

MATHS DRESS DESIGNING

When you think of fashion designing, you might think of many things such as bright colours and funky clothes, whatever you may think of maths may not be the first thing to pop up in your mind. That is why when we were tasked by teachers to create and design a dress implementing mathematical concepts and use that dress as a means to send a social a message, it was natural to feel stumped.

But as it turned out maths fashion surprisingly go very much hand in hand, the connections ranging from simple measurements all the way up to complex mathematical concepts such as heron's formula. The area of the dress, the stripes, shapes all of them were very much connected to maths. To give the children inspiration and ideas the classes were taken to the National Gallery of Modern Art, were we saw many historical paintings and made accounts of all the mathematical concepts that these historical artists used such as symmetry. We also got a very rich history lesson by one of the guides about the old mathematical instruments that were used by these painters and how measurements were previously taken by body parts making each painting truly unique.

We saw many dresses that were designed by professional fashion artists and observed how they had implemented mathematics to create many vivid dresses. The fashion shows that were hosted by these artists usually revolved around a certain theme which tended to be some sort of social issue so it seemed fitting that we were asked to incorporate some social issue into our dresses.

We were then divided into groups, and asked to research designs, take inspiration and create an imaginative design of our own using mathematical concepts that we had either learnt in previous classes or to take up something entirely new, brushing up on previous knowledge and learning new concepts along the way. Some groups had taken up ancient concepts such as Archimedes' shapes, Plutonian concepts and various other ancient Greek concepts paying homage to the famous mathematicians who set the pillars for mathematics, while some delved into some newer concepts such as fractals that are shapes that are only plausible in theory but cannot even be created in the living world.

We submitted our drafts to our teachers and now with insight from people of greater experience we refined our designed collected our materials and got down to making. It was time to put our theory to the test. Over the course of two days the groups got together and made 15 dresses spanning topics such as, Crimes, Feminism, Cancer, and the environment making us more aware of social issues and at the same time allowing us a chance to learn mathematical concepts that we previously didn't know existed. On the final day of presentation every group presented their projects, very proudly at that, now knowing more than what they had previously before starting out with this seemingly impossible task, of having to make a dress using mathematical concepts.

I would like to spare a few words, thanking our teachers, for giving us such a seemingly impossible task, which actually turned out to be educational and fun at the same time, truly proving that maths is present in every field of work, even one where you wouldn't expect it to be such as in the field of fashion

It was indeed a spectacular day, everyone wore a smile on their face just when our math teacher told us that there is going to be a mathematical dress designing activity in 9th and we were in 8th at that time. She showed us some pictures of the dresses made by the people as an example. She then told us that the dress should include various mathematical concepts and we also have to show a social message. We further discussed about how are we going to proceed and the measures to be taken. At first, we thought that this was something to be taken lightly and not care about. But our visit to the National Art Gallery opened our eyes and made us think about it. There we saw some fantastic pieces of art having arithmetical concepts. The paintings were a piece of extreme hard work and worth watching, it was an interesting journey. Soon 8th got over and we were in 9th when deadline for the submission of the rough draft of our dress was near, it took a lot of brains to design the dress everyone had their own unique idea which were wonderful. Many obstacles and difficulties came in our way, but we handled them easily. Many changes were made so as to make the design of the dress better. Days went by and the day came when we had to give life to our imagination and ideas. It was the unity and understanding between the teammates and teachers which made all this possible. It felt as though we were professional designers. The next day was the presentation of the dress which was the fashion show indeed. Hats off to all those people who had the courage to wear the dress designed by their teammates, as it takes a lot of courage to trust the teammates on what they'll design will probably be worth wearing or not.

- **FARIHA AZIM**
IX-A



