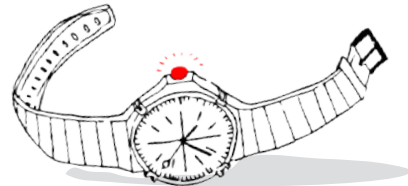


Electronic purse with paired watch

Phamnya Konyak, class 9,
Konjong Higher Secondary School, Mon, Nagaland

Password protected purse and an electronically paired watch, which alerts if user gets away from these or someone steals the purse.

Phamnya is the first student winner from Nagaland and comes from a rural area. She thought about the idea after hearing many stories of theft and when one of her own friend lost his purse to pickpockets. Idolising Mahatma Gandhi, she likes reading story books and occasionally writes stories. She wants to become a doctor and serve the people.



Step-lock system in bus

**R Santhosh, class 11,
J Rajasekar, class 10,
A Nivashini, class 10,
K Rathna, class 10, Govt Girls Higher
Secondary School, Tiruvarur, Tamil Nadu**

Mechanism, which would not allow the bus to move if people are standing on its stairs, thereby preventing accidents. A often observed problem in our country unfortunately.

Santhosh thought about this idea while commuting from his village to his school. He finds physics quite easy and wants to pursue

aeronautical engineering and take up space research. Nivashini likes reading story books and wants to become a doctor. Rajasekar likes outdoor sports, participates in NCC and would like to become an IPS officer while Rathna, who also likes reading books wants to become a teacher.





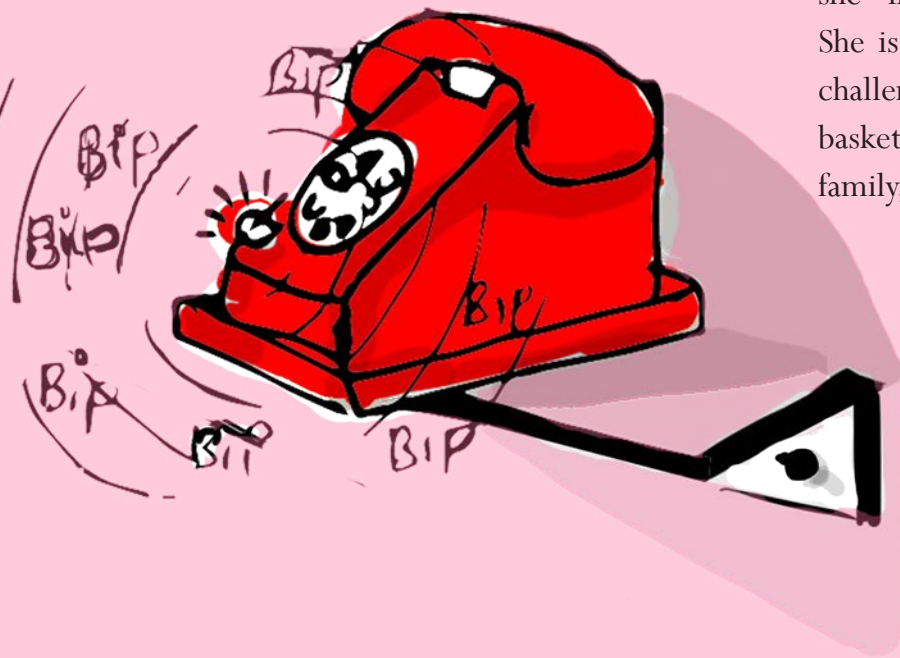


Indicator for 'dead' landline phones

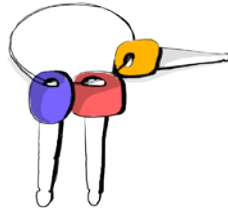
Nidhi Gupta, class 10,
Kendriya Vidyalaya SAC, Ahmedabad, Gujarat

Light/ sound alert that informs user when the landline phone becomes 'dead'. A physics enthusiast, Nidhi came up with this idea once when she missed an important communication due to their 'dead' phone.

Apart from her great interest in science, she likes painting, dancing and swimming. She is also fond of adventure and likes to play challenging computer games apart from basketball and cricket.. With the support of her family, she wants to become a good engineer.



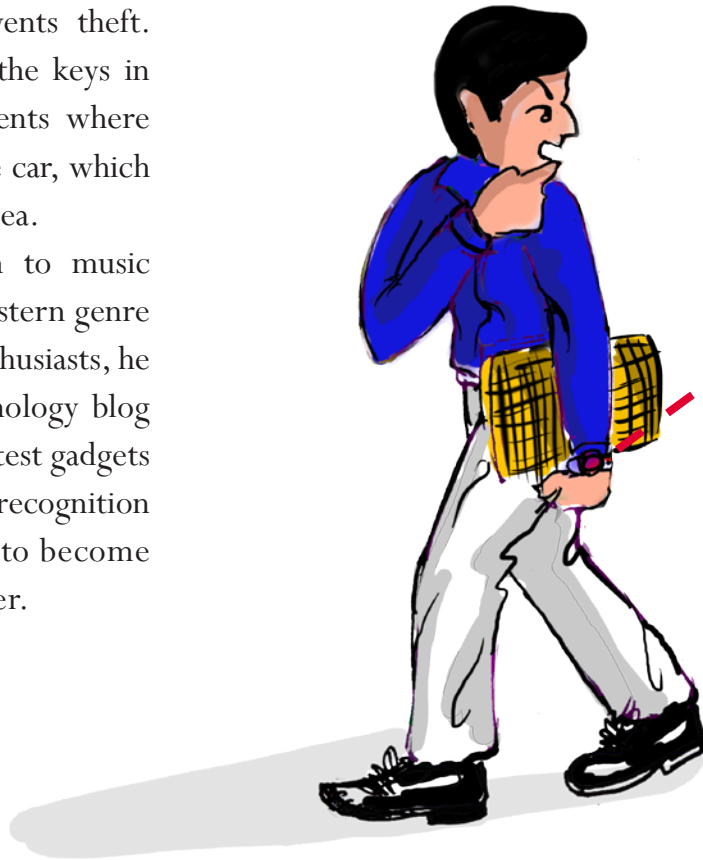
Reminding the owner if keys are forgotten in the vehicle

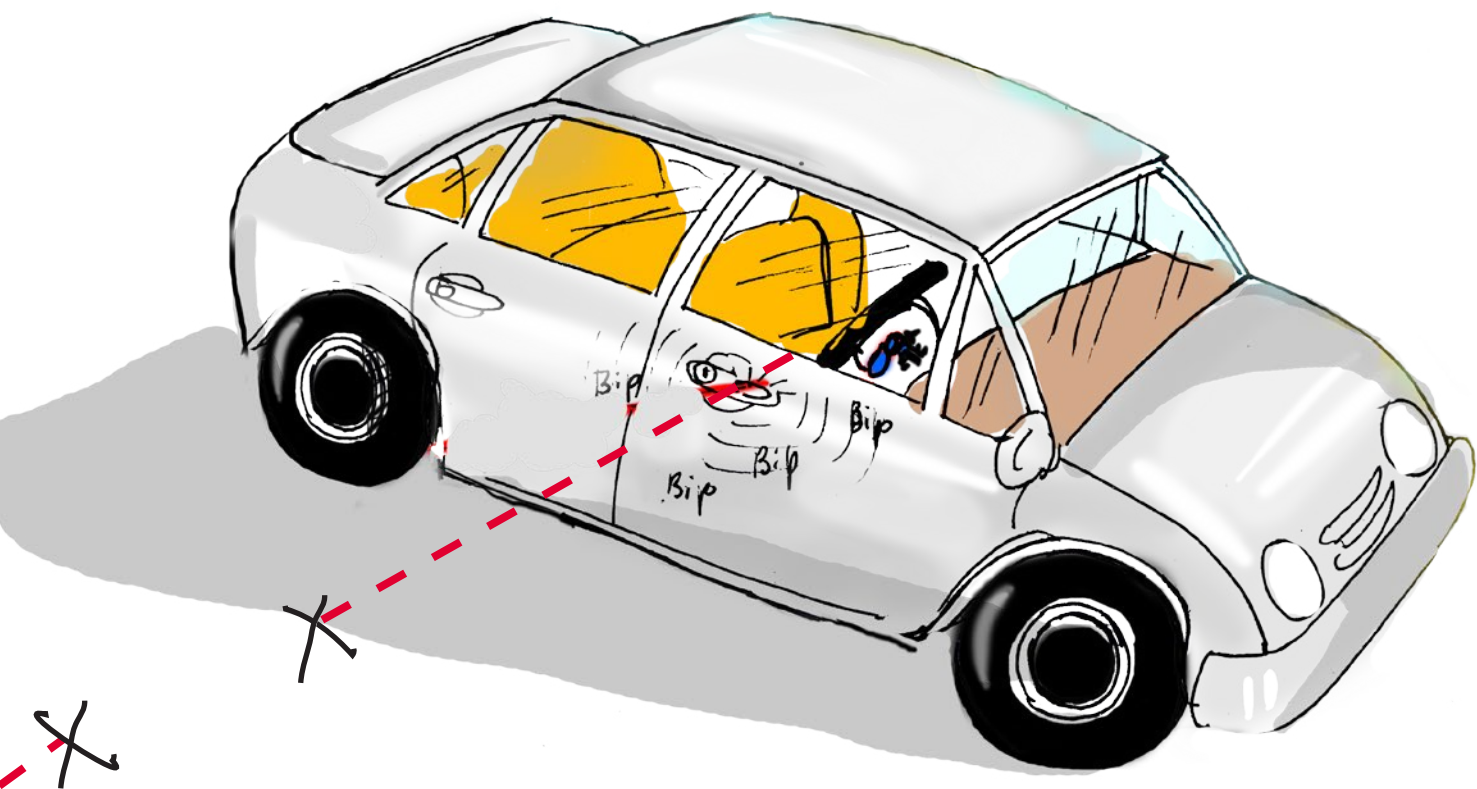


Chandramouly K Kandachar, class 12,
RV PU College, Bangalore, Karnataka

A system in vehicle, which intimates the driver through a phone call if the keys have been forgotten in the vehicle; also prevents theft. Chandramouly's sister often forgot the keys in the car itself. He read about incidents where owner by mistake left the keys in the car, which got stolen subsequently; hence this idea.

Chandramouly like to listen to music especially carnatik music and also western genre like metal and rap. All technology enthusiasts, he and his friends, have started a technology blog where they post all the news about latest gadgets and technologies. He has received recognition for his scientific acumen and aspires to become an electronics or computer engineer.



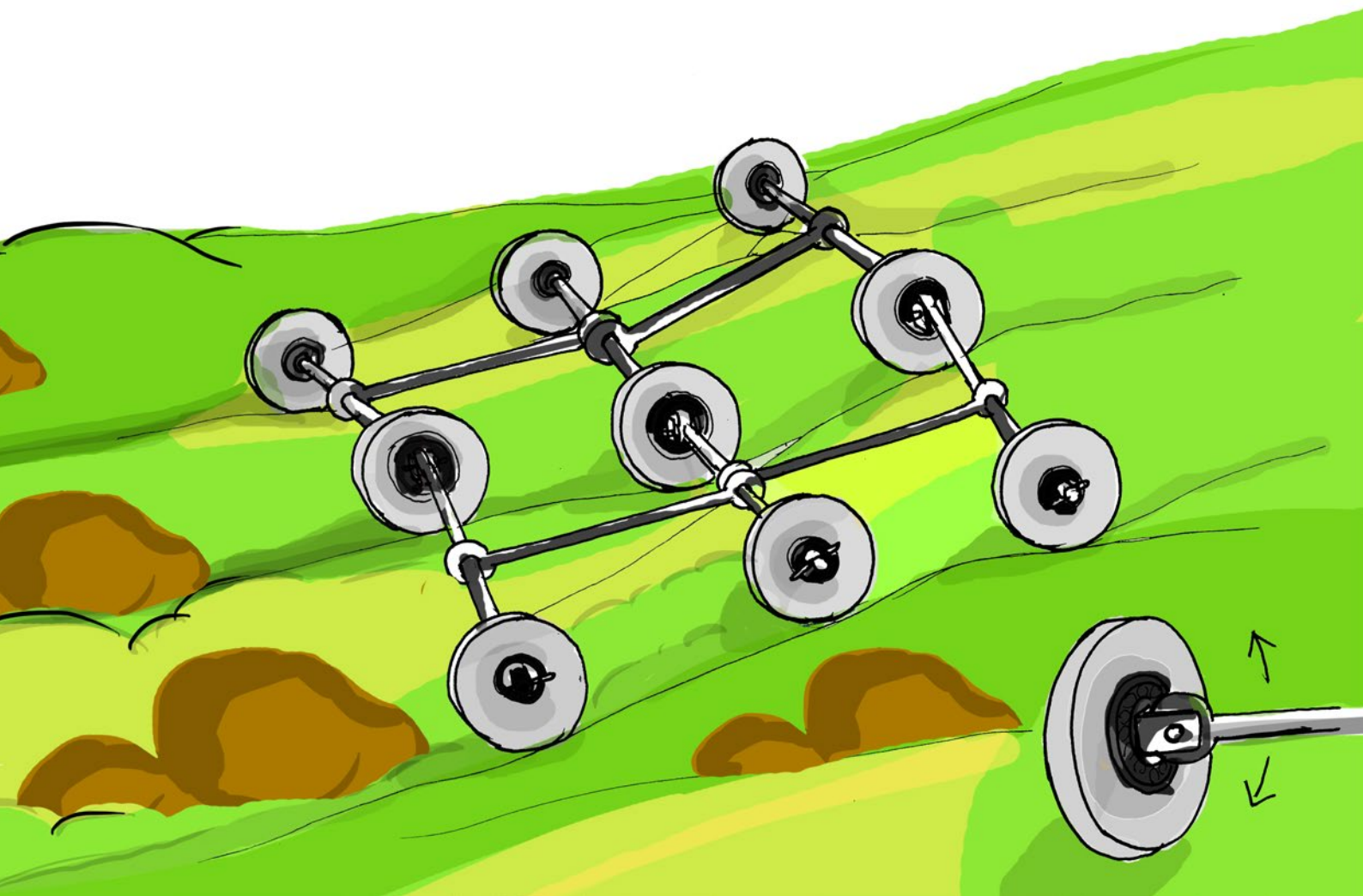


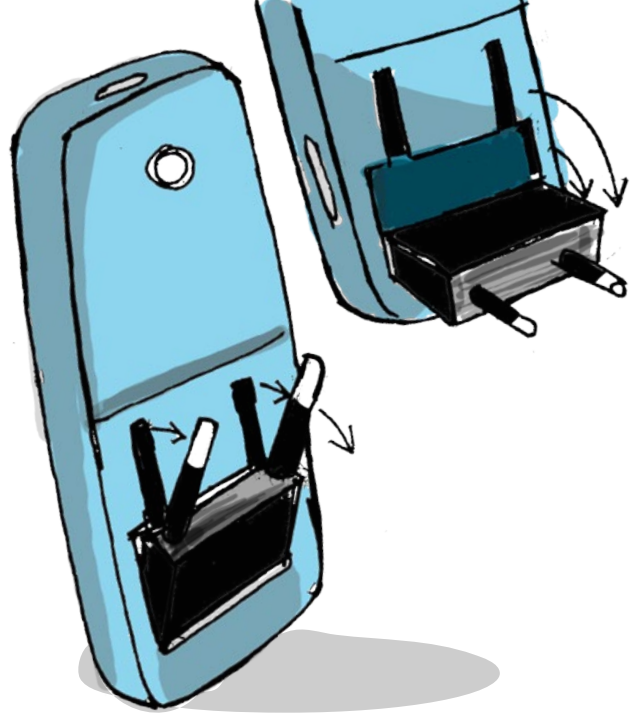
Hilly terrain cart

Vidya Ramesh, class 12, Greenwood High
International School, Bangalore, Karnataka

Three equidistant wheels on a single axle attached to two similar sets in different planes, allowing flexibility in movement with respect to each other. Noting the difficulty people in mountainous regions face in transporting goods, in Vidya tried to modify the design of traditional hill cart.





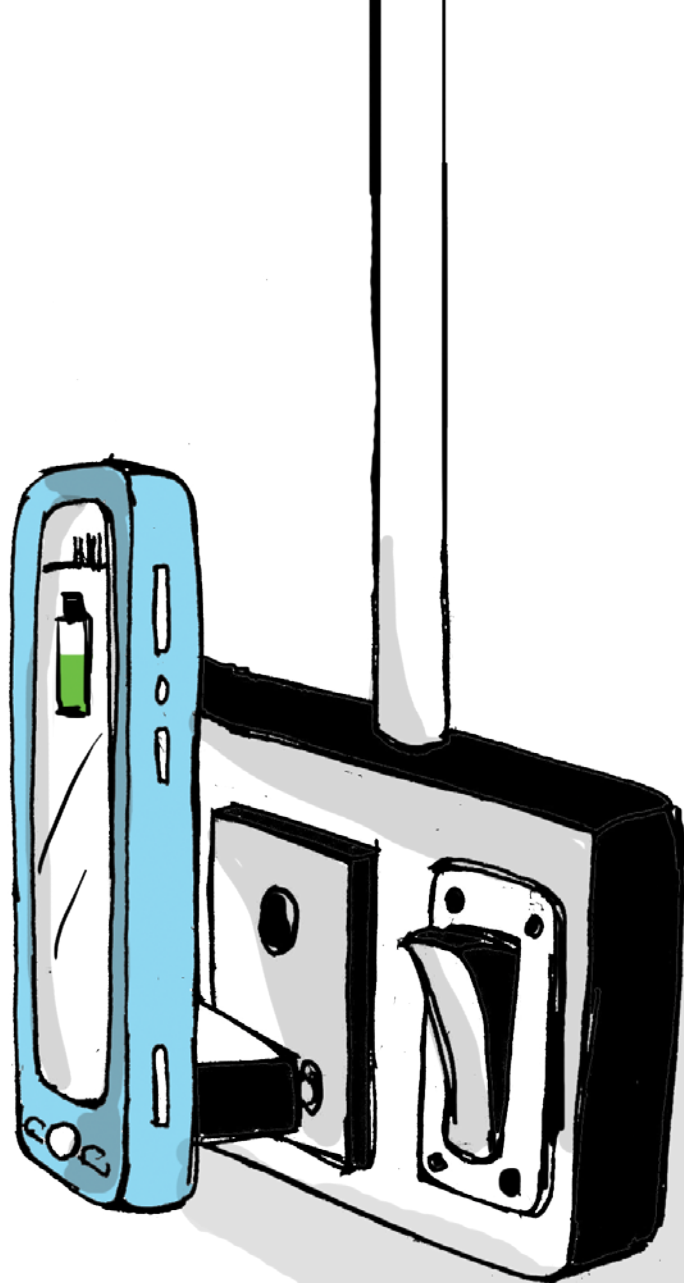


Mobile phone with inbuilt charger

Siddharthanan K, class 11, & Karan Kumar, class 12,
TKV Katapadi, Vellore, Tamil Nadu

A wearable device that alerts if user falls suddenly; useful for old people, and those suffering from fits, convulsions, seizures etc. This will help keep an electronic eye (if integrated with mobile) on one's loved ones to track if they were okay or not. The idea struck Soumya Ranjan when one of his friends getting an epileptic attack and fell down. He wondered, what if she wasn't around ?

He likes to play cricket and wants to become a mechanical engineer.



Posture correcting chair

Kulsoom Rizavi, class 5,

La Martiniere Girls College, Lucknow

Tarun Anand, class 10,

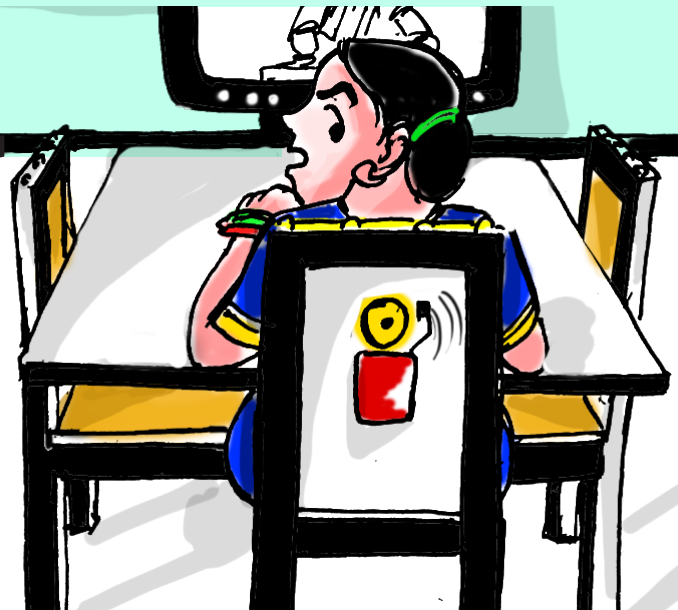
Ch. Chhabil Das Public School, Ghaziabad, UP

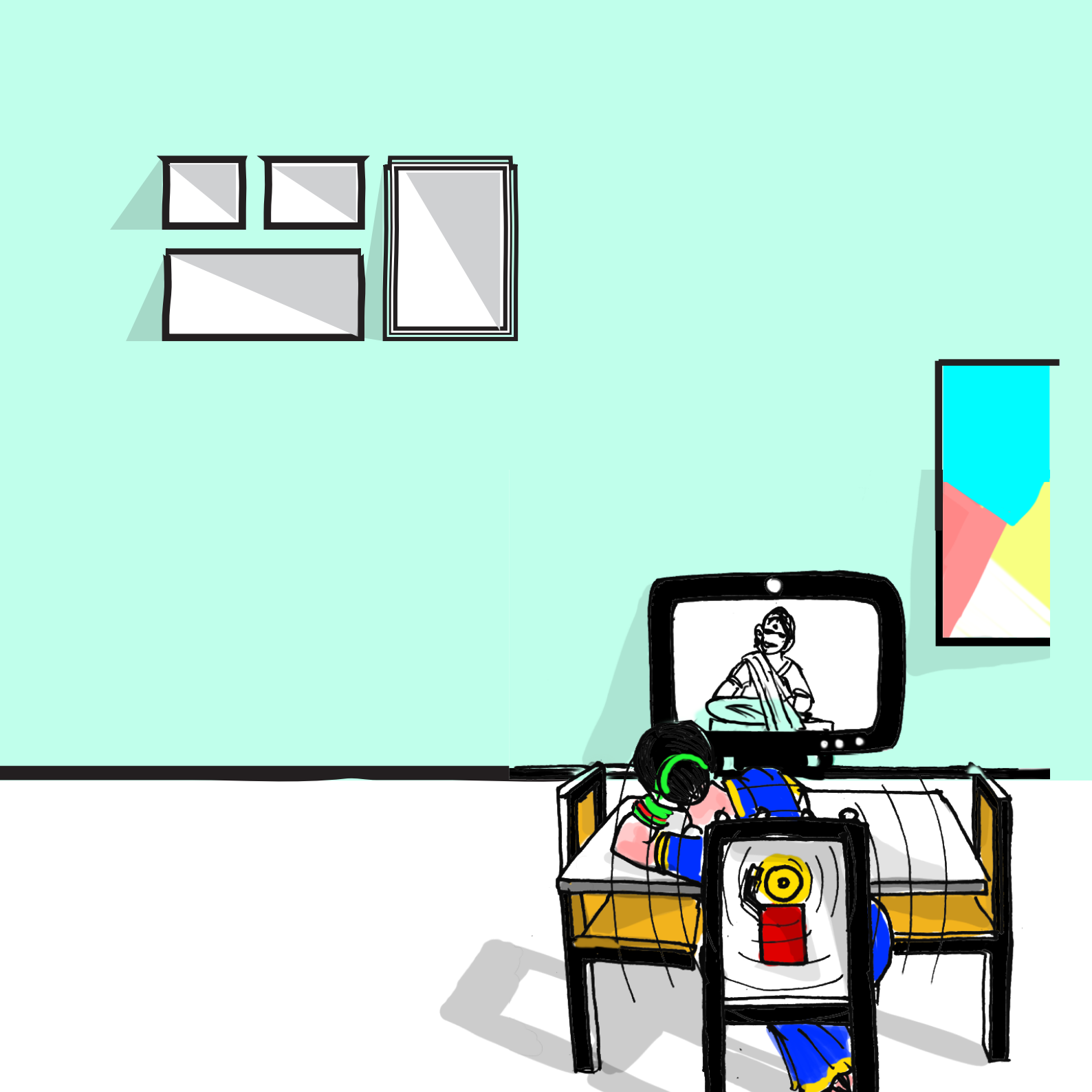
A chair with sensors at appropriate places, which alerts the user sitting in a wrong posture. Both conceived this idea independently after being regularly scolded by their mothers for using a bad posture.

Little Kulsoom thought that while it may not be possible to be reminded again and again by someone for not sitting properly, this task can be done by the chair itself. She likes gardening, arts and crafts, writing stories and poems. Infact she plans to get her own book published soon and

grow up to become an entrepreneur selling hi-tech machines in an automated shop. She has an elder sister who loves her much and a younger infant sister whom she loves most.

Tarun wants to have such a chair to escape his mother's scolding. He has an interest in electronics and likes to know about new and emerging technologies apart from playing cricket in his free time.



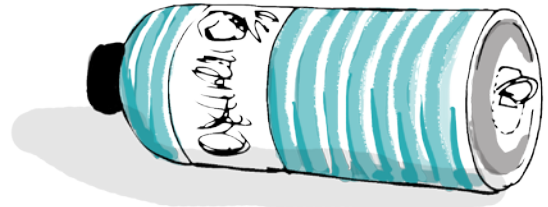


Puncturing mechanism for water bottles

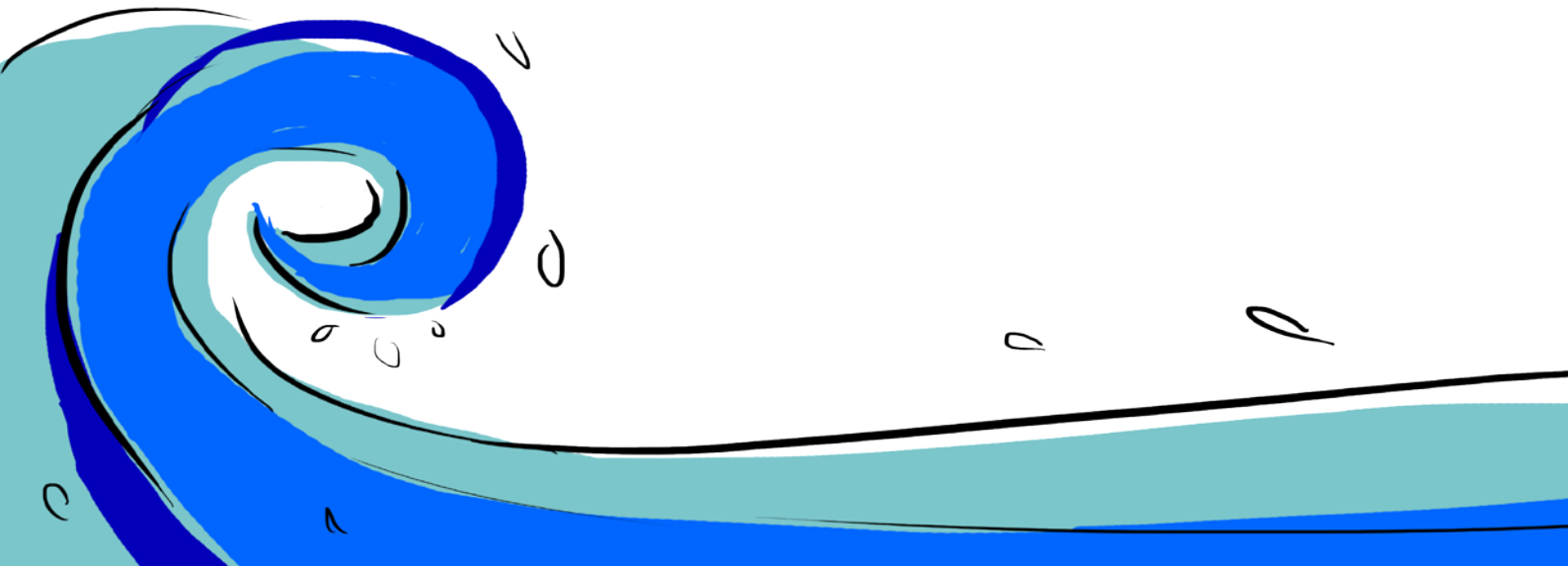
Shibajyoti Choudhury, 5, Christ Church Boys SSS
Rajashree Choudhary, 6, Christ Church Girls SSS,
Jabalpur, Madhya Pradesh

A stay-tab like opening mechanism, similar to the one in juice cans, at the bottom of water bottle to puncture it to make it unusable and prevent refilling/ misuse. This idea came to the brother-sister duo while travelling in a train and seeing some children selling refilled used water bottles.

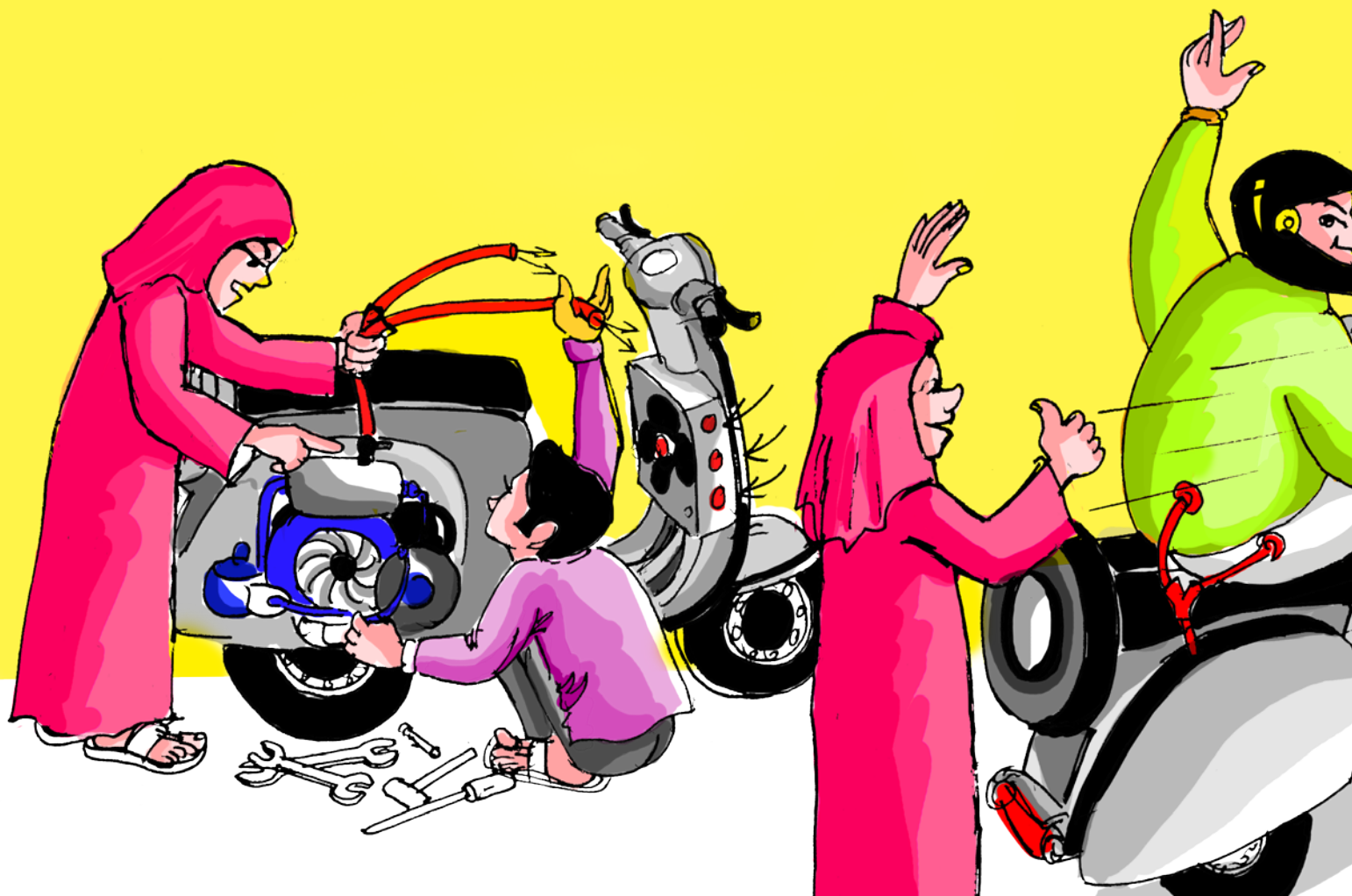
Both of them are nature lovers and have won numerous accolades, nationally and



internationally, in poem writing, arts, sports and other activities. They promote green, healthy and sustainable living through their creative expressions in various forms. While Rajashree wishes to be a green campaign crusader, Shibajyoti wants to become a cricketer and bring home the World Cup. He has even predicted the year for that, 2023!





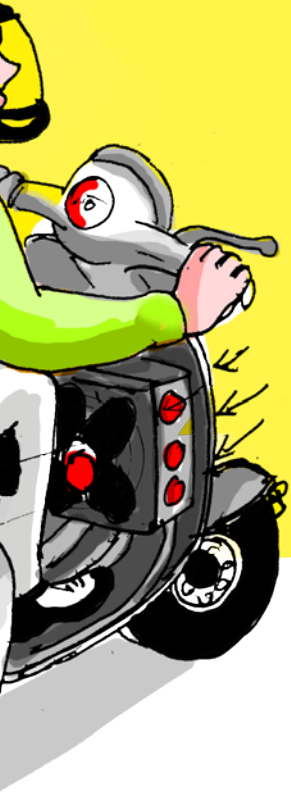


Air conditioning system in scooter / motorcycle

Masira bi Hanif Patel, class 8, MITeli English
Medium School, Jalgaon, Maharashtra

A small modified AC connected to engine, which circulates cool air through tubes woven into a wearable jacket. Once while riding on his father's motorcycle during summer, Masira noticed her father's discomfort. Later, she saw a car with an AC, which prompted her to think, why not two-wheelers could have ACs of their own too?.

A nature lover and cleanliness freak, Masira likes gardening a lot. She wants to become a pediatrician so that she can bring back smiles on the faces of ill children.



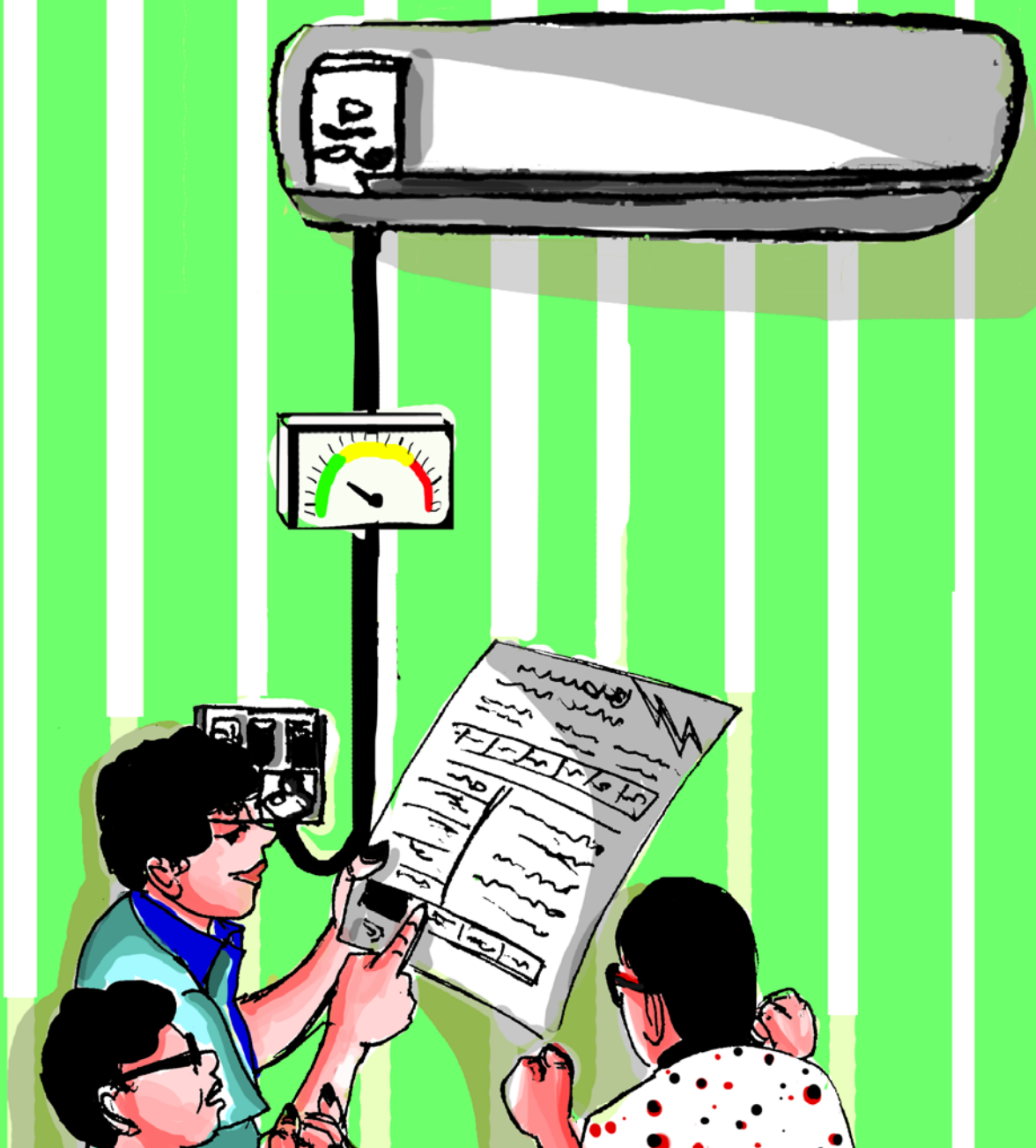
Reduction of AC energy wastage through clamp meter

Aman Venkateshwaran, Mihiraan Singh, Udai Singh, Varun Shriram, class 12, The Shri Ram School, Moul-sari, Gurgaon, Haryana

Clamp meter connected to an AC monitors the current flow and indicates usage (range) through green, orange and red colour codes. The four friends had learnt about capacitor and its use in many electronic appliances in their physics class. Ageing of these, leads to lesser efficiency of the appliance. To identify when are these devices ageing and thus need replacement, they thought of adding a clamp meter in the circuit.

Mihiraan likes playing cricket and basketball and aspires to become an engineer

while Aman is a musician (plays guitar) and a mathematician and enjoys good food, movies and cricket. Varun, apart from swimming and playing basketball, has been involved in dance and theatre since he was quite young. Udai, on the other hand, loves trekking but now spends much time volunteering at local schools and teaching science to young students. He has developed a 'Discover Science' book and kit for the same, and has documented all his experiences online on his blog.



Modified hand-cart with steering and brakes

Md. Usman Hanif Patel, class 3, MITeli English Medium School, Jalgaon, Maharashtra

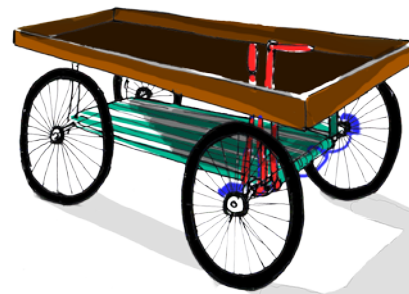
Nidhi Kumari Gupta, class 8, School dropout, Muzaffarpur, Bihar

Pavithra R, class 7, SRC Memorial Matriculation School, Erode, Tamil Nadu

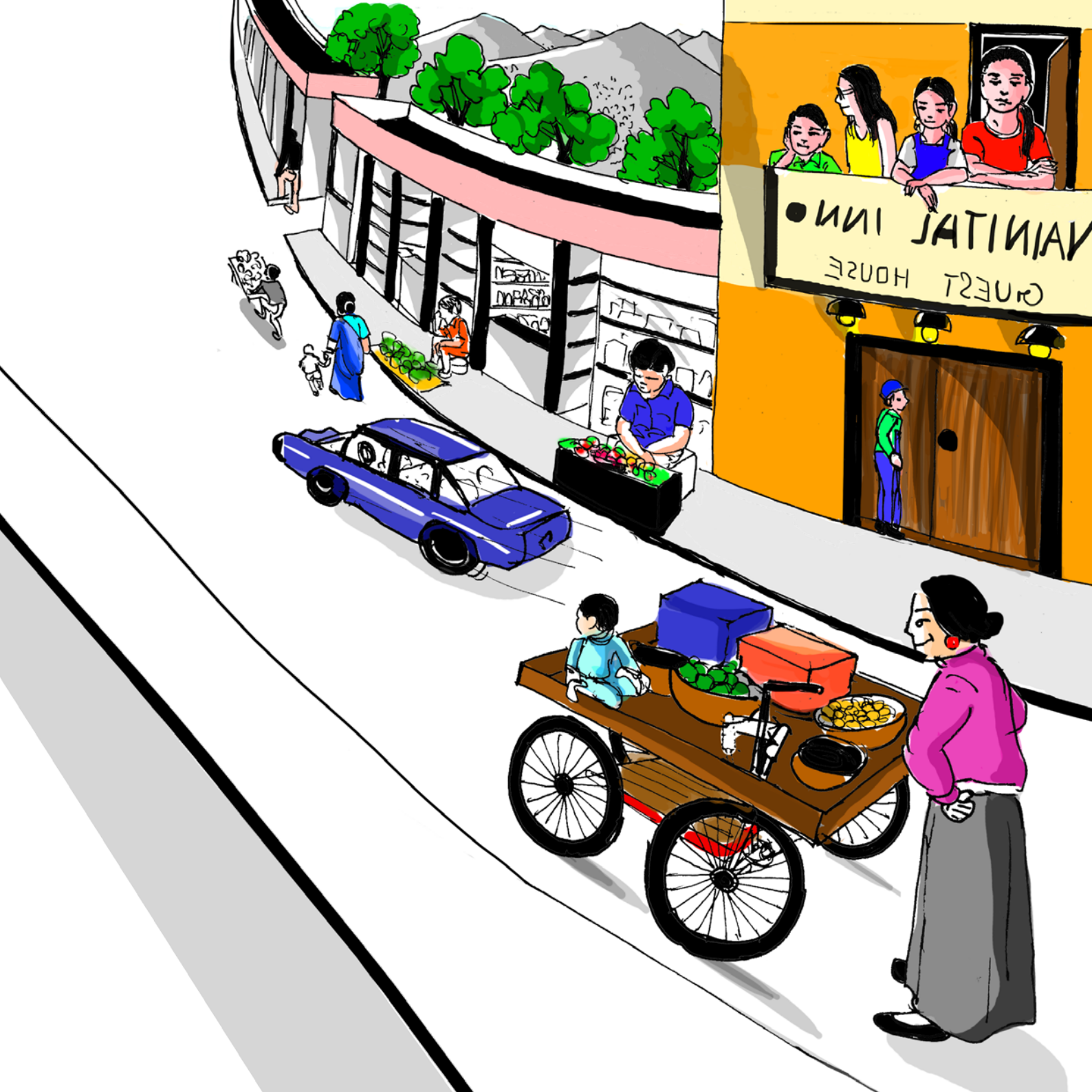
Vidya Ramesh, class 12, Greenwood High International School, Bangalore, Karnataka

The idea is to incorporate easy steering mechanism and brakes to make turning hand-carts easy and arrest slide on inclines. Young Usman saw a street vendor struggling with his hand cart while negotiating a turn on an incline, which triggering this idea. He also thought of adding a folding seat to the cart. Nidhi, a school dropout, saw her father facing problems negotiating turns while selling 'petha' (kind of sweet) on his hand cart.

Vidya suggested incorporating gears and bicycle styled steering mechanism in



hand-carts. She likes reading books, engaging herself in outdoor activities and is still looking for a challenging ambition to chase. Trained Bharatanatyam dancer, Pavithra, aspires to become a doctor and serve the society. She likes to keep abreast of all the happenings around her. She has won a number of awards in essay writing and speeches and plans to make a library of her own with more than 1000 books.



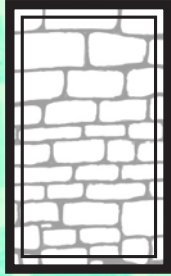


Sensor to correct body posture / regulate viewing distance

Sunvi Agarwal, class 10,
Carmel Convent School, Chandigarh

Light/touch sensors integrated in a seat. When a user bends forward or takes ergonomically bad posture, the sensors detects the motion and puts the TV on standby. Sunvi realized the need for this when she often reclined or assumed bad posture while watching television.

She loves to write- articles, stories and poems. She participates in debates, panel discussions, plays badminton and is now learning photography. She wants to take up such a job when she grows up which does not restrict her to a table and a chair; Indian armed services is one of her choices.





Automatic spike system near traffic signal

S. Siva Mahima, class 9, Kendriya Vidyalaya,
RK Puram, New Delhi

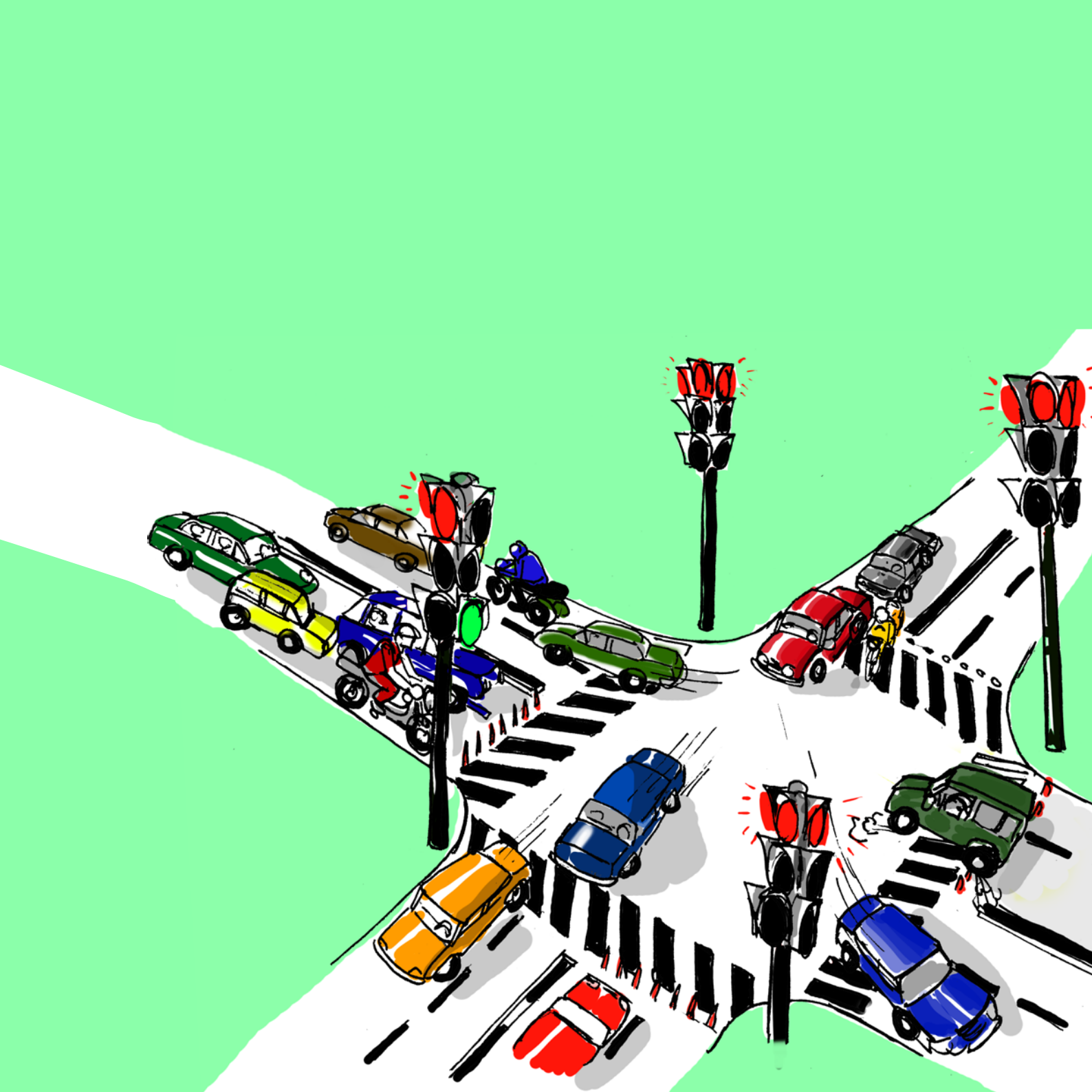
Shameet Badarla, class 11, Kendriya Vidyalaya No. 1,
Uppal, Hyderabad, Andhra Pradesh

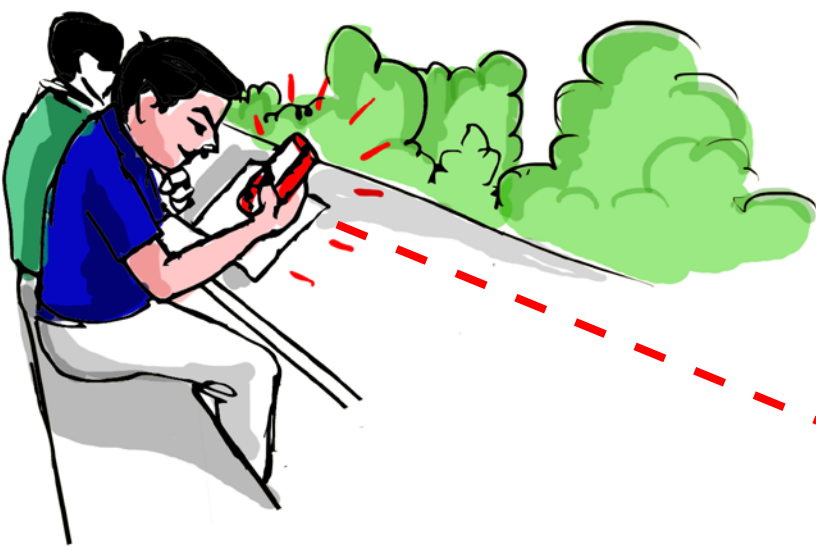
Retractable spikes before the zebra crossing that come out when the traffic signal is red to prevent signal jumping by vehicles.

Siva Mahima was quite concerned with the poor traffic sense of commuters specially when they disregard lanes, jump signals and break other traffic rules, and thus came up with this idea. She loves animals, likes reading about wildlife and wants to become a veterinary doctor. Her hobbies include singing, origami and

other craft work.

Losing a dear friend in an accident caused due to signal jumping by a truck made Shameet seriously think about this idea. He likes playing table and foot ball in his free time. With great interest in computer programming, he wants to grow up and be a robotics engineer with specialization in artificial intelligence. He would like to reduce agricultural costs and bring more benefit to the farmers.





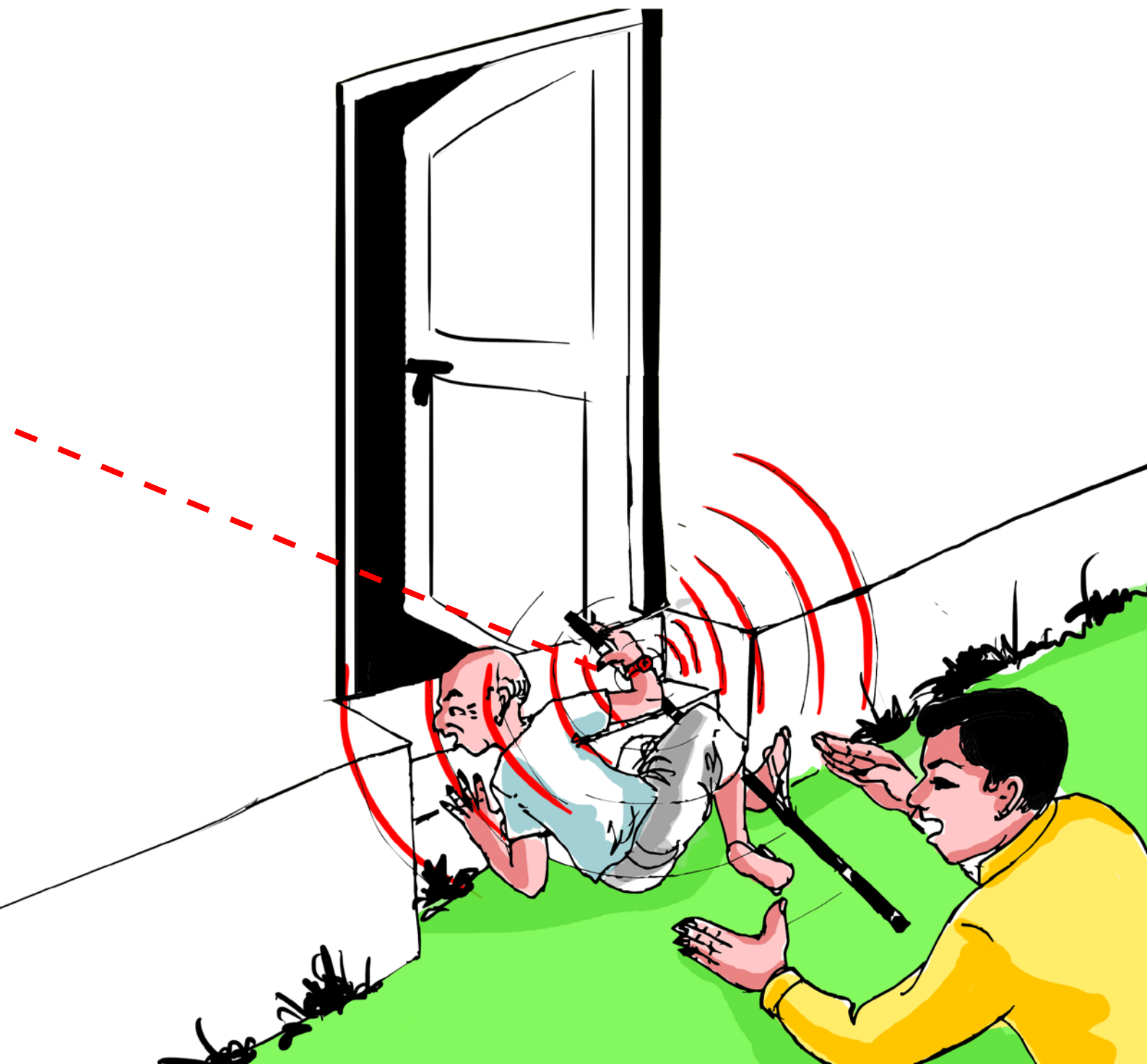
Device to indicate sudden fall or onset of convulsions / seizures

Soumya Ranjan Behera, 7, BTTS Upper Primary School, Jagatisinghpur, Odisha

A wearable device that alerts if user falls suddenly; useful for old people, and those suffering from fits, convulsions, seizures etc. This will help keep an electronic eye (if integrated with mobile) on one's loved ones to track if they were okay or not. The idea struck Soumya Ranjan when one

of his friends getting an epileptic attack and fell down. He wondered, what if she wasn't around?

He likes to play cricket and wants to become a mechanical engineer.





oh god!!
jam !!

stuck !!

terrible !

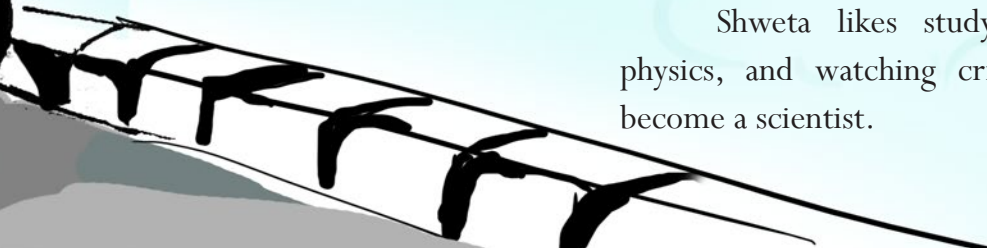


Device to cool down anger

**Shweta Sharma, class 11, Police DAV,
Jalandhar, Punjab**

A head worn device that cools down our nerves within a quick time after wearing. Believing that getting angry frequently may lead to unnecessary stress and hyper tension, Shweta has started thinking about developing a head gear, which when worn by an angry person can immediately cool him/her down.

Shweta likes studying chemistry and physics, and watching cricket and wants to become a scientist.





Keeping students fresh while reading

Mahirah Akhter and Morifat Wani, class 10, Maryam Memorial Institute, Kupwara, Jammu & Kashmir

An ink or a paper (for books), which emits certain radiations keeping reader fresh and fatigue free. Seeing her elder brother getting tired after long studying hours, Mahira thought of having such a book. She wants to become a teacher as she believes that a good teacher can reform the society.

Morifat has been a brilliant student since childhood and conceived this idea while studying Rutherford's model of atoms. She has been conducting the morning assembly of her school for many years and campaigning for environment cleanliness. She wants to become a doctor and serve the people of her village.





**There are many other
variations of these simple
innovations. Should we ignore
them....because they are simple**


simple?


Is simple always sustainable ? 



the philosophy

Honey Bee is a metaphor indicating ethical as well as professional values. Cross-cultural fertilization of ideas, innovations and initiatives to build a knowledge network is one of the fundamental tenets of the Honey Bee Network. Collaborative efforts of Honey Bee Network members during the last 14 years in carrying out the documentation of people's knowledge systems have been pursued on the basis of following principles:

- Whatever is learnt from people must be shared with them in their own language so that people to people connections can be made and they can validate our understanding of their creativity.
 - All practices/innovations must be identified by the names and addresses of the individuals/communities in order to acknowledge their contribution and pursue protection of IPRs of grassroots innovators.
 - Whatever gains are made by those who document or add value to the local knowledge, innovations or practices should be shared with the providers of knowledge and others who have contributed to value addition in a fair and equitable manner.
- 



National Innovation Foundation is pursuing the mission of making India innovative and a global leader in sustainable technologies. The idea is to build upon Honey Bee philosophy, and provide a nurturing platform to unsung heroes and heroines of our society who have solved a technological problem through their own genius without any outside help. The Department of Science and Technology of Government of India has established National Innovation Foundation in March 2000. The purpose is scouting, documenting, spawning, augmenting, adding value, protecting intellectual property rights, disseminating on commercial as well as noncommercial basis. Focus is on the contemporary unaided technological innovations as well as outstanding examples of traditional knowledge from individual and communities.

National Innovation Foundation

Jodhpur Tekra, Premchand Nagar Road

Satellite, Ahmedabad - 380 015

Gujarat, India

Ph. (079) 26732095; Fax (079) 26731903

Email : info@nifindia.org

Website : www.nifindia.org



National Innovation Foundation

mission>>

To make **India innovative** and a **global leader** in **sustainable technologies** by building up on the genius of **green grassroots technological innovators** and outstanding **traditional knowledge** experts, protecting their intellectual property rights and converting **innovations into enterprise**, be they commercial or social spheres.



National Innovation Foundation

**Jodhpur Tekra, Premchand Nagar Road,
Satellite, Ahmedabad - 380 015
Gujarat, India.**

Email: info@nifindia.org

7E's

Ethics

Excellence

Environment

Empathy

Equity

Efficiency



Education

The Voice of Grassroots Innovations





Nidhi Gupta *“Believe in yourself ! Have faith in your abilities! Without a humble but reasonable confidence in your own powers you cannot be successful or happy.” - Norman Vincent Peale*

Shibajyoti Choudhury *“We , all are the children of supreme soul , not to fight with our own brothers and sisters on earth . Let us join our hands to make a peaceful green world..”*

Rajashree Choudhury *“Our nature is in danger , need to follow green life style by each of us. Let of us come forward to make our world greener and cleaner.”*

R.Pavithra *"Even if fate will not, exertion will pay" - the wages of effort.*

Atheerth Chandran *“Work hard god never forget to support you.”*

Shameet Kumar Badarla *“Nothing is impossible.” - Lewis Mumford*

Rudra Prasad Goswami *“Life is like an icecream, enjoy before it melts.”*

Shweta Sharma *“Only those who can attempt absurd can achieve impossible”
- Albert Einstein*

Vidya Ramesh *“Don’t worry, be happy.”*

M.Tenith Adithya *“Every person has his own hazards and success.”*



Sanjay Srinivaas M.R *“Success is not final, failure is not fatal: It is the courage to continue that counts.” - Winston Churchill*

Chandramouly K Kandachar *“By always thinking unto them. I keep the subject constantly before me and wait till the first drawings open little by little into the full light” - Sir Isaac Newton*

S.Ramkishore *“Dreams mean work”*

G.Tamil Selvan *“Don't cry because it's over, smile because it happened.” - Dr. Seuss*

Mihiraan M. Singh *“The Night is Darkest just before the Dawn” - Aman Venkateswaran*

Alok Kumar Singh *“Nothing is impossible in the term of science.”*

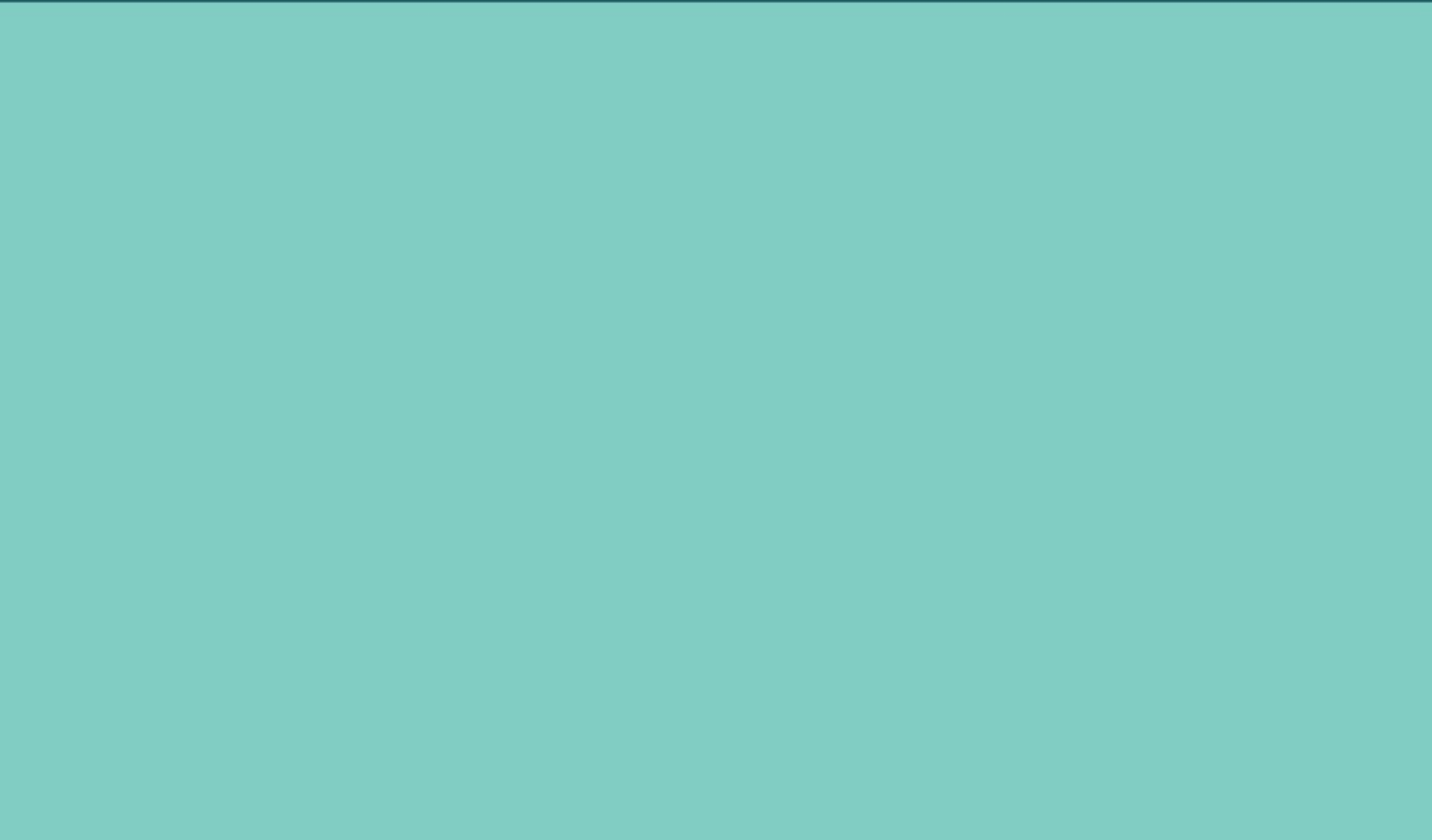
S.Siva Mahima *“Rome was not built in a day”*

Gautham Praveen. A *“Students should be multi talented like a swiss army knife.”*

Pratyush kumar Sahoo *“When you wish upon a star, Makes no difference who you are.”*

Swetleena zenith *“Be the change you would like to see in the society.” - Mahatma Gandhi*

Bikash Kumar Mallick *“Success is not something one is born with. It is something you have to strive for.”*



What is the IGNITE contest?

IGNITE is a national competition to harness the creative and innovative spirit of school children. Students are invited to send their original technological ideas and innovations for the same.

Why the IGNITE contest?

Creativity among children is almost in-born, every child is creative, degrees may vary, but not the basic manifestation. Then what happens during the growth and maturation? Why should children stop asking basic questions? Why do they agree to do repetitive science projects instead of being original? Why do they learn to live with unsolved social and professional problems? We should not allow our children to live with such problems rather urge them to come up with solutions to these. We want to promote originality, creativity and innovative spirit among our children so that when they become leaders of our society, they ensure an imaginative, inclusive and an innovative future for the country. We want our children to be more sensitive to the problems faced by not just them and their families or neighbors but also other socially disadvantaged sections of the society. The IGNITE '13 contest (September 1, 2012 to August 31, 2013) saw participation of students from 301 districts of 33 States and Union Territories of the country with 20836 entries being received. The awards were announced on October 15th, the birth day of children's favorite Dr A.P.J. Abdul Kalam, celebrated as the Children's Creativity and Innovation Day by NIF. These were given by Dr. Kalam on November 19th, 2013 at IIM Ahmedabad.



dst.gov.in



honeybee.org



gian.org



sristi.org



cbse.nic.in



ignite awardees 2013



**Phamnya
Konyak**



**Shameet
Badarla**



Pavithra R



**Bikash Kumar
Mallick**



**Siddharthanan
K**



**Shibajyoti
Choudhury**



**Masira bi
Hanif Patel**



**Md. Usman
Hanif Patel**



**Shweta
Sharma**



**Atheerth
Chandran**



K Karan Kumar



**Rajashree
Choudhury**



S. Siva Mahima



Sunvi Agarwal



Md. Alisher



**Varun
Shriram**



R Santhosh



**Kulsoom
Rizavi**



J Rajasekar



Vidya Ramesh



Nidhi Gupta



**Khushwant
Rai**



**Mahirah
Akhter**



**Nidhi
kumari
Gupta**



S R Valava



**Swetleena
Zenith**



**Rudra Prasad
Goswami**



**Mihiraan
Singh**



Morifat Wani



**Pratyush
Kumar Sahoo**



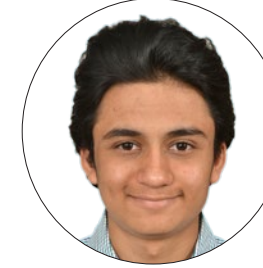
Adithya



**Aman
Venkateshwaran**



**Gautham
Praveen A**



**Chandramouly
K Kandachar**



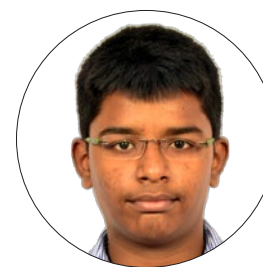
K Rathna



Santokh Singh



Alok Singh



Tamil Selvan



A Nivashini



**Sanjay
Srinivas**



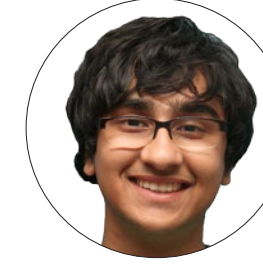
**S
Ramakishore**



**Tarun
Anand**



**Soumya Ranjan
Behera**



Udai Singh