



Face to Face with the Nobel Laureate, Dr. John C. Mather



Mukundan A., VI B

Q *Sir, I was in Class II when you won the Nobel Prize. I remember having seen your photograph on the TV and in the newspaper. But even now I do not know exactly for what you got the Prize.*

A Well, I got it for finding things about the Big Bang. You know what the Big Bang is? When the Universe began, it was very hot and very compressed and everything just flew apart. When the material was cool enough, the stars and planets were formed. The original material was much too hot. So here we are.

Q *But sir, where was the matter before the Big Bang?*

A No one knows, no one knows. I pass the buck back to you. You have to find out

Q *Sir, will the universe come to an end?*

A No it seems it's going to continue to expand forever. So it seems it's just going to get larger.

Q *But sir, if it's expanding, is there anything beyond the Universe?*

A Probably not. We don't think so. But there can be other universes, places like our universe which may have their own Big Bang. We won't necessarily know that they exist. It's hard to imagine. As a scientist you have to think about it. What are you studying in School?

Q *Physics Chemistry, Math, Biology.*

A Everything! How old are you?

Q *Eleven, sir.*

A You are eleven. So we can begin with all the wonderful things in science. What parts of science you think are most interesting? Space? Space travel? Satellites in space?

Q *All of these. Now I would like to know when the Big Bang occurred.*

A Around 13.7 billion years ago. Everything is now continuing to get bigger and bigger.

Q *What happened to the heat and light of the Big Bang?*

A It is still there, it still exists. Its wavelength has changed and now it's much cooler. That's actually what we measured to get the Prize. We measured that light. It's still there in the entire Universe.

Q *What are its properties ?*

A. Properties? It has got a temperature. About 2.7 degrees above absolute zero. But it is still an immense amount of energy, much larger than the amount that has ever been produced by all the stars and galaxies in this Universe. It's very important and we measured

Dr. John C. Mather is a famous scientist in NASA's Goddard Space Flight Center. He won the 2006 Nobel Prize for Physics, sharing it with George F. Smoot of the University of California for their collaborative research on the Big Bang. Dr. Mather came down to Trivandrum to take part in the 97th Indian Science Congress.

its brightness and temperature and we even made a map. We can see how bright it is in every different direction. It has different brightness in different directions.

Q *How is that?*

A Well it means that the Big Bang wasn't exactly the same everywhere. There were Hot spots and Cold spots in the Big Bang itself. And that has been very important for us. Those hot and cold spots made it possible for us to exist. They created the atoms that make up your body. You know that the atoms in your body come from inside stars?

Q *Hub?*

A Well, the Sun is a star. Before the Sun was made, there were other stars that exploded. The material from those exploded stars are the chemical elements that make up you and me ... Carbon and Oxygen actually are made inside stars that exploded in the past.... We circulate and combine those elements. Well, here we are. Those atoms had a great many things to do in the meanwhile. The air we breathe in is the same as the dinosaurs breathed.

Q *Was the Big Bang the beginning of everything? Even time?*

A Yes, even time.



Q *Sir, then what was before the Big Bang?*

A We don't know. This is one of the most fascinating subjects of science. To understand the nature of the Big Bang. There are several types of forces in the universe—the gravitational force that holds things together, the nuclear force that holds atomic nuclei together, the electromagnetic force that carries light and makes the electric motor work. Scientists think they can understand three of them, but they can't understand Gravity. It's one of the great mysteries of Physics, the tug of gravitation as it appears that it changes space and time. Albert Einstein said that gravitation operates by changing or curving space and time.

Q *Curving time? You mean like slowing it?*

A Yeah, uh uh, you have to be Albert Einstein to understand that. It's not impossible, but you may have to wait a little while. It is one of the great mysteries of science. What is the nature of Time? What is Gravity? We have made some tests, tried to measure things. But right now, I think, we have enough measurements, but we don't have an understanding.

Q *Sir, what is this Background Radiation?*

A It's Electro-Magnetic Radiation. Heat and Light and X-rays and Gamma rays and Radio waves, they are all the same type of radiation. The only difference is how long the wave is.

Q *When wave length changes, does it become something different? A different substance?*

A Well, we just give it a different name because of the way they interact with everything. If we are moving very fast the wavelength would look different, so there is nothing fundamental about the difference.

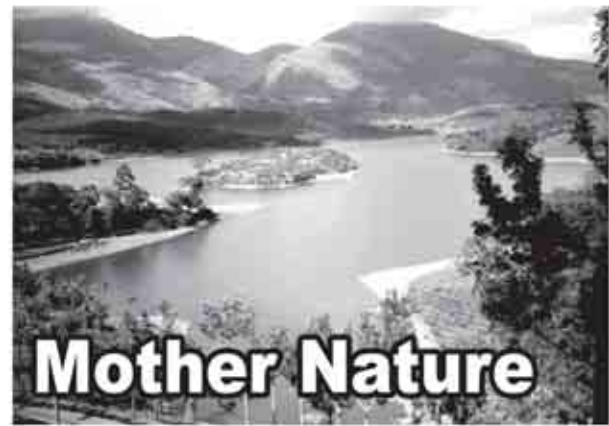
Mukundan: Thank you, Sir. Thank you very much. It was wonderful meeting you.

Dr Mather: It has been a very interesting time. Good luck in school Mukundan, I am sure we will meet again.



Aditchandra, VI C

Oh! beautiful nature
Which I see in the woods and
Mountains, the oceans and land.
I see her, smiling and dancing,
And sometimes crying, seeing
Her dear children dying.
The sweet nightingale sings
To the beat of nature.
The beautiful rain pours
With the love of nature.
The gurgling of rivers,
The paradise of flora and fauna,
Oh! beautiful nature.



Words can either burn or warm

K. Murali, VI A



So roses and reap smiles and blessings—thus goes the saying. A kind word, a polite gesture or a sweet smile can win many wars, said Guru Nanak.

In this world there are hundreds who starve and who are denied justice. A kind word, a friendly gesture, a loving touch or a sweet smile can go a long way in dispelling the gloom around us.

People often cause us pain with their harsh words. Anger or tension may be the reason

for this. Whatever be the reason, one bitter word can wound like a sword. Being courteous and using carefully chosen words would create a feeling of happiness and warmth. Barbed words with double meanings should be avoided because they break relationships.

Rudyard Kipling once said that words are the most powerful drugs used by mankind. We would have fewer disputes in this world if words are aptly spoken and correctly understood. So, let us spread goodness around by being careful in using words.



Roy Mathew, VI A

In the summer holidays, I used to go to the swimming pool with my brother. He was able to complete one lap across the pool even though the coach said he swam like the tsunami. I was much better than him but worse than many others. One day my ten-year-old cousin from the village came for a visit. He too wanted to come with us to the swimming pool because he had never seen one. But my mother was worried and she said it was deep and dangerous. Finally we agreed to take him along on

condition that he would stay in the shallow end. On the way my brother tried to make him understand the basics of swimming. On reaching the pool, all of us took the customary shower and went to the pool. My cousin was excited to see the blue sparkling water. There were many of my friends splashing about in the pool. I showed the diving boards to my cousin. Then we told him to stand and watch while we swam a lap. We waded into the cold water and swam about laboriously. Both of us reached the other end, exhausted.

My swimming lessons

But when we looked back, our cousin was nowhere to be seen. We searched for him in the dressing room and at the ticket counter. He had just vanished. We were worried and frightened. All of a sudden, we saw everybody looking up at the diving board. My cousin was standing there, ready to jump with his hands stretched. Next moment, he dived in a graceful arc and swam like a fish towards us.



Nitin S. Nair, VI C



It shines in the night,
Like jewels in the sky;
It shines very bright,
Throughout the night.
 Wish upon a star,
 Having it come true,
 It's really, really far,
 Sometimes it is blue.
Sometimes it's red,
Sometimes it's white,

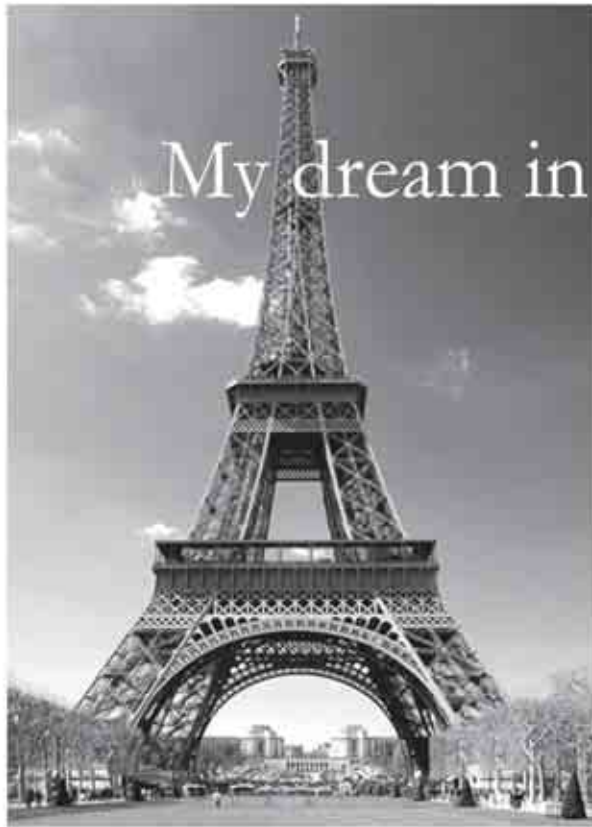
I want my star bright,
Throughout the night.
 Twinkling and twinkling,
 That's what they do.
 Twinkle, o' bright star,
 Twinkle!
The night sky is a wondrous place.
Go out and watch the clear night sky,
Sometimes you can see shooting stars!



Beautiful Flowers

Soorya S. Padmanabhan, V C

Teachers are beautiful flowers,
That bloom in the garden of love,
They are fairies of knowledge,
They are our advisers and guides
All through our lives.
Teachers are full of wisdom,
They scold and cajole,
But also allow us our freedom
They are our wise mothers
Who love us more than others
They are the lovely flowers
In the banquet of our lives.
And these flowers are the ones
We can never forget.....



My dream in life



Rahul Roy Mathew, V A

Bonjour! Ca Van

Guess who? This is Rahul Roy Mathew, the future Frenchman of Loyola. My ambition is to go to Paris for higher studies. I am told that Paris is the most beautiful city in the world.

Once my father's friends came from Europe. One of them was from Paris. They stayed with us for a few days. They spoke in French and this was when I got attracted to the language. Later I got to know the Alliance Francoise De Trivandrum through an exhibition called 'How Tin Tin would be in Kerala.' I happened to hear the director of the institute speak in French. I joined the French classes. I have finished level 1 and level 2.

I also happened to see *Ratatouille*, an animated movie which tells the story of the great chef Gustau who helps a rat named Remmy turn into one of the greatest chefs. The entire movie has Paris as the backdrop. You won't believe if I tell you the truth – I have seen this movie twelve times. I hope and pray my dream comes true. My dream to visit Paris, to study there, to see the Eiffel Tower, the great museums and above all, the renowned chefs of Paris.

French my craze
Has made me chase
This awesome language
At such small age.

Au Revoir for now.



Richy Yesudas, V B

Memories of a Little One

I have a tiny brother
Who runs around the house,
Who hops between the flower beds,
Who climbs high on the trees,
All these and more,
I really wonder at this creation!
I have a naughty brother
Who runs through the roads,
Who teases the stray dogs,
Who challenges the hens,
All these and more,
I really wonder at this creation!
He is very cute,
With eyes round and bright,
His ears as sharp as ever,
His mouth doesn't ever stop,
And heavens! Oh Heavens!
I really wonder at this creation!

Ajay Philip John, IV B



How I learnt to swim

Animal Planet is my favourite television channel. This channel gave me the sense of doing something exciting. I have always had a lot of dreams – dreams to run like a cheetah, swim like a dolphin and fly like an eagle. Recently I realized one of my dreams and I am getting trained in it.

On my last birthday, I got a swimming trunk and a pair of goggles as a gift from my parents. So I decided to put them on and try out my swimming skills. In the beginning I was very afraid to get into the pool. I bucked courage and stepped in. The water was very cool. I swallowed a lot of it, but gradually managed to succeed in my struggle. Now I have become an expert and enjoy every moment in water.



Destination Hong Kong

Vivek Wilkins, V B

I am back, my friends, to share with you yet another experience of my visit to Hong Kong during the Christmas vacation.

The trip started in the early hours of Christmas eve when we boarded our flight to Hong Kong. We reached there in the evening. We had to adjust our watches by two and a half hours ahead to keep up with the Hong Kong time. I was amazed to see the grand decoration and illumination right through every street there. Christmas in Hong Kong is celebrated with melodious carol singing and with much fun and frolic. On Boxing Day, we made our way to Disneyland on a special theme train. We were greeted by the Disney characters who were all over the place. I had a great time enjoying the rides, shopping, snapping photographs with my favourite characters and all the different shows performed by them. The grand finale was the amazing fireworks that held me spellbound. The largest outdoor Buddha statue high up on the mountaintop is worth seeing. We went there by the cable car. The Madame Tussaud Wax Museum, the shopping centre at Mong Koh and the Stanley Market are the most exciting places to visit. I was amazed to see the tall buildings. The top of some buildings went into the clouds. We visited the *Avenue of Stars* where the handprints of Chinese movie stars like Jetli and Jackie Chan are imprinted on the floor. The largest display of lights was awesome to watch. Fourteen of Hong Kong's tallest buildings participated in the display of lights. The last but best place we visited was the Ocean Park. Before I really started enjoying myself it was time for me to return to India. Now, all that I am left with are the photographs and memories of the exciting moments I have had in this most enchanting place, Hong Kong.

Thomas P. Alexander, V B



I WISH

I wish I were a policeman
Finding criminals and thieves.
I wish I were an astronaut
Exploring new avenues in space.
I wish I were a pilot
Flying planes and jets.
I wish I were a doctor
Treating patients with patience.
Oh god! If I am none of these,
Help me be a good citizen at least!



Chris Francies, IV A

My Mother

My mother is so full of love
To whom I must bow.
With all her caring
She's indeed so bearing.
She feeds me with all sorts
She gives me more if I snort.
She guides me every time
She punishes me sometimes
She teaches me how to pray
And all my prayers to say.
But all of a sudden
She took up the burden
Leaving me at my home alone
With my father who is always at home
Before she went she told me a thing
That I should, all my problems bring
To the one who is dear to me
The one to whom I could always be free
She is none but Mother Mary, my mother
The mother of Jesus
Who never fails to grant me
The love that I seek.



During the Onam vacation, my parents and I went on a trip to Valparai. My father's friends and their families came along with us. Valparai is an amazing place. It is in Tamil Nadu. It is very cold there. There are many tea estates and big bungalows. There are unique forests and grassy hills. There are many dams. The biggest one is the Sholayar

Reuben Thomas, IV A.



My Trip to Valparai

dam. We stayed in a hotel called Greenland. The accommodation was wonderful and the cuisine was excellent.

There are many tourist spots like Parambikulam, Aliyar, Nirar etc. On our way back we stopped to see the Athirapalli waterfalls. We had to cross the Western Ghats and Anamalai Hills to get to Pollachi. Our journey was hampered because of fog. To get to Pollachi, we had to go through 40 hair pin bends. Oh heavens! When we reached Kerala we decided to stay in Ernakulam for a day.

Valparai is a beautiful place and I am looking forward to a second visit which I hope will be very soon.



Anand Nair, IV B

An Unforgettable Day

I went to Veega Land for the first time when I was four years old. I was very scared to get on the giant wheel. The wave pool looked as big as a football field. I stood far out and watched all the fun.

A few years later my parents, my brother and I went to Cochin to spend a day with my grandmother's younger sister. They took me to Veega Land. This time, when I saw my brother playing in the wave pool and getting on the giant wheel without any fear, I bucked up courage and followed suit. At first I shuddered a bit but soon I got used to it and then on I never looked back. It was my unforgettable day- the day I changed from a timid boy to a brave one.



Srinandan P., IV C

Parents are IMPORTANT

Do you feel sad when your parents scold you? We should not feel sad because they love us a lot. They do many things to make us happy and successful. They take us to many places. We should fulfil their wishes also. Then they will definitely fulfil our wishes. When we get a lot of things fulfilled through our parents, we should be thankful to them and obey their instructions. We can achieve many things with their help and God's blessings.



Stephan Thomas Varghese, III A

I love you dear mother
For whatever you are
You spend your whole life for me
Caring and giving me my needs in glee
Wherever you are
I'll be there to care
Whatever you say
I am ready to obey
For you are my everything
My mother my life

My mother,
my life



Dhananjay Premjith, IV C

It was during the last summer vacation that I got selected to act in the movie named *Daddy Cool* with superstar Mammooty. I was thrilled and was eagerly waiting to meet the great actor. Finally the day arrived and there I was before Mr. Mammooty shaking hands with him. Mammooty uncle as I lovingly call him is a great person at heart and has much love for children. He helped me a lot with my acting and taught me many valuable things which turned out to be very useful in my performance.

We went to Hong Kong to shoot a song sequence for the film and those were the most enjoyable days. We went to various beautiful places in Hong Kong. I cannot forget the days when I went boating along with Mammooty uncle and also for long drives. He was very loving, jovial and caring throughout the trip. I enjoyed my days with him very much. The fun days we had together got over very fast. My father and I returned with very good memories of the shooting days and the wonderful company of the one and only Mammooty uncle. I wish I get more of such chances to do many more films in the days to come.

My experience with Mammooty



Sidharth B. Pai, III A



My favourite subject



My favourite subject is Social Studies. I like to study about the solar system. The planets fascinate me very much. I wish some day I may be able to land on one of them if not see them from a distance. Maybe, it is possible with life after death.

Adithyan K., III C



I love rain because everything becomes very fresh. During the rainy season it is very cool and cosy. I would like to go out in the rain and wet myself, if only my mother allows me to. I think animals too like to get wet in the rain. I love the rainbow, but I've seen it only once. Rain water becomes streams, rivers and big oceans. Without rain rivers will dry. Fishes and animals will die without rain. There will be no flowers without rain. Rain is the life giver and I love the rain.

Why I love rain





If I were a bird

Advaith B., III C

If I were a bird, I would fly high up into the sky. I would see the clouds and feel the heat of the sun. I would feel the smoothing wind. I would sing sweetly. I would kiss the flowers and feel their beauty. I would peck different tasty fruits, nuts, berries etc. I would fly from one country to another. I would see the wonderful world below. I would see different people and customs. I wish I were a bird.....

Rohan C., III C



18 September 2009 was a day of happiness and excitement. It was a day of enjoyment, lots of gifts and good wishes. It was my birthday.

My last birthday is one which I will remember all my life. My parents gave me a love bird as a gift on that day. I called him Ashy. We bought a pretty cage for him. It had multi-coloured feathers of yellow, blue and green. It ate grains and seemed to like *tulsi* leaves very much. I played with him all day long. I had him for a month and was very happy. As time went by, I noticed that he longed to be free. Then one day I let him go out of the cage. The day I let him go was the happiest day as well as the saddest day in my life; happy to see him fly free but sad to lose my little friend.

The happiest day in my life



The Unknown Space

Rahul B., III C

Space is unknown and bright,
How vast and deep it is!
There are millions and millions of stars
That never could be counted.
How I would imagine, going into space,
To know what is happening there,
And to see the brightest star.
How could I know,
What you are,
Where you are,
And how you are!



My most beautiful dream

Sancho Simon, III C

It was a fine day. I was in the forest with my parents. We saw some lovely birds like peacock, parrot, cuckoo, bulbul, etc. A family of monkeys was chattering and playing in the trees. I gave nuts to the monkeys. We heard the trumpeting of an elephant. Soon we saw it. It came near the caravan. I offered it some bananas. My father was taking some photographs, when I heard my mother's loud voice, "Wake up Sancho it's time to get ready for school." I woke up with a jolt and then I realized that I was only dreaming this most beautiful dream!

My Grandfather



Arjun V. Arun, III B

My grandfather is old. He is quite smart and strong. He is honest and bold. He helps all those who turn to him for help. I love him very much. I pray that he may live long, as long as he wishes.



What I would like to be



Joel Thomas K., II A
I would like to be a teacher when I grow up because I wish to teach in a school like Loyola!



Kevin Thomas Jose., II A
I would like to be a pilot when I grow up. I would like to be so because I could fly high in the sky and look down on the clouds below.



Amith Krishna, II B
I would like to be an astronomer and study more about stars and planets.



Naveen V.P., II B
I would like to be a postman and deliver letters. I would like to peep into different homes.

One rainy day



Aravindh S.M., II C

I went to a beach on a holiday with my family. While we were playing in the water, the clouds covered the sun. The wind blew on us and suddenly rain drops started falling. We ran into the hut of a fisherman. We saw the beauty of rain water falling on the sea. It was an evening which I will never forget.



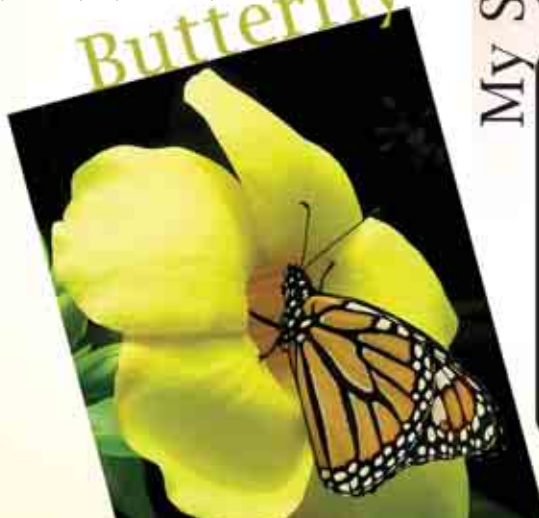
Samuel Alex Koshy, II C

Not so long ago on a rainy day I had just returned from school. Suddenly I heard a cry. It was not a baby or a cat that was crying. It was a small puppy. He was fully drenched in water and shivering with cold. I took him into my room and wiped away the water, put him in a basket and gave him some warm milk. I named him Barky. He is my friend since that day.



Siddharthan Dileep, II C

Butterfly, butterfly where do you come from?
Butterfly, O' fly who is your mother?
Swat fly, lovely fly, when do you sleep?
Butterfly, butterfly, what do you eat?
What do you do when I'm at school?
Will you come to play with me?
Butterfly, butterfly why don't you talk?
Swat fly, lovely fly I miss you at school.

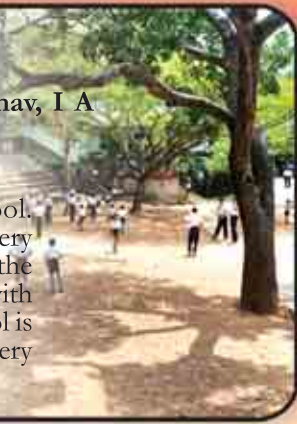


My School



Sankar Madhav, I A

I study in Loyola School. The teachers teach me very well. I enjoy playing in the big playgrounds. I play with my friends. Loyola School is the best school. I love it very much.



Arnab Vasudevan, I C

I am a Loyolite. I love my trip in the school bus. We have a large Indoor Stadium at school. I like the plants and the shade of trees in my school. I really love to study and enjoy the fun in my school.




Suryanarayanan Kartha, I A

My Father

My father is Syam Vikram. He works in R.C.C Hospital. He loves me very much. We have a lot of fun together. He gives me all that I ask for. I love you Pappa.

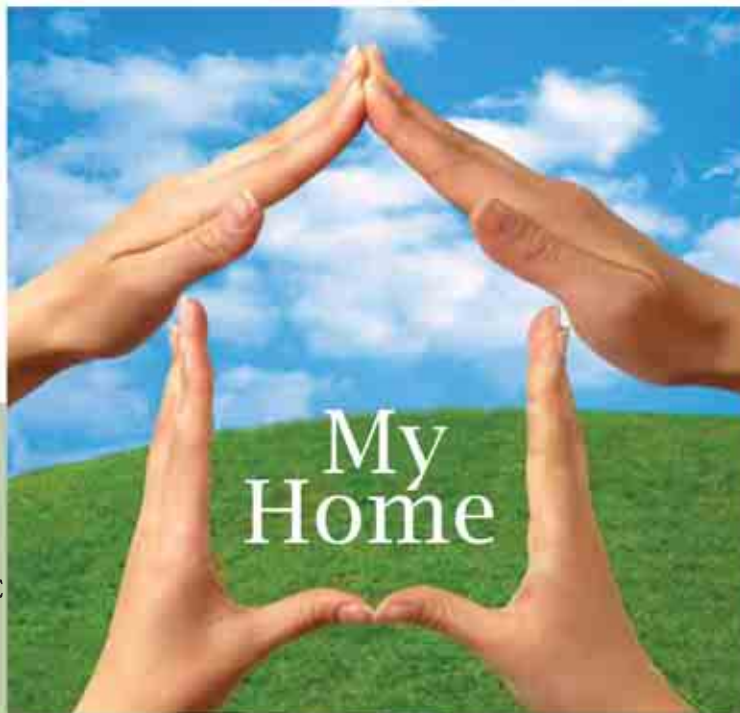
My Mother


Kasi Promod Sivan, IB

My mother is a very nice person. She is pretty and smart. She helps me in my studies. She kisses me every night before I go to sleep. I love my mother very much.


Venkatesh Krishnan, I B

My mother's name is Radhika. She is very cute. She hugs me whenever she sees me. She buys toys for me. She teaches me. She is my best friend. She goes to office every day. She is a very nice mother.


Balaganesh V.M., I C

My home is a sweet place where I am living with my parents. I love to play with my brother at home. I like the drawing room very much. Beautiful butterflies are the visitors of my small garden. We keep our home clean.


Hemant A. Nath, I C

I have a sweet little home. In my home there are five members. My home is painted cream and white. I have a small beautiful garden in front of my house. I love my home very much.