

Let your imagination run free......





Unleash your creative potential.....

Can you run a washing machine without electricity... ...and exercise at the same time too???





Can you cycle in water..???

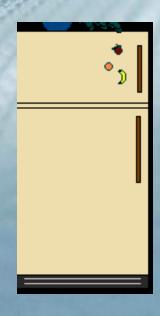


Can you climb a coconut tree....???



Can you make a robot....???

Can you make a fridge that doesn't need electricity?



Can you ...??

Can you ...??



Can you ...??

Can you ...??

Most of the children or grown-ups you would be seeing in this presentation are from villages or small towns.

They did not have a chance to get formal education like you.

They faced some problems and started thinking... "What can I do to solve this?"

They were determined to find a solution.

Some got support, some got encouragement.

Many faced opposition and ridicule.

Yet they persevered and through their own efforts they came out with a solution.

This is a presentation about such people who were not bound by their own limitations.....



National Innovation Foundation

Making India Innovative

Ahmedabad Gujarat, India

Celebrates.....



Children's Creativity



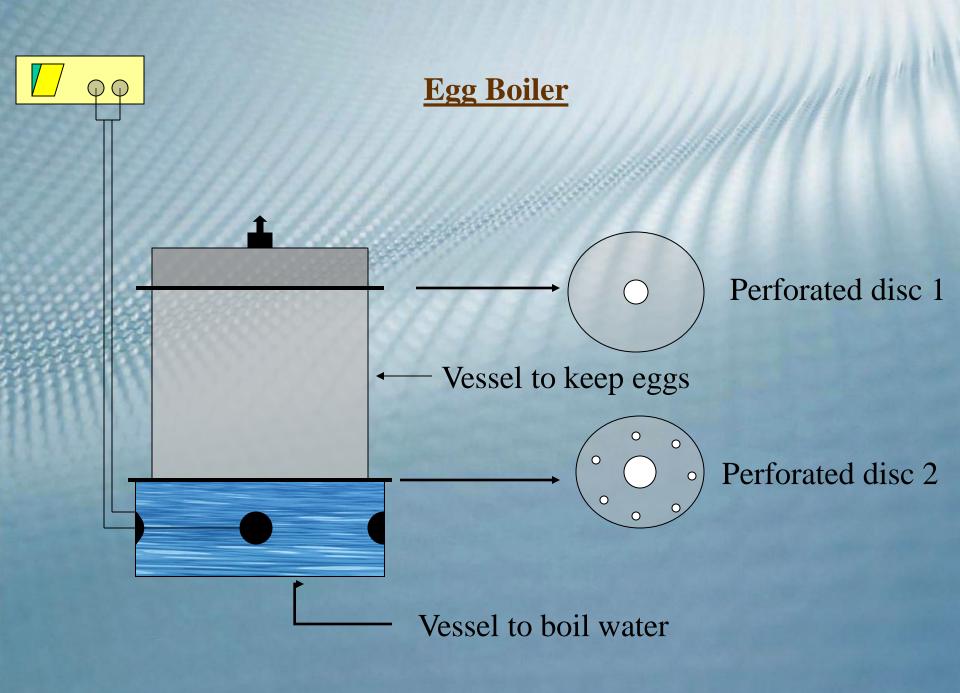
Student's Innovations

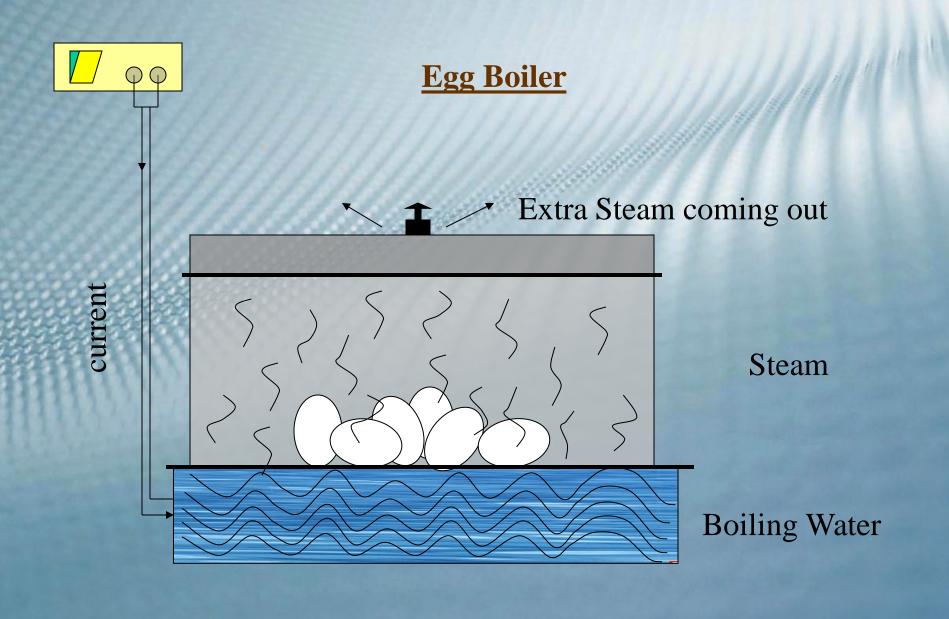
Student Award, First Competition (2001) Pradeep Mandal Egg Boiler

Bihar



- Take two vessels, keep one on top of the other
- The upper one contains eggs and has holes on its bottom
- Lower one contains water
- Water is heated, it evaporates and reaches the top vessel through the holes
- Since steam is hotter than boiling water, the eggs boil quickly
- Saves fuel, time & labour





You live on the 10th floor of an apartment or in a big house

You are waiting for an urgent letter.....

How would you come to know if there is a letter in your letter box???

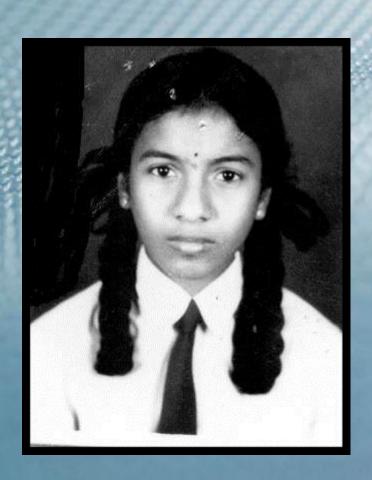
Any ideas ?

Well.....Swetha and Uttalika thought about it.....

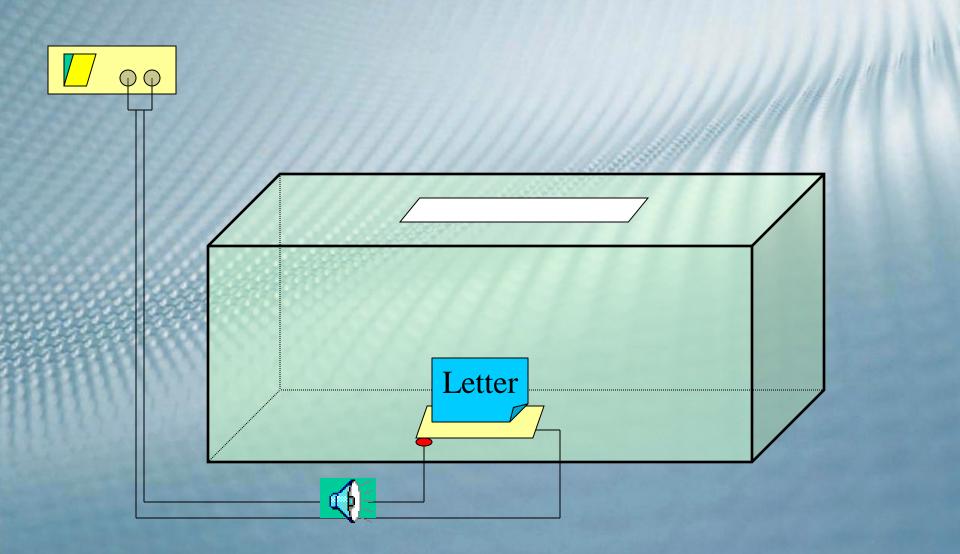
Student Award, Second Competition (2002)

Swetha B. Andhra Pradesh

Post-Box Alarm (Idea)



- It is a small box with a flap inside on the base
- Flap is connected to an alarm
- When letter is dropped, it falls on the flap and pushes it down, completing the circuit and triggering the alarm
- This is useful in large farms, big houses or apartments



Post Box Alarm

Student Award, Fourth Competition (2007)

Utkalika Patnaik

Post-Box Alarm

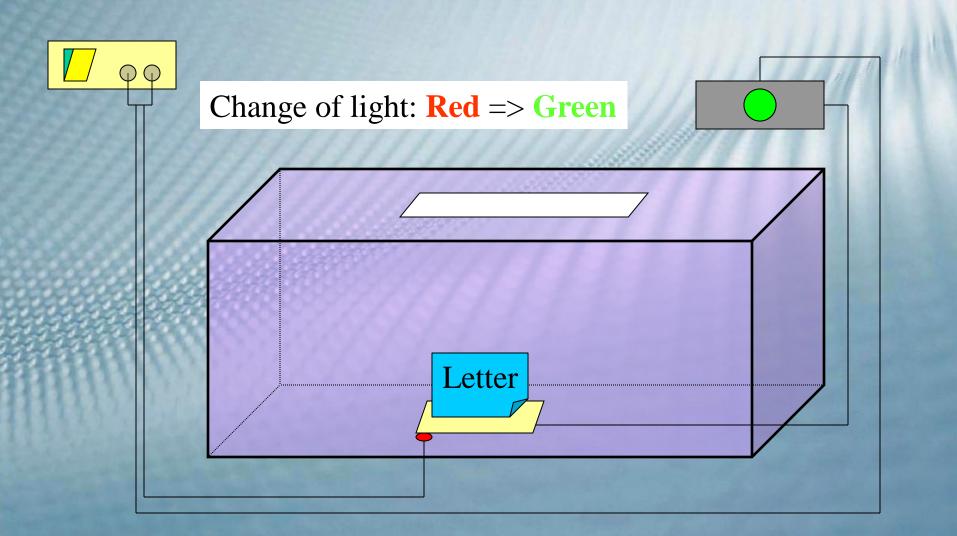
(Idea)

Orissa





- It is a small box with a flap inside on the base
- Flap is connected to a light bulb
- When there is no letter in the box the bulb glows in red colour
- When letter is dropped, it falls on the flap and pushes it down, completing the circuit and green bulb starts to glow



Dharmendra made seed scattering device to help his family and friends in agriculture.....

He was 13 years old then.....

Student Award, Second Competition (2002)

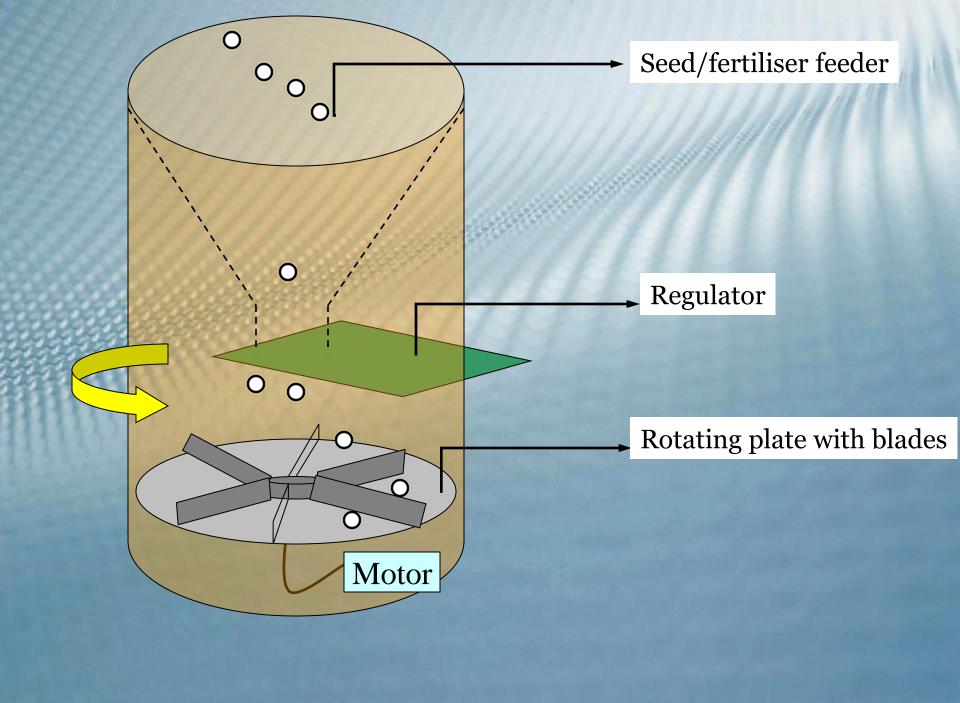
Dharmendra Patidar

Seed Scatterer

Madhya Pradesh



- Small device used to scatter seeds uniformly in the fields
- Consists of a hollow cylinder
- A rotor with metal blades is fitted into it. It runs on a 6V battery
- Seeds are put in from the top, a regulator controls the seed flow The seeds fall on the rotating blades and get scattered



Innovation Video follows for Seed Scatterer



National Award Video follows for Seed Scatterer





Can electricity be generated while we walk

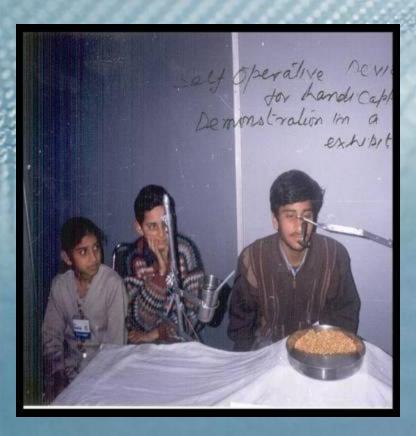
?????????

Student Award, Second Competition (2002)

Sunil Kumar, Pankaj Sharma, Pooja Sharma

Dynamic Shoes (Idea)

Himachal Pradesh



- The purpose is to tap energy produced at every step while walking
- Base of the shoe can have a small switch attached to a dynamo which would charge a battery
- This battery can then be used to run / recharge small gadgets like mobiles, radios, etc.

Innovation Video follows for Dynamic Shoes

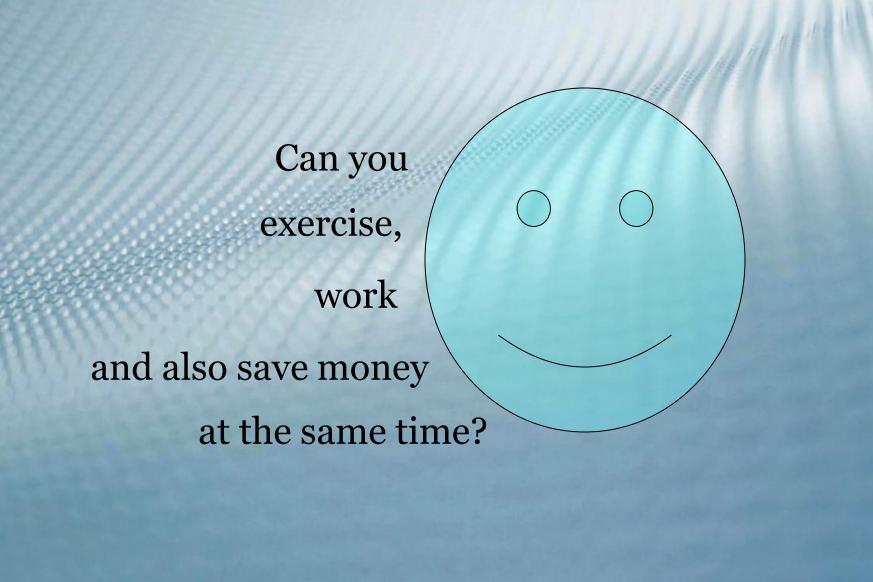
Dynamic Shoes

Electricity Generation while walking



National Award Video follows for Dynamic Shoes





Student Award, Third Competition (2005)

Remya Jose Kerala

Washing cum Exercising Machine



- It is a pedal driven machine having a a rotatory drum
- The clothes are kept in the drum, pedalling rotates the drum and clothes get washed
- Cycling provides the exercising and washing is also done



Rotatory drum

Pedal

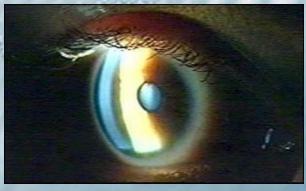


Discovery Channel Video follows for Exercising cum Washing Machine

National Award Video follows for Exercising cum Washing Machine

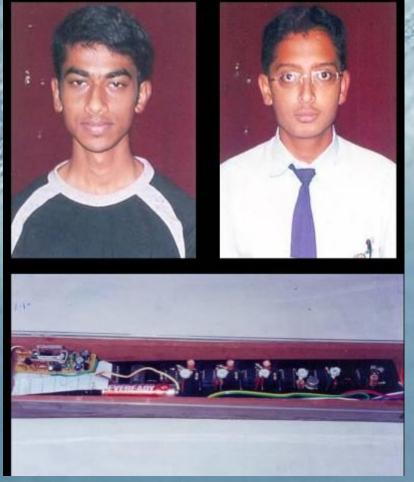


India has the largest number of blind persons in the world?



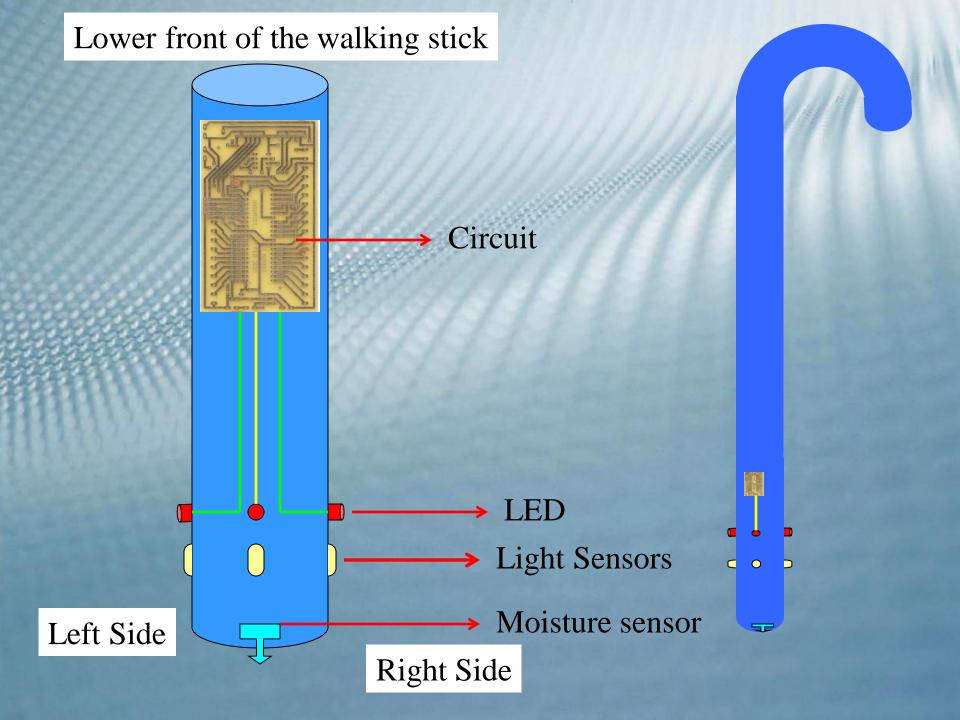
Did you ever pause and think about them....?

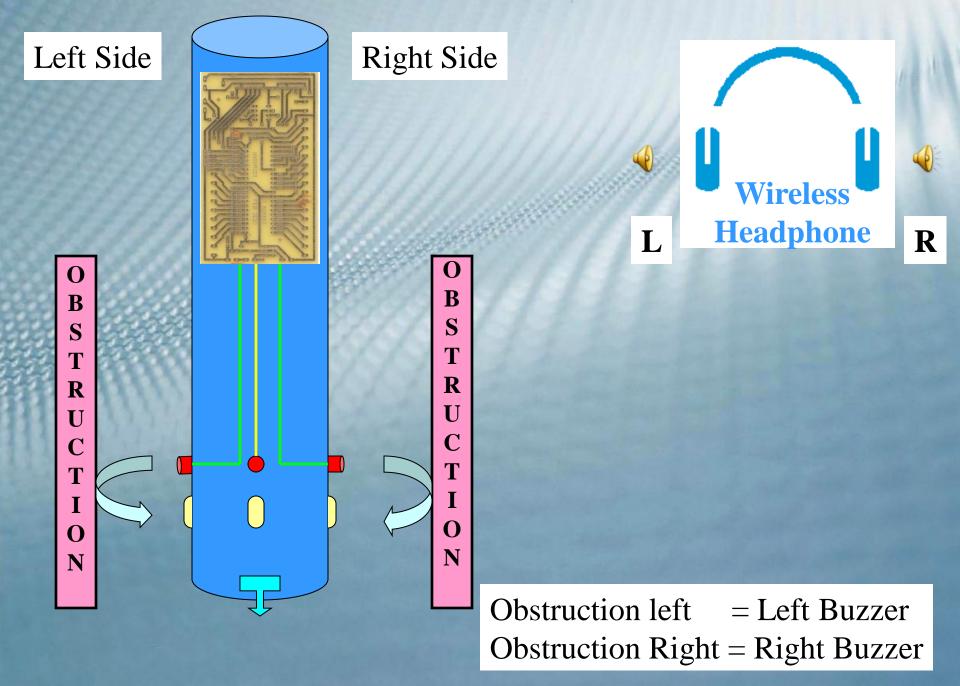
Sanket & Prashant Karnataka

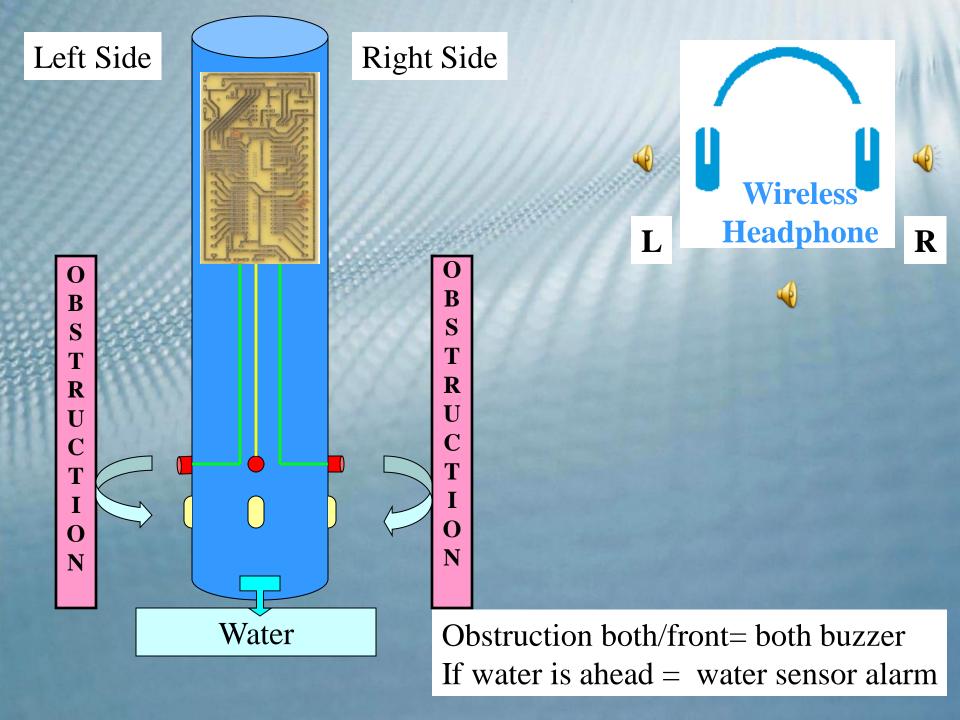


Modified stick for visually challenged

- It has infra red Light Emitting Diodes (LEDs), infra red sensors, moisture sensors and a wireless headphone
- Infra red light from the stick is reflected back on the sensors from any obstruction and the alarm is sounded
- If the obstruction is on the left, alarm is sounded in left headphone speaker and similarly for the right side
- Both alarms go off if the obstruction is in the front
- Alarm also goes off if there is water on the road







Award Video follows for Modified Stick for the Visually Challenged



They were moved by the problems that....

..older people faced....

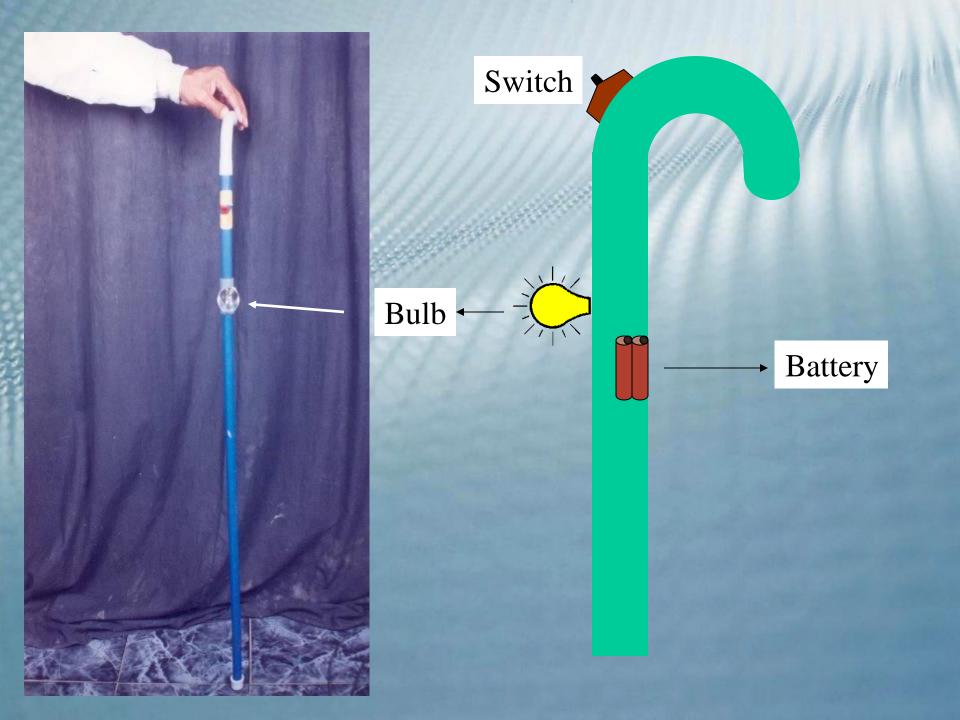
They came out with their solutions.....

Gopal Suresh Patil Maharashtra

Walking Stick for the Aged



- To a normal walking stick, a light bulb (torch), a switch and batteries were added
- This made it easier for the elderly to move around in the night.



Award Video follows for Modified stick for the aged



Student Award, Fourth Competition (2007)

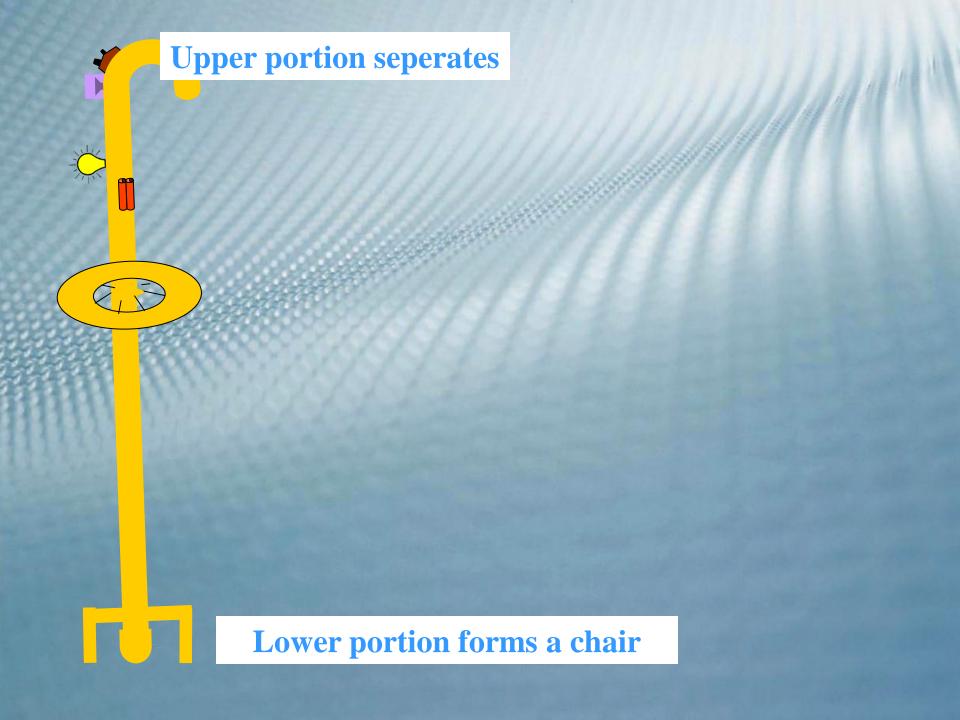
Rakesh Patra Orissa

Multipurpose Walking Stick (Idea)

The student has added torch, folding seat, horn, light to a simple walking stick







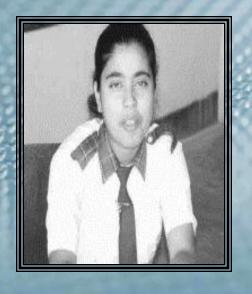


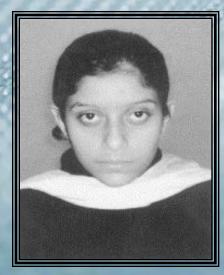
menace

Leena & Sushanta thought about it.....



Leena & Sushanta Assam





Herbal Mosquito Repellent

- Prepared Mosquito repellent from locally available herbs and made agarbattis from it
- These Agarbattis burn for 4-5 hours and their effect remains for 3 more hours keeping the mosquitoes away







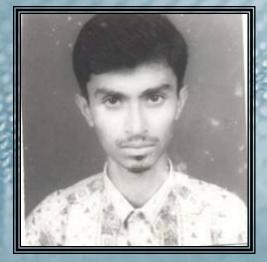
• Safe, Eco-friendly, easy to use and cheap

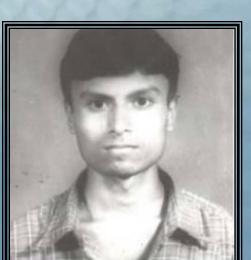
Award Video follows for Herbal Mosquito Repellent



Trilokiya & Champak

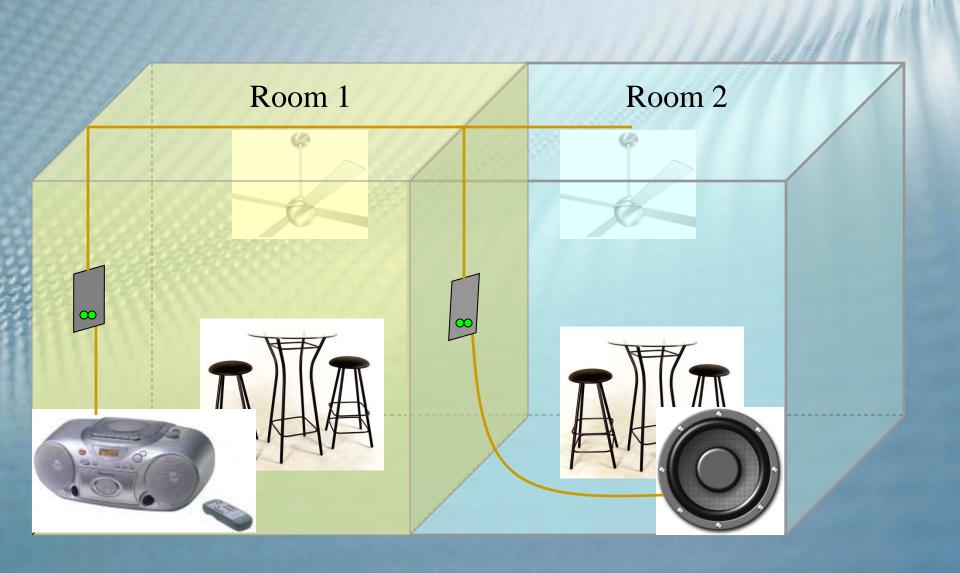
Assam





Music through Electric Wires

- Used neutral and earth wire of existing electric wiring in the house to transmit music from one room to another
- Music player can be kept in one room while speakers can be put in separate room and music can be heard



Innovation Video follows for 'Transmission of music through electric wires'



National Award Video follows for 'Transmission of music through electric wires'



Kalpita Patil Maharashtra



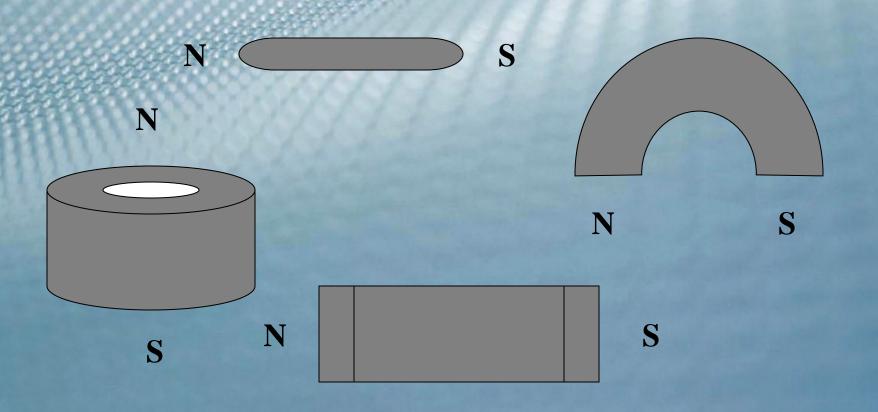
Magnetic Shock Absorbers

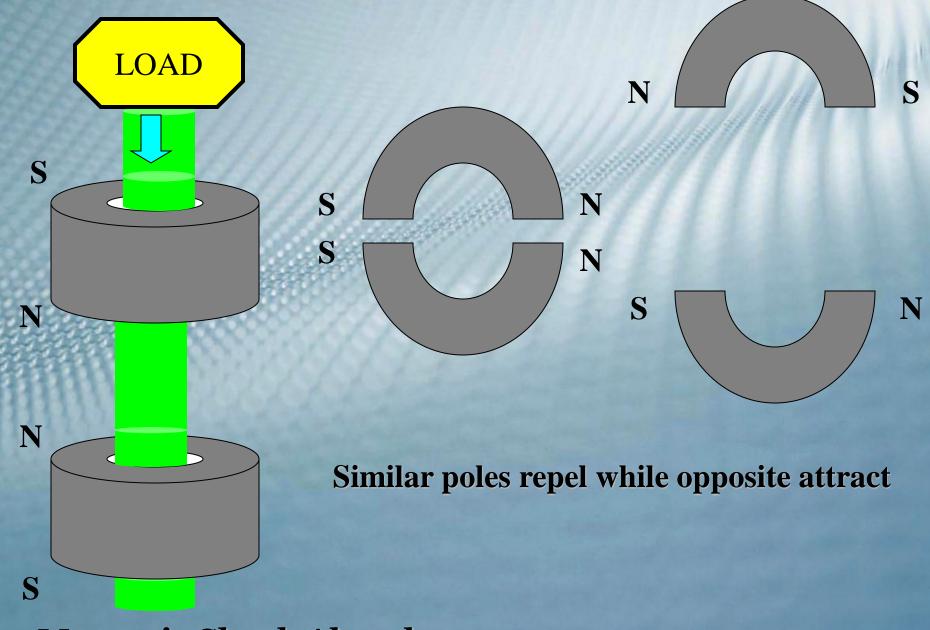
- Uses the magnet to act as cushions or shock absorbers
- Based on the principle that like poles repel each other while unlike ones attract
- Can be used in automobiles
- Reduces the maintenance cost



Magnets

Whatever the shape, whatever the size, a magnet always has two Poles, NORTH (N) and SOUTH (S)





Magnetic Shock Absorbers

Innovation Video follows for 'Magnetic shock Absorbers'

Miss Kalpita Prakash Patil

Megnetic Shock Absorber

National Award Video follows for 'Magnetic shock Absorbers'





Student Award, Second Competition (2002)

Amrita Gupta

Uttar Pradesh





It has a wooden frame and its walls are made up of blankets and hemp fibers

The principle on which it works is similar to the one in air coolers

Water kept on top of the fridge in a container slowly drips down on the side and back walls of the fridge due to capillary action

When it evaporates, the temperature gets reduced and food gets cooler by around 6-8°C

It is economical, eco-friendly and runs without electricity



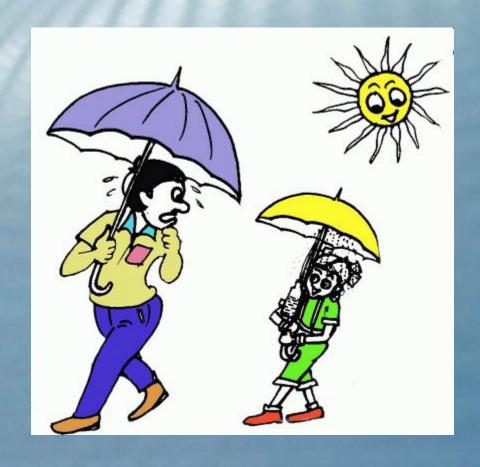
Supriya Chotrey Orissa

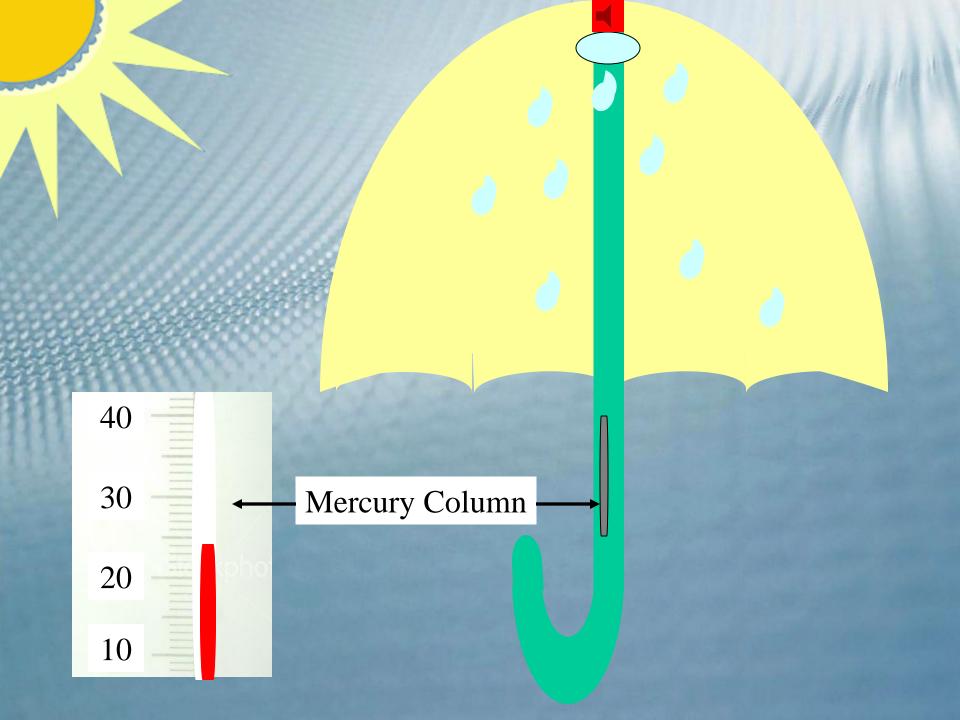




The umbrella has a mercury column attached to its handle. When the temperature goes beyond 37 degrees centigrade, the mercury level rises and triggers off an alarm attached in the umbrella. Once the alarm is heard, the user can spray water from a bottle, which is also attached to the handle of the umbrella.

Heat Resistant Umbrella (Idea)

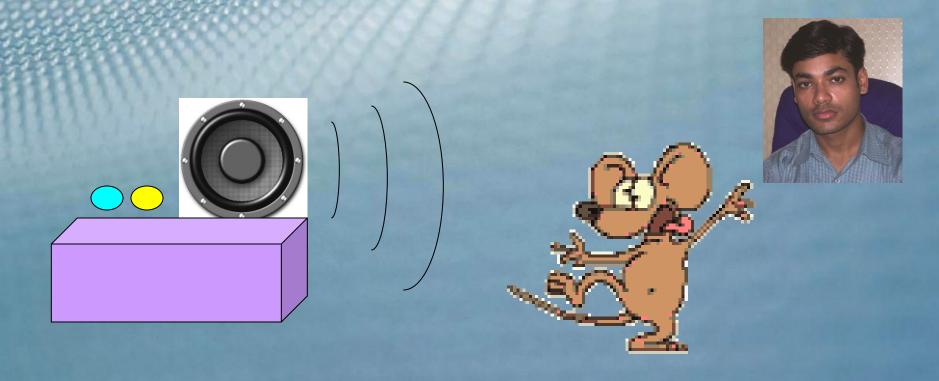




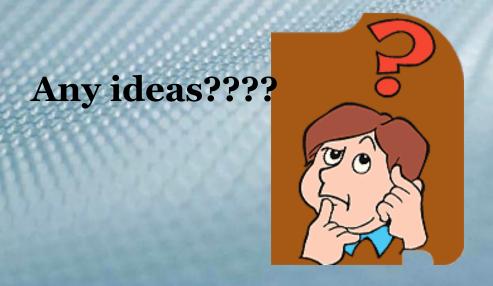
Nitin Kumar Tyagi Uttar Pradesh

Rat protection Device

Device consists of a circuit and a buzzer which emits ultrasonic waves (which we cannot hear) in the range of 20-37 Hz which irritates rats and they run away.



What can you do with sewage and dirty water????



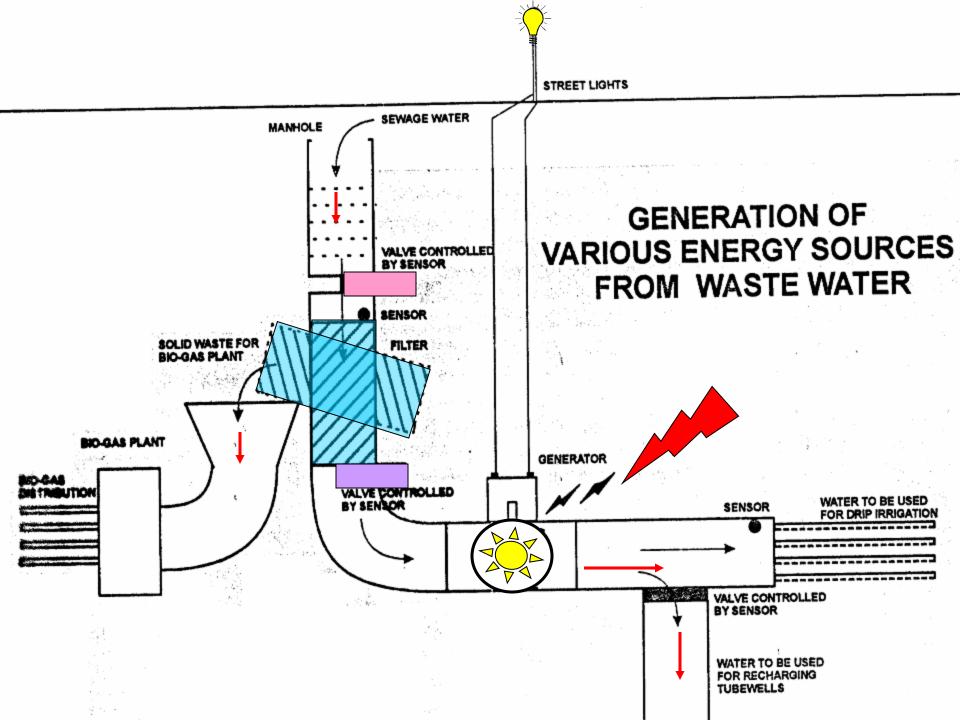
This is what little Moxad thought.....

Moxad Thaker Gujarat

Generating electricity through waste water

- Has developed a model to utilize waste water of sewage to produce electricity to light street lamps
- Sewage can be recycled to produce bio gas
- Some water can be used to recharge the ground water
- Rest of it can be used for drip irrigation





Video follows for 'Electricity Generation through Sewage'



Raj Kumar Soni Madhya Pradesh

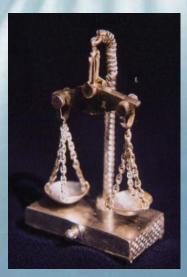
Micro Balance

He has prepared the smallest size of balance used for weighing silver and gold

The size is 24 mm (width) by 38.1 mm (height). Its weight is 8.2 grams

The balance has been prepared from silver

The weighing balance can be used for weighing precious stones between 20-2000 m





He is the youngest person in the world to develop a micro balance and is set to enter Limca Books of Records 2007

Ojasvi Goel Delhi

Rain Water Harvesting Umbrella



An umbrella that protects from rain and at the same time collects water and makes it available for drinking in a bottle.



Vishan Popat Vadodara

Side window wiper for cars



Single Push Pizza Cutter



Ullas Keshav, Poornesh A S, Amogh M Hooli, Vignesh D Nernekar, Akshay Tulasigeri Dakshina, Kannada

LPG Exhausting Indicator

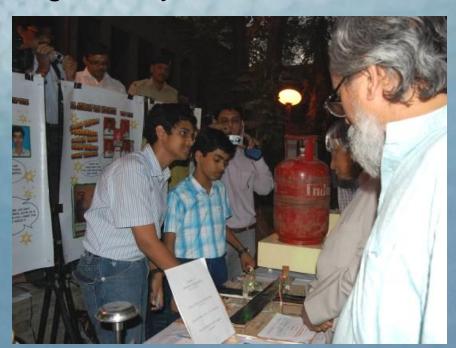
An electronic device that informs the user that the LPG in the gas cylinder is going to exhaust. When the weight of the cylinder decreases beyond a certain fixed weight, the signal gets activated.



Girish S & Ashwin Nagarajan Chennai Automated traffic signal system

The traffic signal is based on the traffic volume rather than only on time interval like we generally have.









G. Sathish Kumar Tamil Nadu

Automatic Tariff Indicator in Electricity Meter

The product idea recommends having the electric meter display of "power consumption in terms of money" (Rs) rather than power units (Kilowatt Hour), and having a "prepaid system" of paying for power units. This way, at any point in the month, the balance amount shown will influence the future consumption or repurchase of more units as needed.

This unique scheme of things has many benefits. Firstly, since the meter reading for electricity consumption is in terms of money, anyone can understand and plan for future months and usage patterns.

Secondly, for the power company, collection of power tariff by deploying the prepaid SIM card style functionality is easier. It allows the ability to cut off power supply based on balance amount in SIM card and restoration of electric supply after the SIM card is renewed.





Sanjay Karmakar Jharkhand

Fishing Rod with siren and light

Many times while waiting for the fish to be trapped, the mind gets diverted and one misses the fish. This fishing rod has a siren and a light to intimate that the bait has been bitten by the fish.



Adarsh B & Suresh Kerala

Adarsh and Suresh noticed that the bathrooms remain perpetually dirty because the users don't flush water after using the toilet. This happen sometimes unknowingly or unwillingly due to users being in a hurry. Sometimes it is also because of the reason that regular cleaning is not done properly. The system developed by Adarsh and Suresh can clean the urinal system automatically after use. It also wipes the surface with brushes incorporated in the system. Thus the device cleans the public bathrooms automatically and without involvement of much labour.

Automatic Urinal Cleaner



Video

Communication board for the deaf and the dumb

Kundan Kumar Bihar







In his class there were two students who were deaf and deaf and who could communicate easily with each other while Kundan and his friends d problems communicating with them and understanding them. This made him think of options that will enable them to communicate easily with other people or an audience. That's how he came up with this idea.

This is a board that has alphabets, numbers and commonly used words written on it. The user has a torch, which he/she illuminates behind the word/alphabet or the number, highlighting the same and enabling the person (s) viewing the board to see what exactly is being communicated.

Low cost overhead projector

Nirja & Heny, Ahmedabad, Gujarat











The girls are students of class nine and have made a low cost over head projector using wooden frame, glass sheet, hands lens, mirror and a white bulb. Transparent glass is used in place of the plastic transparencies.

The cost of the entire apparatus is around 200 Rs and can be easily replicated anywhere and is specially useful for rural schools where there is a need for such an apparatus as an educational aid while there are no funds to buy it.

Beam balance for blinds

Hemayan AK & Sruthi ME, Vishnu Ramachandran & Sanjay Menon

Kerala

For taking part in a science exhibition held in their school, the students developed a beam balance for blinds. In this balance a semi-circular plastic tube containing some mercury is attached to the balance. Due to the difference in the weight, tilting of the balance to either side results in the movement of mercury column to that side. If the weight becomes equal on both the side of the balance, the mercury column comes in the center.

This results in the completion of the circuit facilitated by a nail pin and an alarm is rung. Likewise, movement of mercury column to either sides of the balance also results in alarms via completion of circuit facilitated by the nail pins attached to the circular tube at different position on the tube.





Automatic cobweb cleaner

Ankush Kumar, Dhanbad, Jharkhand

It is a home appliance to clean cobwebs automatically. One needs to hold it in proper position, it wraps up the cobweb. It consists of a small dc motor, a small rod, a light emitting diode (LED) and a long plastic pipe. Cost of the device is nearly Rs. 50/-



Video



Auto stopper for LPG gas stove

Davalasaba Mahamadgows Ladamma, Dharwad, Karnataka.

Imagine your mother or father is alone at home and is away in the garden watering the plants. She has kept a dish in the pressure cooker on the gas requiring one whistle. But the whistle sound does not reach the garden. The dish gets over cooked and the gas is being burnt unnecessarily. To solve these problems, Davalsab, 16, a young student has come up with an auto stopper, which senses the whistles and at preset numbers, gives an alarm and turns off the knob of the gas-stove. This machine is thus able to count and display the number of whistles a pressure cooker has made. NIF is working on the technology to help refine it further and optimize it to assist the creative and concerned student. NIF has also filed a patent for the technology in the student's name.







V Atchara, Nellore K Preethi, Chennai

Ignite Award, 2007

Low cost respirometer





This simple device made by the young girls can measure the residual volume, tidal volume and peak volume of lungs during respiration. It can also help anybody to monitor their breathing during rest, after exercise, during yoga and also while sleep. This device can be up graded by using an analog to digital converter and storing the data in a computer. The two girls won the first prize in IGNITE 07- the national competition for students' ideas and innovation in 2007. NIF has also filed a patent for the same.



Digging tool for archaeologists
K Samhith

Generally archeologists, on site, work with brushes to gently remove the soil over the embedded artifacts or fossils to unearth them without damage. This process is time consuming and involves a lot of hard work. Samhith, a young student, has developed battery operated machine with a motor to mechanise this process. The power of the motor, which rotates a brush, is just sufficient enough to clean the soil gently. Using this device, a person only has to maneuver the brush around the embedded arefact/fossil and increase the output.

Secunderabad





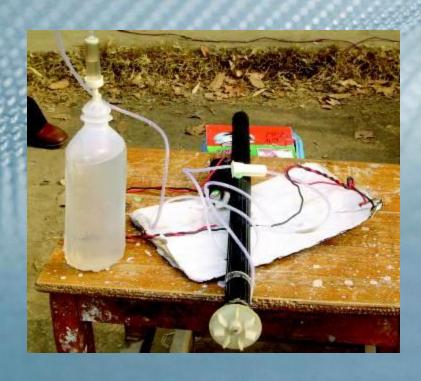
Rural Refrigerator Tehrim Qaiser Umar Ali Anantanag



The rural refrigerator developed by two children works on the principle of evaporation. There is an outer steel jacket having pores in the upper half. There is a main storage compartment made of copper and another inner compartment which acts as a cooler. The exterior of the storage compartment and interior of the inner compartment are covered with cotton lining. The outermost jacket and innermost jacket are filled with water which takes away the heat from storage compartment.



Solar Sprayer Showkat Ahmad Peer Anantnag



Made by a young student, this solar prayer consists of a small water tank and a connecting rod through which water is moved to the nozzle. The student has also incorporated a mechanism to track the amount of flow of pesticide used in the sprayer. Though the innovation's working mechanism is well known but the novelty lies in retrofitting the known things for application at low cost. The basic working principle of the machine is same as that of Knapsack Sprayers. This sprayer is also being incubated at GIAN J&K.

Multipurpose crutch for the physically challenged

Rakesh Patra Nayagarh

Rakesh, a student of class Xth, felt concerned about the plight of physically challenged people. He has made a wooden crutch, which is equipped with a foldable seat, a head light, an alarm, and even a place to put an umbrella. This multipurpose crutch provides convenience and comfort to handicapped people. This innovation reduces the drudgery involved in walking long distances using a crutch without making a halt. One can stop whenever one feels like taking a little rest. One does not have to sit on the ground from where getting up without external help is not easy. He won an award in NIF's Fourth National Competition for Grassroots Innovation and Traditional Knowledge in 2007 in students' category.





An umbrella that rains and cools!!

Supriya Chotrey Khurda

Supriya Chotrey was inspired to make an umbrella with a water spraying arrangement during an extreme heat wave that struck Orissa in 2003. She consulted her science teacher and successfully built a unique umbrella with a water sprayer, a thermometer and a siren attached to the handle of the umbrella. The umbrella has an upper layer of white cloth, and a lower layer of black cloth. In between these two lies a layer of sponge. A water spraying bottle is attached to the handle of the umbrella. When the ambient temperature rises above 35° C, the built-in thermometer signals the umbrella to sprinkle water from the attached spraying bottle. It saturates the sponge below the top. Once the umbrella gets wet, one gets cool air. She won an award in NIF's Fourth National Competition for Grassroots Innovation and Traditional Knowledge in 2007 in students' category (Also see: Honey Bee, 16(3): 8-10, 2005).





Electronic picture tube charger for getting clearer images & rat capturing machine

Meraj Ahmad Bihar

This is a charger for recovering the damaged tube (discharged tube) of B&W TV, which gives poor picture quality, defocussed pictures and poor roster. The charging device consists of a transformer, a two-way switch, a one-way switch, a push switch, CRT base and a bulb.

Meraj has developed another machine, which captures the rat. It not only captures but also produces sound after capturing. It is an electronic machine which works on 6V battery. The outer body of machine is made up of wooden block having cuboids shape. In this machine, there is an entry door through which a rat enters inside the box (machine). Inside the box, there is an iron plate in a last corner which is connected with a circuit through a switch. When a piece of bread is kept beneath the plate then circuit becomes disconnected and when rat pulls the bread then iron plate falls on switch and circuit get completed.







Abdul Kaleem, Uttar Pradesh

Automatic watering system for flower pots: The device stitches on / off the water pump automatically based on feedback of moisture sensor.



Ceramic pot with heating element: It can be used to burn slowly, small mosquito coil fragments/tablets, dry *neem* leaves, *havan samagri* of the Hindus or even *lohban* used by Muslims. After burning, the ash and the residue can be easily disposed by inverting the pot. The whole process, thus, remains very clean.



Davalsab Mahamadgows
Dharwad

Auto stopper for LPG gas stove

Imagine your mother or father is alone at home and is away in the garden watering the plants. She has kept a dish in the pressure cooker on the gas requiring one whistle. But the whistle sound does not reach the garden. The dish gets over cooked and the gas is being burnt unnecessarily. To solve these problems, Davalsab, 16, a young student has come up with an auto stopper, which senses the whistles and at preset numbers, gives an alarm and turns off the knob of the gas-stove. This machine is thus able to count and display the number of whistles a pressure cooker has made.

NIF is working on the technology to help refine it further and optimize it to assist the creative and concerned student. NIF has also filed a patent for the technology in the student's name.





Wastewater treatment using hair, bird feather, saw dust and straw

Nikhilesh Das & Debanjan Mukharjee Assam





During school project, they experimented over waste water treatment using human hair, birds feather, sawdust and straw (last two were suggested by teacher).

Use of each ingredient is known in art individually. However, combination seems novel. It absorbs oil as well as other substances.





Ankush Kumar Dhanbad

Student Award, Fifth Competition Cob-web cleaner & Pocket alarm

Cob-web cleaner

How many times we frown at the irritating sight of the cob webs in the corners of our rooms, which refuse to go away completely with the traditional cleaners. A possible solution comes from a young boy, who has developed a battery operated cob web cleaner, which rotates the head to clean away the last strand of a cob web.

Beware Pick Pocket: an alarm/light to alert

A simple circuit that will make a siren to go off once some one tries to take away something from your pocket. And if you miss the alarm, a light will blink in your goggles. Another idea from the young mind!





Modified silencer

Bhagwan Singh has modified the silencer of the two-wheeler. Part of the exhaust gas is used to pre-heat the intake air leading to increased combustion efficiency of the engine, which ultimately leads to increase in mileage in the range of 25 to 30 per cent and reduction in the noise of the vehicle. NIF facilitated the testing of his silencer at BITS, Mesra, Ranchi, which corroborated the claims of the innovator. NIF also filed a patent in the name of the innovator for this technology.

He has developed many other items like battery operated bicycle, a multi-purpose harvester, multi-purpose jogging machine, amongst others.

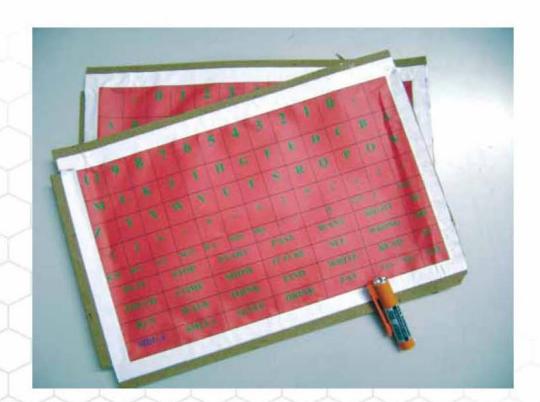


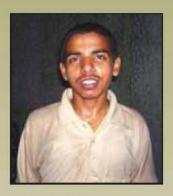


Bhagwan Singh Vishwakarma Bhopal

Communication board for the deaf and the dumb

This thoughtful effort from a student enables deaf and dumb people to communicate with others as well as among themselves easily. This is a board that has alphabets, numbers and commonly used words written on it. The user has a torch, which is used to illuminate the specific word, alphabet or number such that the person viewing the board can understand the meaning.





Kundan Kumar Patna

Student Idea: Innovative study table





Manibhushan Prasad Dhanbad, Jharkhand

Manibhushan is a young student. Facing problems studying in the night due to erratic electric supply, he has thought of developing a study table where the user can generate electricity at the same time along with the studies. He also wishes to incorporate a system wherein the light bulb will only glow till the time a book is on the table. NIF has supported him for the development of the prototype.

Student Award, Fifth Competition

Student Idea: Automatic bathroom cleaner





Adarsh B and Suresh Calicut, Kerala

Adarsh and Suresh noticed that the public bathrooms remain perpetually dirty because the users don't flush water after using the toilet. Sometimes it is also because of the reason that regular cleaning is not done properly. The idea of the system developed by Adarsh and Suresh can clean the urinal system automatically after use. It also wipes the surface with brushes incorporated in the system. Thus the device cleans the public lavatories automatically and without the involvement of much labour.

Once more students start engaging with the issue of hygiene and sanitation; will not India and the whole world become much cleaner than they are today?

NIF has filed a patent (2764/CHE/2007) for the technology in the innovators' name.

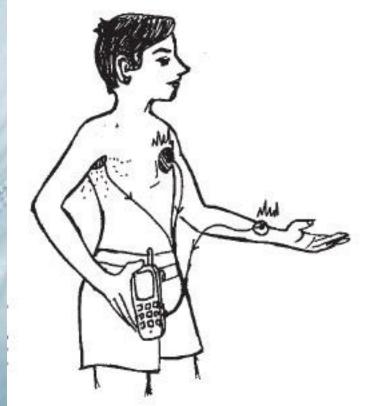








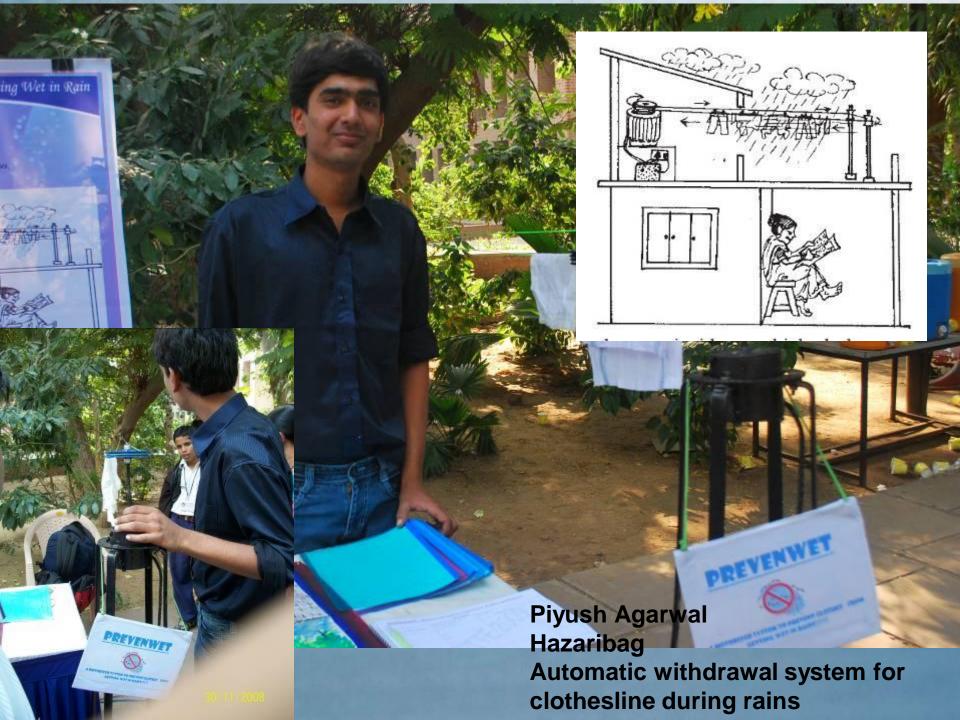




Sarojini Mahajan
Delhi
Charging mobile
through human
pulse: Idea



Prakhar Parashar Hoshangabad Increasing life of mosquito coil by almost 20%





Masha Nazeem Kanyakumari Flameless Seal Maker



I want to integrate the gait of a person with a mobile. As walking style difference person to person, the software will be able to identify the signals based on the body movements while we g.

If the mobile will sense a different movement once act ted, it will lock itself and send a message about its locatio o a predefined number. The system will also have a paster option so that in cases of emergency, the original user can unlock it.

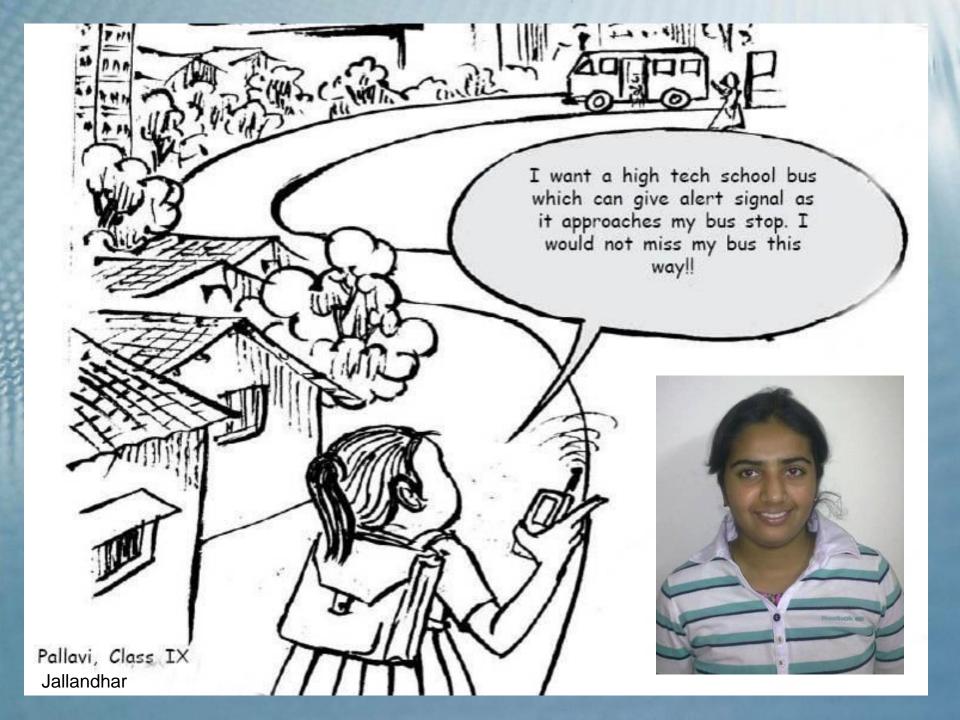
Anurag Rathore, class IX

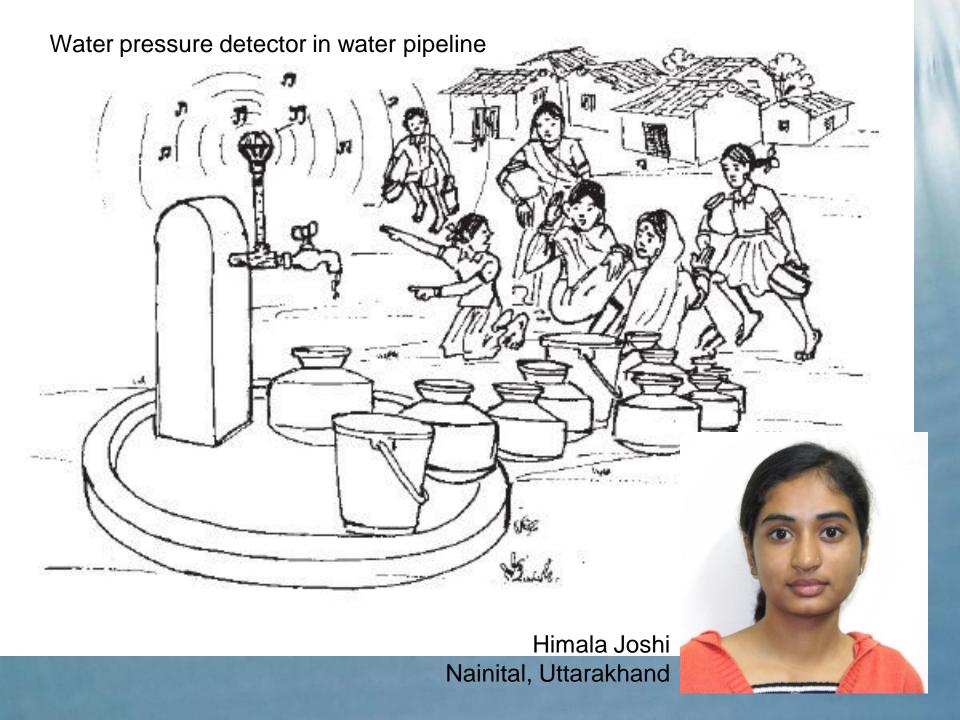
Jallandhar

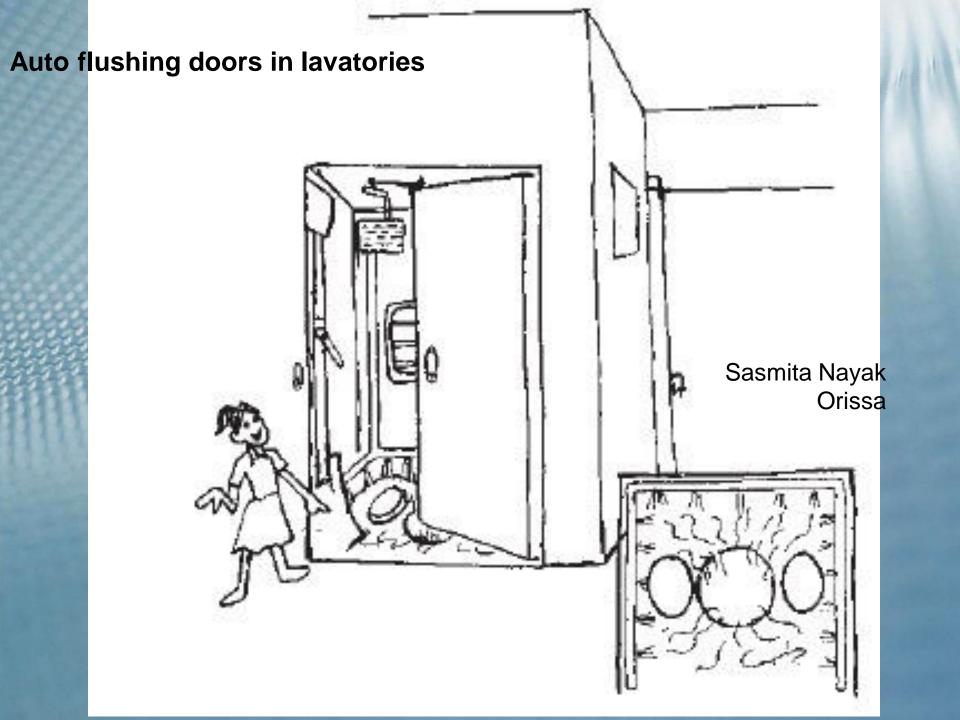




Gait identification in mobiles for locking







Water clock with 'shower' alarm'



Aeram Khatoon East Champaran Bihar



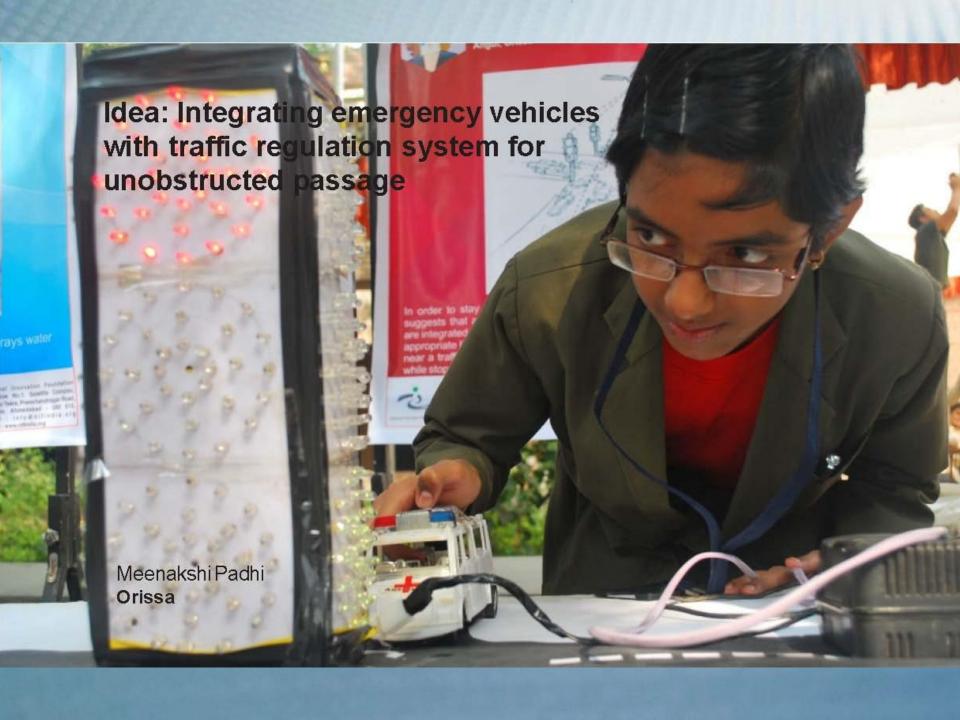


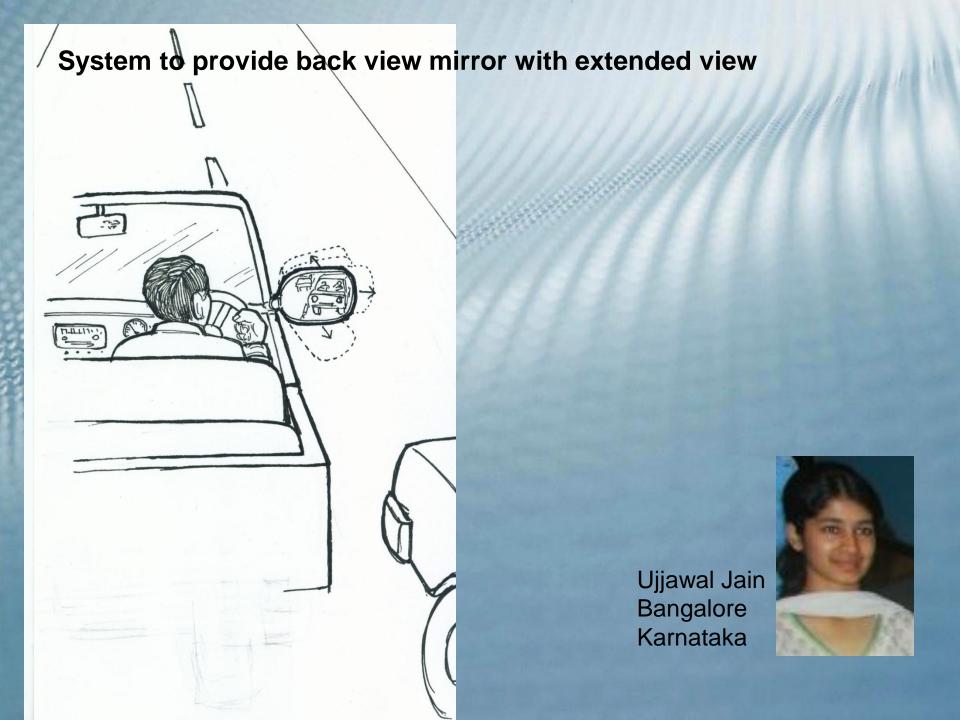


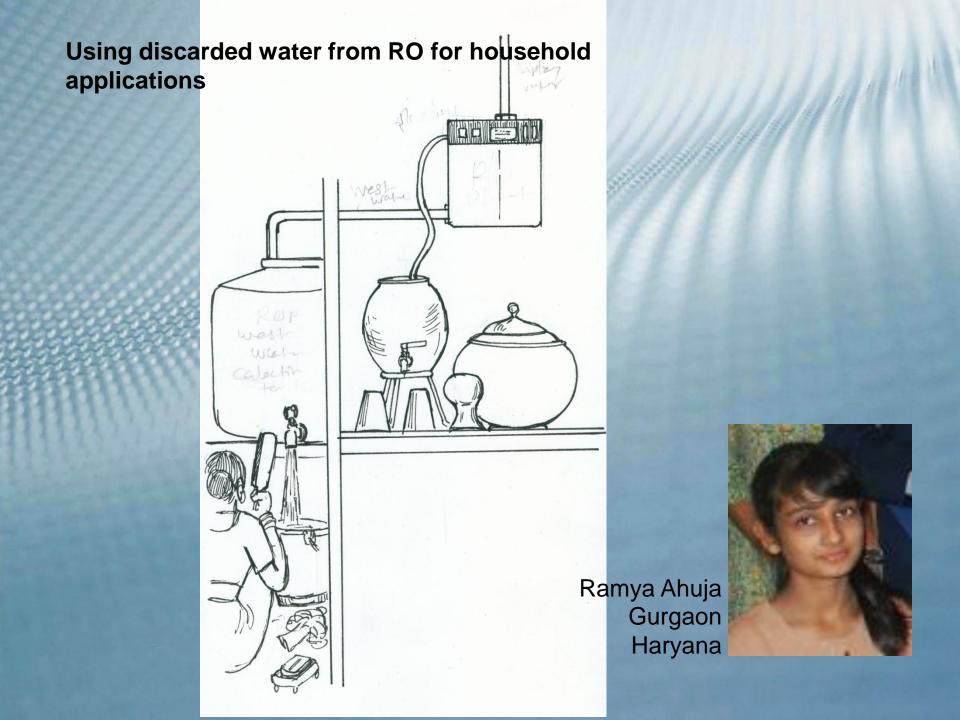
Abhishek Srikanth Singapore

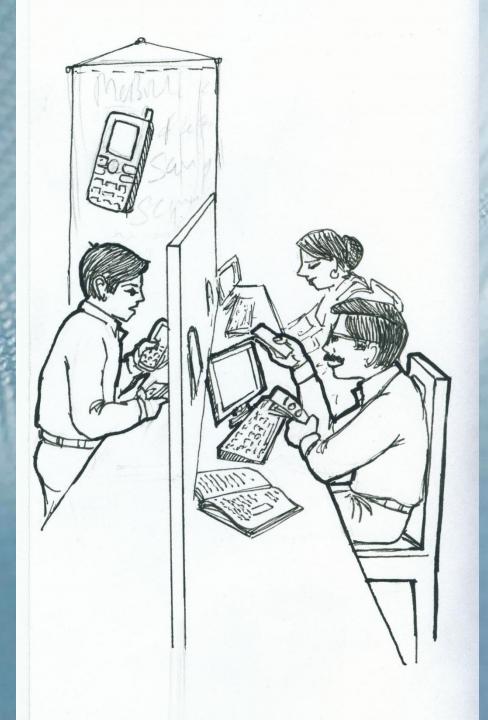


Fire hose supporter









Tiny savings through mobile recharges

Praanshu Goyal Agra, Uttar Pradesh



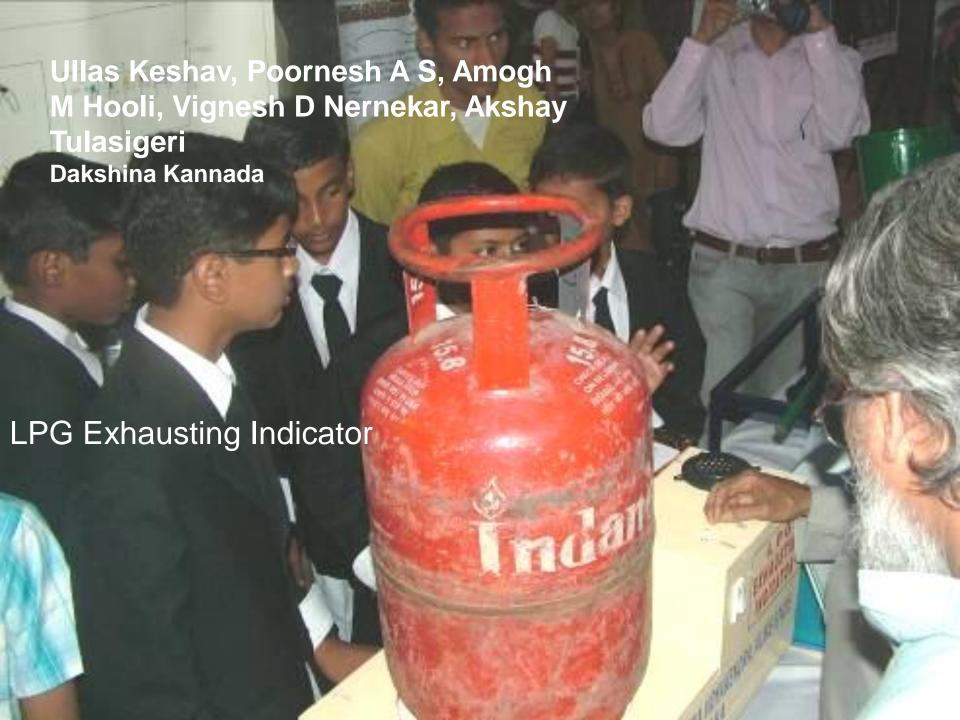
K Samhith Secunderabad

Digging tool for archaeologists

Generally archeologists, on site, work with brushes to gently remove the soil over the embedded artifacts or fossils to unearth them without damage. This process is time consuming and involves a lot of hard work. Samhith, a young student, has developed battery operated machine with a motor to mechanise this process. The power of the motor, which rotates a brush, is just sufficient enough to clean the soil gently. Using this device, a person only has to maneuver the brush around the embedded arefact/fossil thereby increasing the work output.







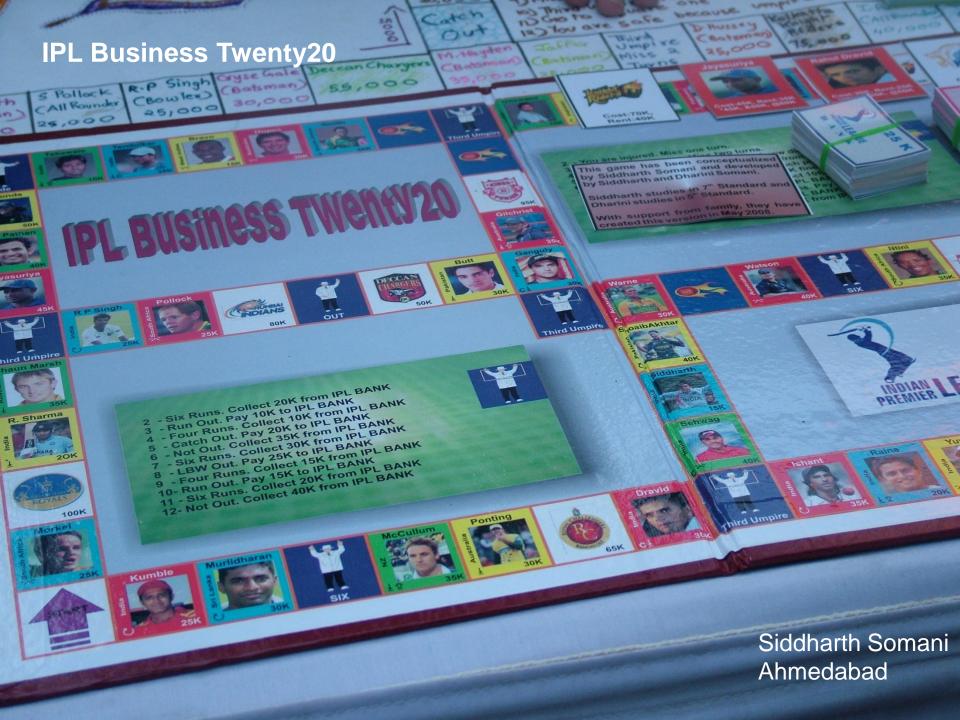


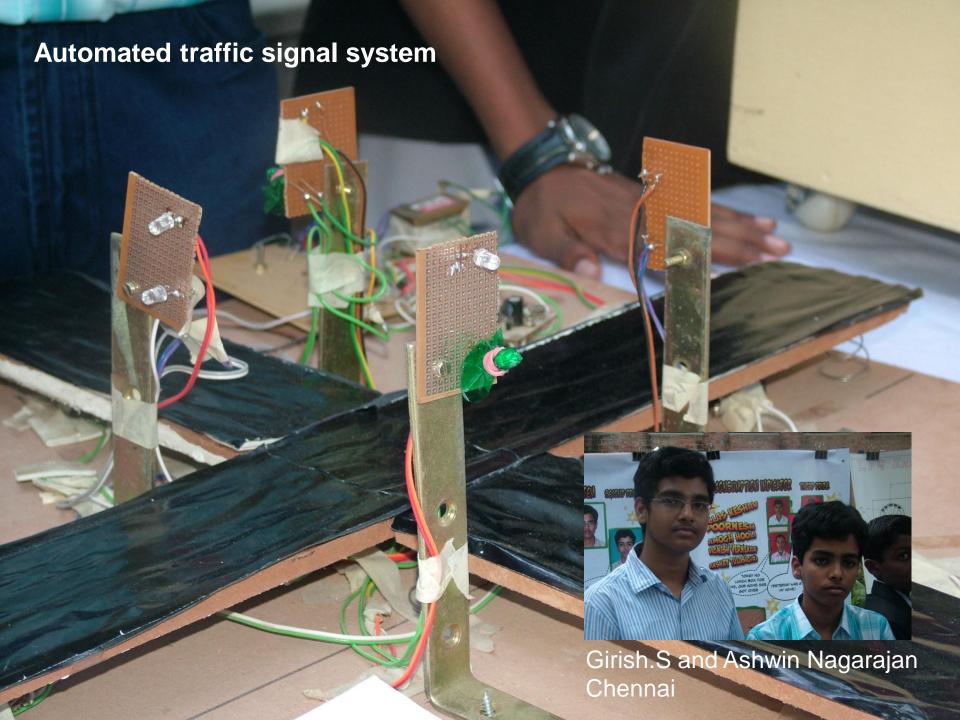


Use of magnetic strips on packaging material and garbage bins for garbage collection

Atulya Gupta New Delhi



















Aditya Parashar

Class 7

Tagore Vidya Mandir
Hoshangabad, Madhya Pradesh

Vibrator based overtake alarm

The idea is to incorporate a microphone in the side view mirror in a car to pick up the horn frequencies of vehicles following the car. Sometimes, when the door windows are up and music is playing, it becomes difficult to hear the horn. The microphone gets activated when the window glasses are up, and sends signal to a vibratory pad on the steering, which will alert the driver about another vehicle following. He has many other ideas as well like a remote that takes energy from TV light or any other natural/artificial source of light, and a luggage carrier on the top of automobiles with a rotatory base so that one needs just to rotate the carrier to pick up any luggage on any side.



Her idea is to have a crutch with shock absorbers for the comfort of the user and also a bell to alert other commuters and a light to be used during the night



Archana Konwar Class 8 Butacore High School Dhemaji, Assam



T Chris Ananth Class 1 Bell Matric Higher Sec School Tirunelveli, Tamil Nadu



Mini vacuum cleaner in shoe

Young Ananth's idea is to have a vacuum cleaner like small device in a shoe that could suck in dust when a person walks. The base of the shoe would also have a small dust bag in which this dust may be collected.

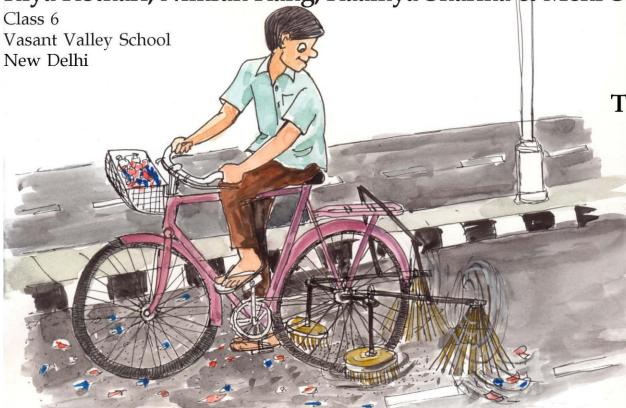








Riya Kothari, Nimran Kang, Kaamya Sharma & Mehr S. Mehta

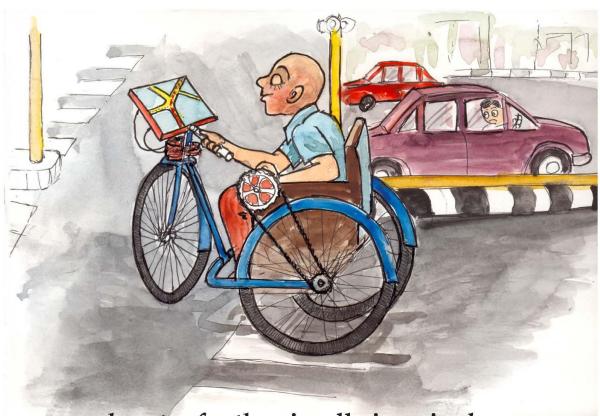


The Cycl-O-Cleaner

The idea is to have a bicycle with two brooms attached to the back wheel. The brooms rotate as one pedals and the brushes sweep away the dust making the drive way clean. The cycle may optionally include an extra dustbin attached to the front to collect large scraps and pieces of garbage.



Rashmi Maruvada Class 5 Patha Bhavan High School Kolkata, West Bengal



Tricycle with preprogrammed routes for the visually impaired

Her idea is to have a tricycle, which will have an inbuilt navigation system with an audio announcement system to inform the rider about the places/landmarks enroute. Such a tricycle would make it easy for a visually impaired person to travel.

Euphorbia cotinifolia as termite / tick repelling

Working on a project, Varsha has found out that the said plant can be used as a termite and tick repellent. Earlier reports mention the use of this plant mainly as a fish poison.



Class 8



Divyam GuptaClass 10
Delhi Public School
Bulandshahr, Uttar Pradesh

System to prevent people from using mobile phones while driving, Divyam suggests to place touch sensors on the gear lever and the steering. This means that both the hands need to be either on the steering or on the steering and the gear lever. If anytime, the driver's hand is not on either steering or gear lever (for more than designated seconds), the system will infer that either s/he is using a mobile phone or not carefully handling the steering. Based on this, the system may react, which can be pre programmed. This reaction,

moving to side by giving indicator or simply giving an alert alarm to the driver.

as per the programming, may be slowing down the vehicle and bringing it to a halt after some delay,



Process of reeling cut or pierced muga cocoons to obtain continuous filament

The process developed by Kaushik helps to obtain continuous silk filaments from the cut or pierced muga cocoons. Traditionally, the cut/pierced cocoons are used to make gicha yarn in the villages. Using this process, 50 per cent of silk from these cocoons can be recovered, rest can be used to make gicha yarn.

Kaushik Boruah

Class 9 Vivekanand Kendra Vidyalaya Golaghat, Assam

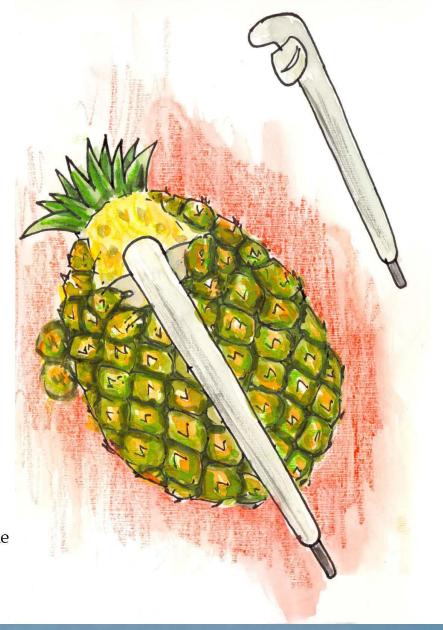




Vishan Popat Class 10 Navrachna School Vadodara, Gujarat

Peelgroove knife for pine apple

Pineapple peeling is a very tedious and cumbersome job, which has been made easy by this device.



Ashuni PatelClass 10
Navrachna School
Vadodara, Gujarat



Sai Sri RamClass 9
Don Bosco Public School
Vijaywada, Andhra Pradesh

Locator beeper

Who has not faced the problem of misplacing an object or forgetting where it has been kept. Ashuni and Sai Ram's device makes it easy to locate them. This device can be attached with any item that people generally tend to misplace/forget about. It is fitted with transmitters/receiver, LED and a sound device. When its remote is pressed, sound is emitted from the device tagged to an item/article and the user can trace its location







Masha Nazeem
Class 12
Vidhya Vikas Girls High Sec School
Kanyakumari, Tamil Nadu

Mechanical porter

Masha's device helps people specially women, old and children to lift and move heavy objects from one place to other. This transportable device has a wooden base that can be raised through a jack like mechanism to lift weight. This device can be hand or foot operated.

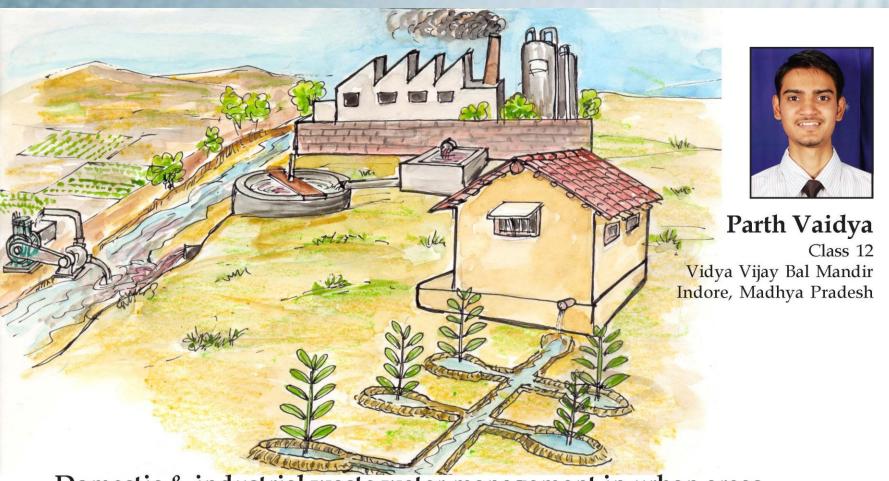
Multiple physiotherapy devices

Ashok has designed many simple and low cost exercising devices that help accident victims in rehabilitation. These are also very useful for people with limb disorders. Some of his machines have already been installed in physiotherapy centers where the feedback has been very positive.





Ashok Aasrani Class 12 Shubham Sen Sec School Jaipur, Rajasthan



Domestic & industrial waste water management in urban areas

Parth has developed a system to process waste water so that it can be used for different purposes like irrigation, construction, washing or producing manure. Indore Municipal Corporation has in principle agreed to install the system in new residential colonies. GlaxoSmithKline has also implemented the same in their premises

Recycled composite material made from multi layer film plastic packaging waste

By appropriate heat treatment of multilayer film plastic packaging waste, Hetal has converted it into a composite plastic material. This material can then further be used for making various articles and sheets with the help of extrusion, injection or compression moulding. Hetal got this material tested at different laboratories and has also filed a patent for the same as well.

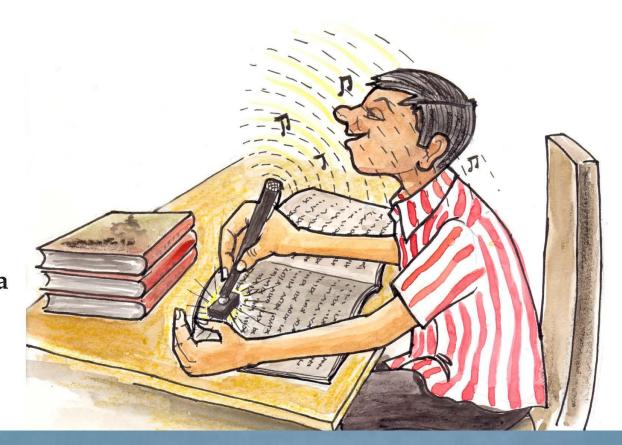


Reading assistant for the blind/low vision people

Mayank's idea is to develop a gadget that can be worn on a hand and which can be moved over text or braille. It uses sensors that scan text and braille and convert it into audio signals for the blind /visually challenged.



Mayank Walia Class 12 Police DAV School Jallandhar, Punjab

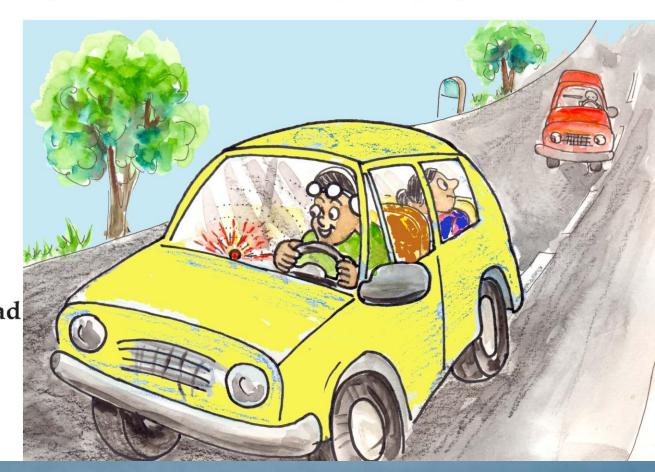


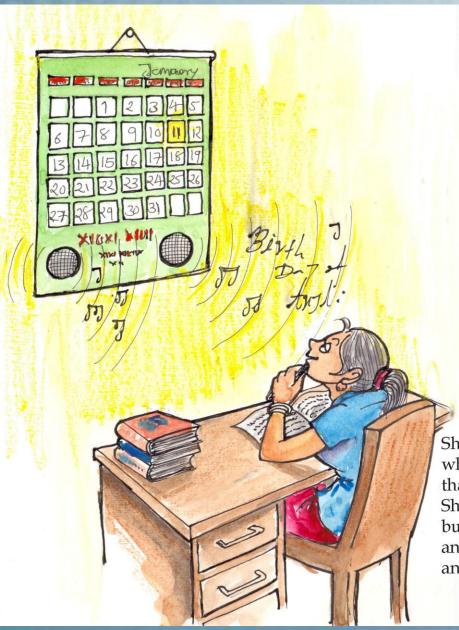
Sound/Noiseless horn

Manibhushan suggests each vehicle to have signal (may be IR) emitters and corresponding sensors. When horn is pressed by the driver, signals are transmitted (instead of sound), which are picked up by the car in front and a beep alert is there in its dashboard along with a light signal.



Manibhushan Prasad Class 12 Sindri College Dhanbad, Jharkhand



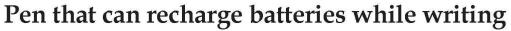




Shruti Tyagi Class 11 Police DAV School Jallandhar, Punjab

Talking wall mounted calendar with reminder facility

Shruti visualises a wall mounted electronic calendar, which has an in-built organiser and reminder facility so that one can never miss any event or an engagement. She has a number of other ideas as well including a push button type stand in two wheelers for the ease of women and old people and voice actuated switch for television and other appliances.

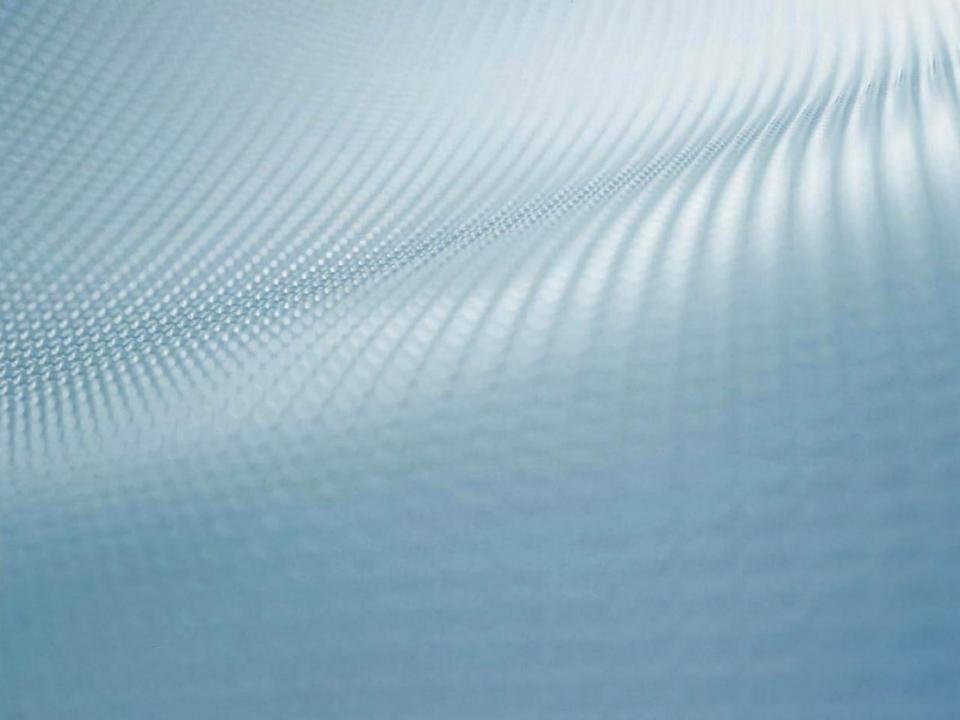


Rahul's ideas is to have a pen that recharges a small battery while one writes. The pressure on the tip of the pen while writing is being used to charge a small battery.



Rahul K Singh Class 12 DAV Kapil Dev School Ranchi, Jharkhand





So...did you get any ideas ????

If yes.....





What are you waiting for....

Pick up a pen and start writing....



If no.....



Do not worry....







You never know what you might discover





You may even win a National Award ...



Think about it





Time

is running out.....

Write to us at

National Innovation Foundation Bungalow No 1, Satellite Complex Prem Chand Nagar Road Jodhpur Tekra Ahmedabad 380015 Gujarat, India www.nifindia.org

Email: campaign@nifindia.org

Toll free number: 1800 233 5555

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Thanks....

We are waiting for your ideas and innovations...send them soon

