



THE 2021 YOUNG MATHEMATICAL STORY AUTHOR (YMSA) COMPETITION

THE STUART J. MURPHY AWARD
(THE 8-11 YEARS OLD CATEGORY)

SHORTLISTED

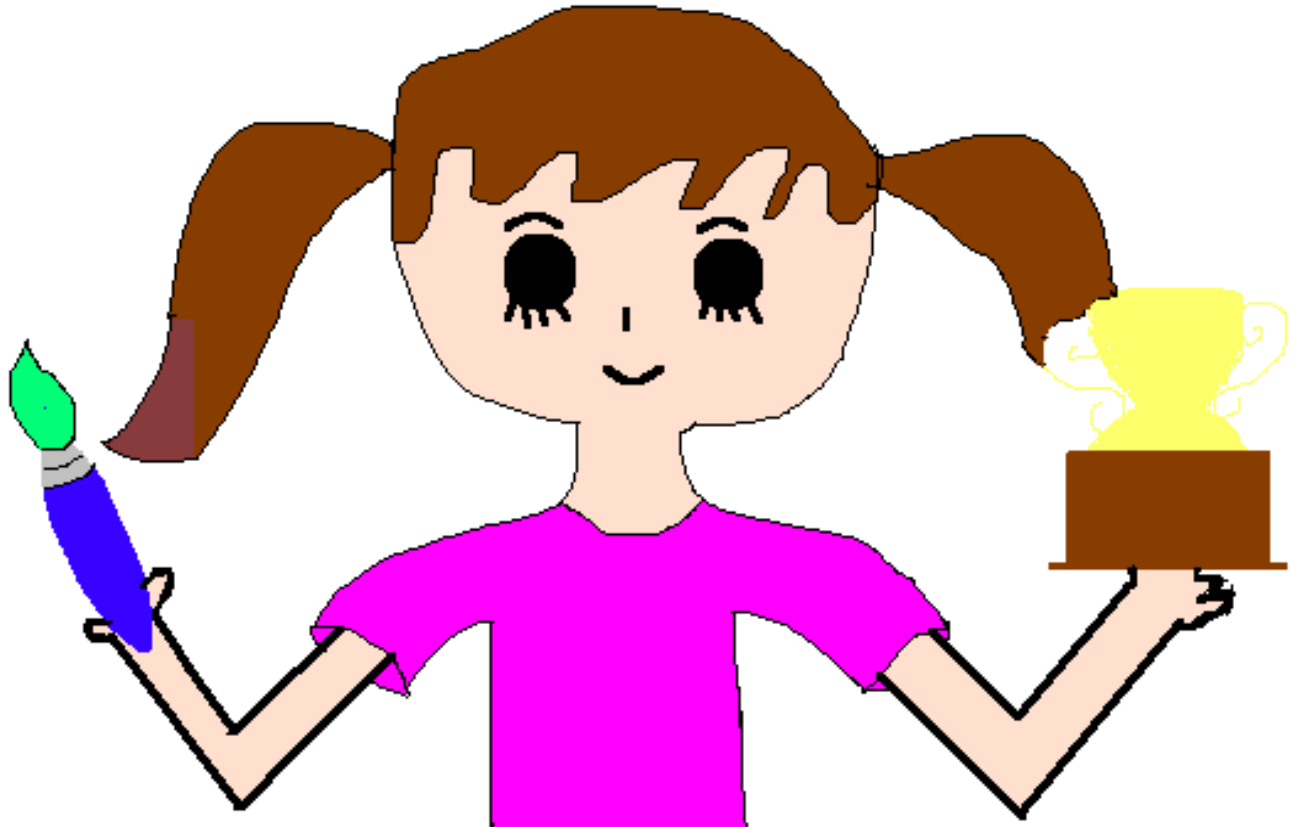
'Ruby and the Art of Creating Colours' by Charithra Chokka (11 years old)
at Silver Oaks International School (India)

You can read the author's inspiration for the story and the judges' comments
on:

www.mathsthroughstories.org/ymsa2021

#YMSAMaths

RUBY AND THE ART OF CREATING COLOURS



Written and Illustrated by:

CHARITHRA LAKSHMI CHOKKA

Grade 7

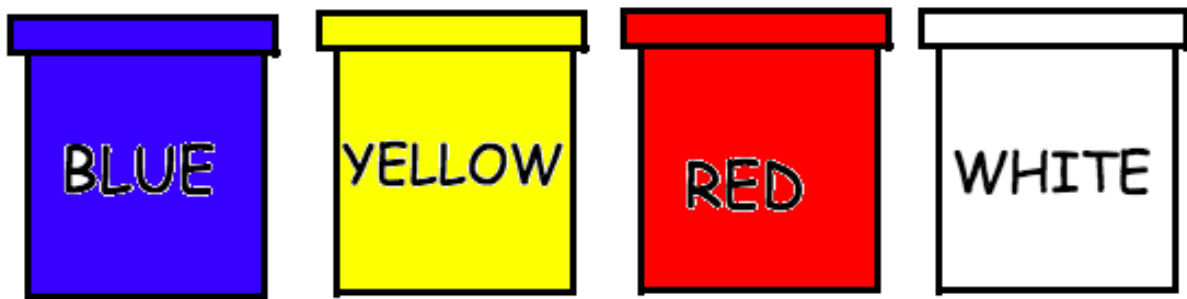
Silver Oaks International School,

Hyderabad, India

I would like to thank the YMSA team and my school, Silver Oaks for giving me the opportunity to enhance my creative writing skills. It is a great experience for me to blend the mathematical ideas and present it in the form of a story.

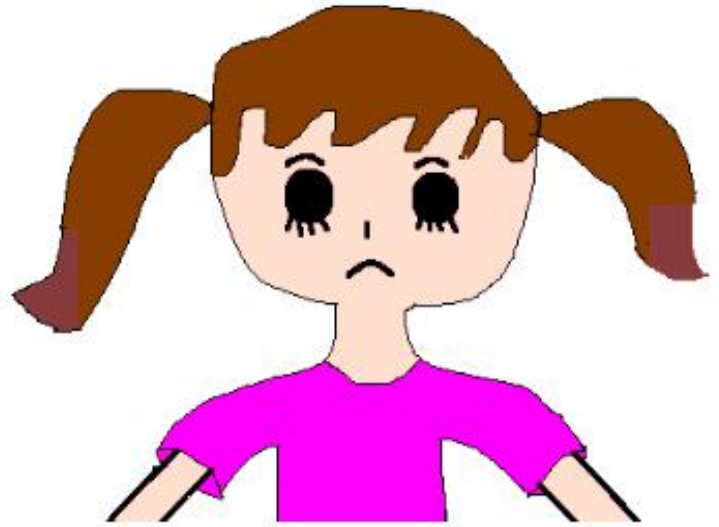
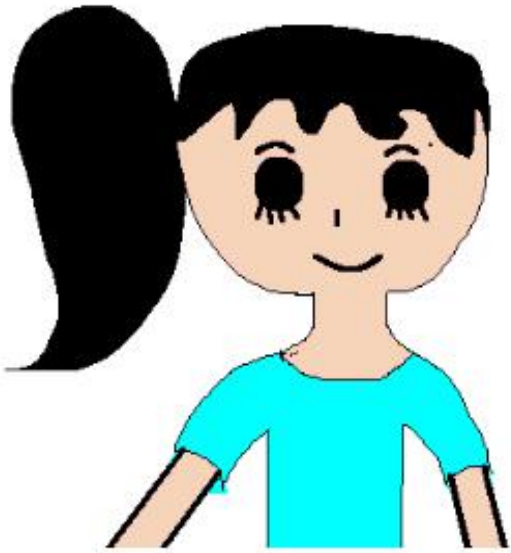
Once upon a time, there lived a girl named Ruby. One of her favourite things to do was painting. She lived in a small house with her family.

One day, she heard that a painting competition was being held in her village. She wanted to participate in it. So, she asked her mother to buy her colours for the competition. When they went to the shop, her mother was only able to afford four colours. They bought the colours: Blue, Yellow, Red and White and went back to their house.



Ruby was very upset. She went out and sat down under a tree, lost in her thoughts of how can she do a nice painting with just 4 colors!

Just then her friend, Kylie came to her.



Kylie asked, "Is there any problem"?

When she asked this, Ruby narrated the whole story.

Kylie replied by saying, "Don't worry, I will help you. Come let's go to your house and bring all the colours". They went to Ruby's house and bought all the colours.

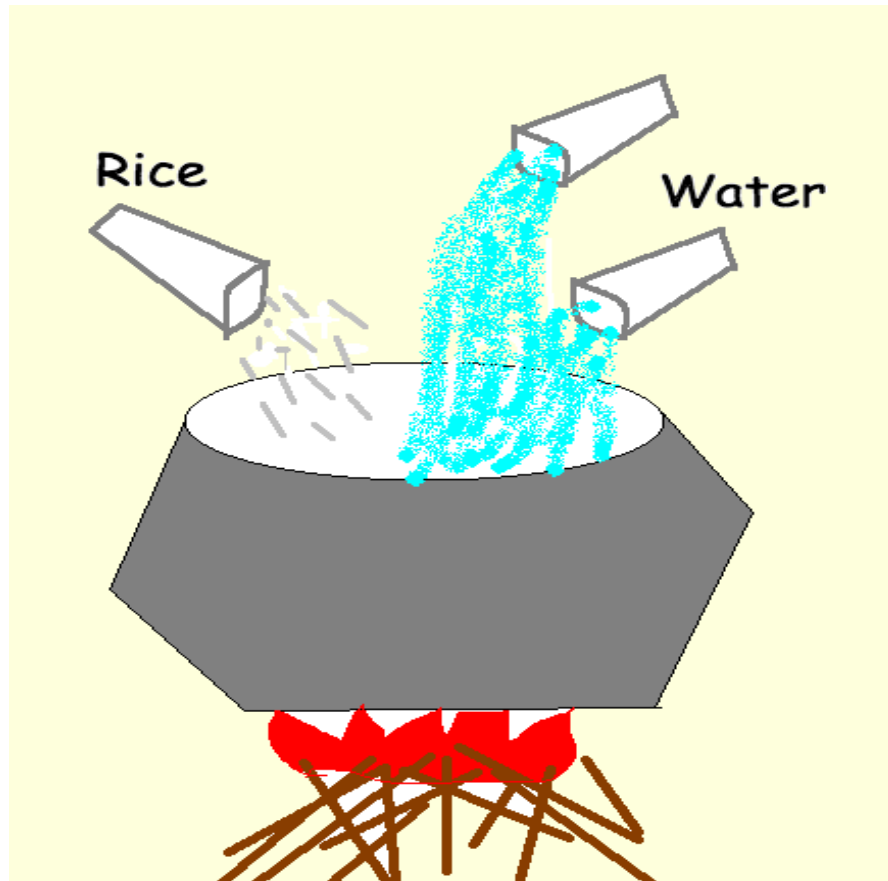
Kylie explained this way, "You can get different shades of colours by mixing two or more colors in the right ratio".

Ruby was amazed and asked her friend, "What is a **RATIO?**"

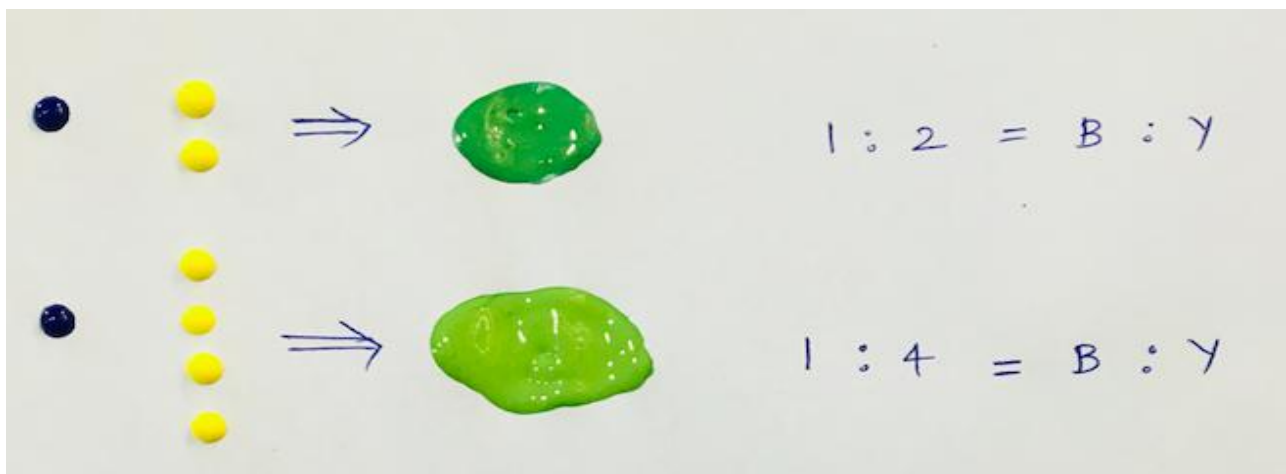
Kylie replied, "A ratio is a way of comparing and relating two or more quantities. For example, have you ever noticed your mom cook rice"?

Ruby said, "Yes I have. She pours two glasses of water for one cup of rice".

Kylie said, "Yeah exactly!! That's a ratio. It means, the ratio of rice and water is 1:2 if it has to be cooked properly. We can use this understanding on ratio to create new colours too".



Ruby was very curiously listening to her friend. They both sat down under the tree and started mixing different colours in different ratios. First they tried to get light green. They mixed one blue drop and two yellow drops. The result was a middle shade of green. Next they tried mixing one blue drop and four yellow drops. They got light green, the perfect shade that they wanted!



They then mixed one yellow drop and one red drop to get orange. They got the right shade after mixing them.



They also mixed one red drop and three white drops to get baby pink.



They thought for a while and tried mixing one blue drop, one green drop and one white drop (1:1:1) to get turquoise.

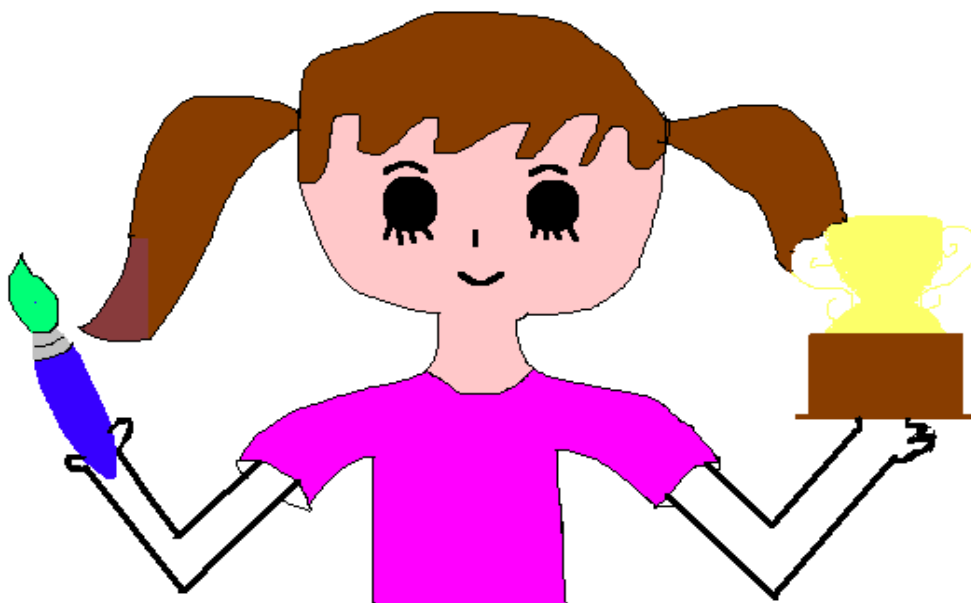


They put these new colours in separate bottles. Ruby thanked Kylie and went back home happily.

On the day of the painting competition, one hour was given for the contestants to paint a picture. Ruby began to paint. She used all her new magical colours that she and her friend created, to create her painting. She was very happy with the different shades of colors she had.



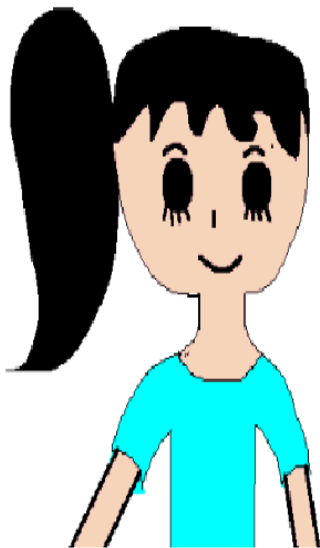
After the competition was done, the results were announced. And guess what.....
Ruby came first and she was given a box full of 12 poster colours. She was speechless and ran back home.



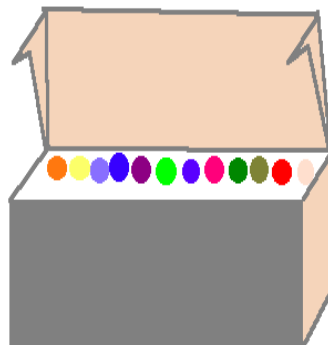
The first thought that came to her mind was to share her colours with her friend Kylie as she was the one who gave her this wonderful idea.

Ruby and Kylie shared the 12 poster colours in the ratio of 1:2.

So readers, can you figure out how many colours did each one of them get?



Kylie



Ruby : Kylie = 1:2



Ruby

How many did each get?

THE END

A girl named Ruby is participating in a painting competition. But her mother could only afford to buy four colours. She was sad. But her friend Kylie gives her the magical idea of creating new colours. Will the idea work out??

READ IT AND FIND OUT!!



My name is Charithra and I am 11 years old. I am an acorn of Silver Oaks International school, Hyderabad(India@Asia).

The inspiration behind writing this story is the video that I made on 'Ratio in Colours' for my school's graduation presentation. I would recommend everyone to participate in this as it brings out the best creativity in us.