THE 2022 YOUNG MATHEMATICAL STORY AUTHOR (YMSA) COMPETITION

THE STUART J. MURPHY AWARD

(THE 8-11 YEARS OLD CATEGORY)

LONGLISTED

'Tasty Multiplication' by Maria Savvide (10 years old)

at the International School of Paphos (Cyprus)

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

www.mathsthroughstories.org/ymsa2022

#YMSAMaths

12×12

7×10

Tasty multiplication

4×6

By Maria Savvide

11×9

One morning, while David was sleeping, he heard a knock on the door. It was his sister Delilah who came to wake him up for school. David woke up fast and started to worry.
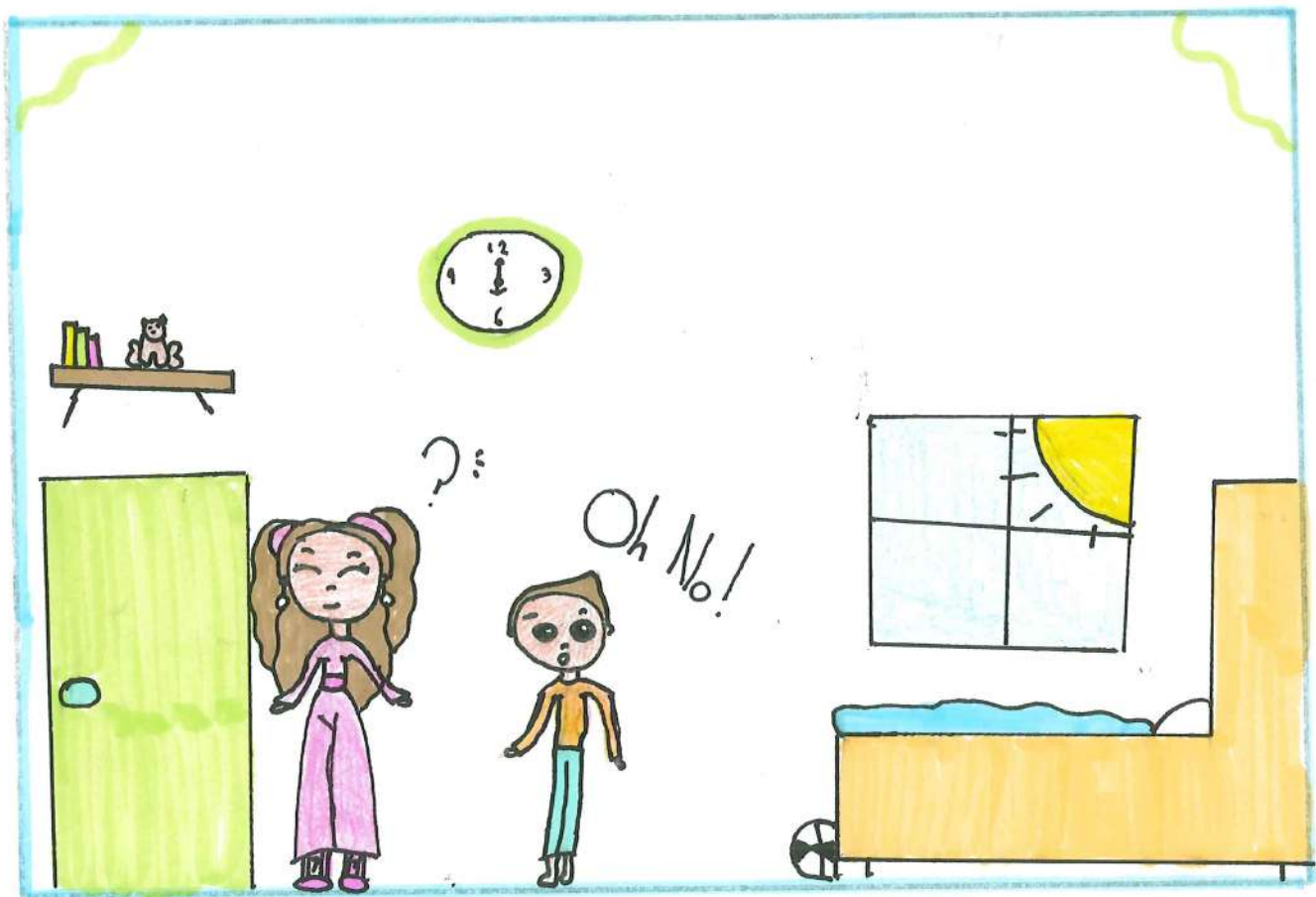
"What's wrong?" asked Delilah.

"The math test!" he shouted. "I fell asleep last night and didn't study!"

"Well you've got 1 hour until school starts." Delilah said. "Go change your cloths and meet me in the kitchen."

"Ok." he said.

"Get ready quickly!" Delilah said.

David got dressed and rushed to the kitchen.

When David arrived at the kitchen, Delilah asked him what topic his math test was about.

"Multiplication." he said.

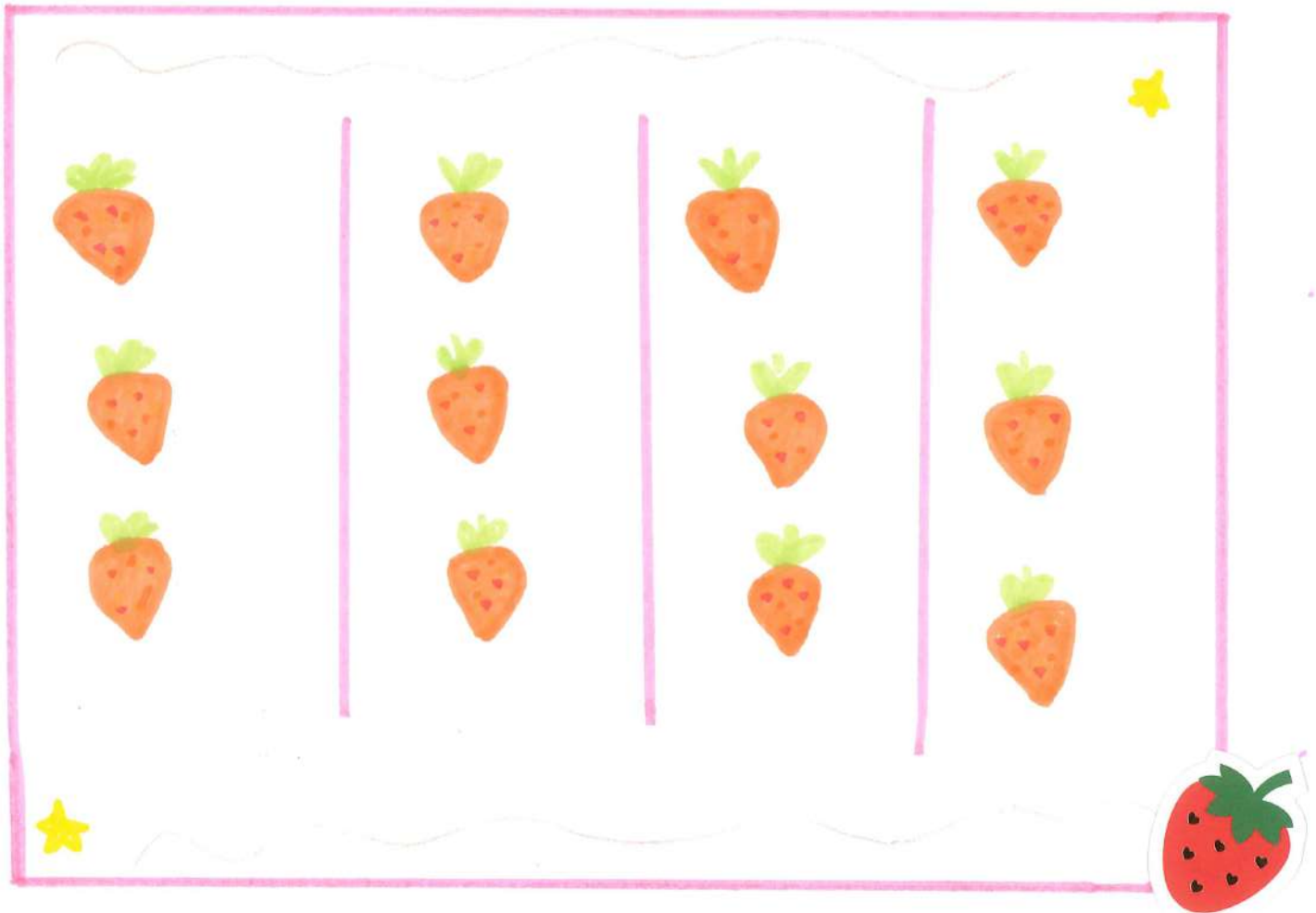"Ok let's see what we can do about it!" Delilah answered.

Delilah grabbed a bunch of fruits and put them on the table. She started to put them in different patterns, when she was done she asked David what he thinks she is doing.

"Hmm...trying to make a fruit salad?." He replied.

"Uhm no! I am going to show you how to multiply using fruits!" she exclaimed. "Can you tell me what 3 x 4 is?"

"Is it 5?" he answered.

"No no no, not even close, look I put 3 strawberries in four vertical lines now all you have to do is count them, so... its 12!" Delilah said.

"I get it now!" David says happily.

"Ok, now you can eat the strawberries so that you are eating breakfast and learning maths at the same time!" Delilah said.

"Ok!" David replied.

David ate the delicious strawberries one by one.

"Now that you ate all the strawberries, which are full of vitamin C, let's try something else."

Delilah got some watermelon slices and asked Daivid to make a question. David placed two rows of 5 watermelon slices vertically and said, "This is 5 x 2!"

"Correct!" Delilah answers "Now can you tell me what it equals to?"

"1..2..3..4... oh is it 10?"

"Yes!" Delilah said smiling.

"Let's do higher numbers now!" Delilah said.

"Um... ok I'll try I guess." David answered while eating some of the watermelon slices which are full of vitamin A.

Delilah placed 12 rows of 10 cherries vertically and asked David what is 12 x 10.

"Umm you're confusing me a little." David said. "Why do you have so many cherries!"
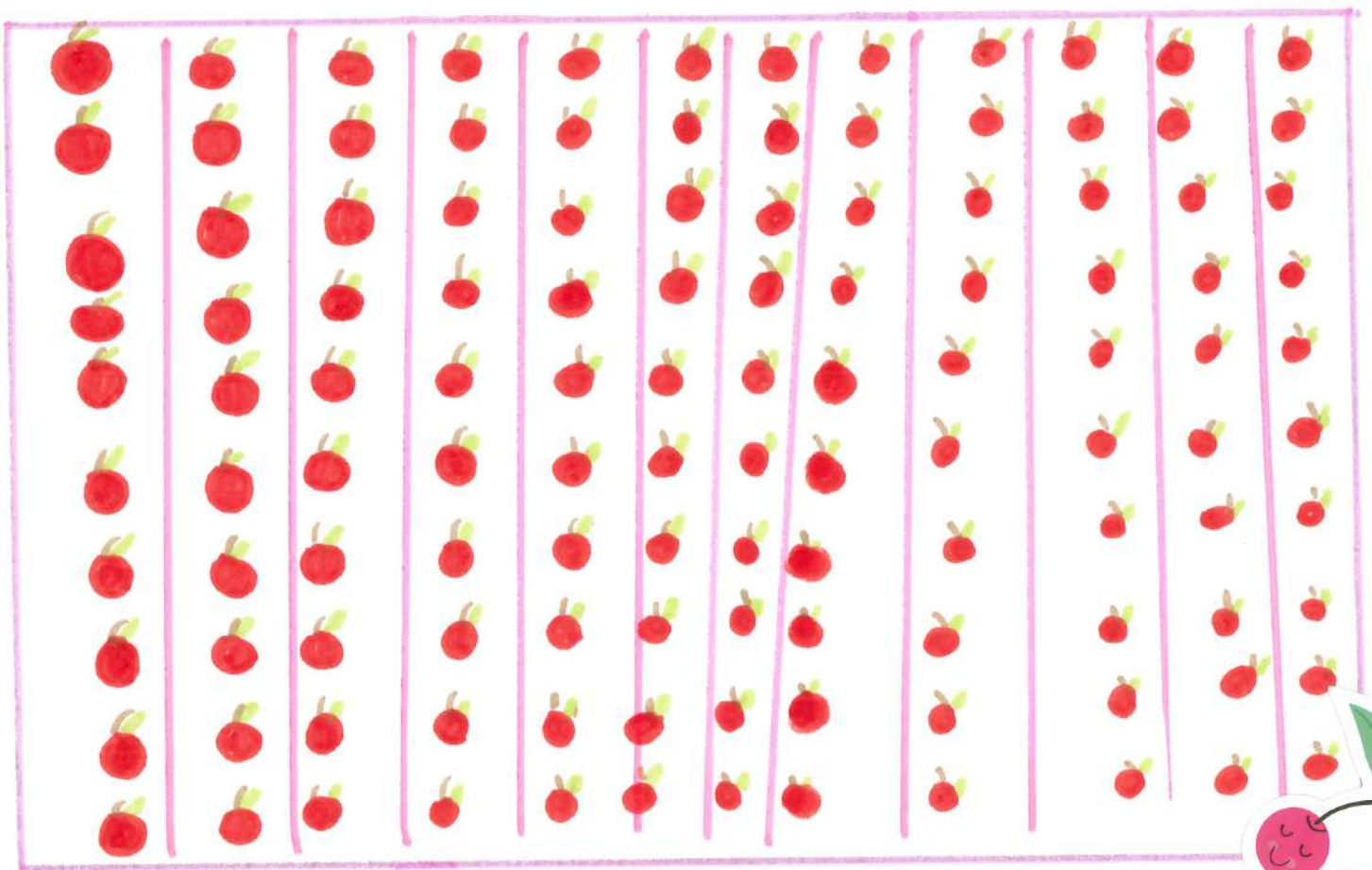
"Ok let's make it simple it's like the other two examples we did before!" Delilah said.

David started to count the cherries.

"Umm... 120?" David said with a curios look on his face.

"Good job!" Delilah exclaimed.

"Where did she find so many cherries?" David thought.

"I'm going to tell you a trick now so you don't need to count one by one, because during your test you won't have so much time.." Delilah said.

"Ok!"

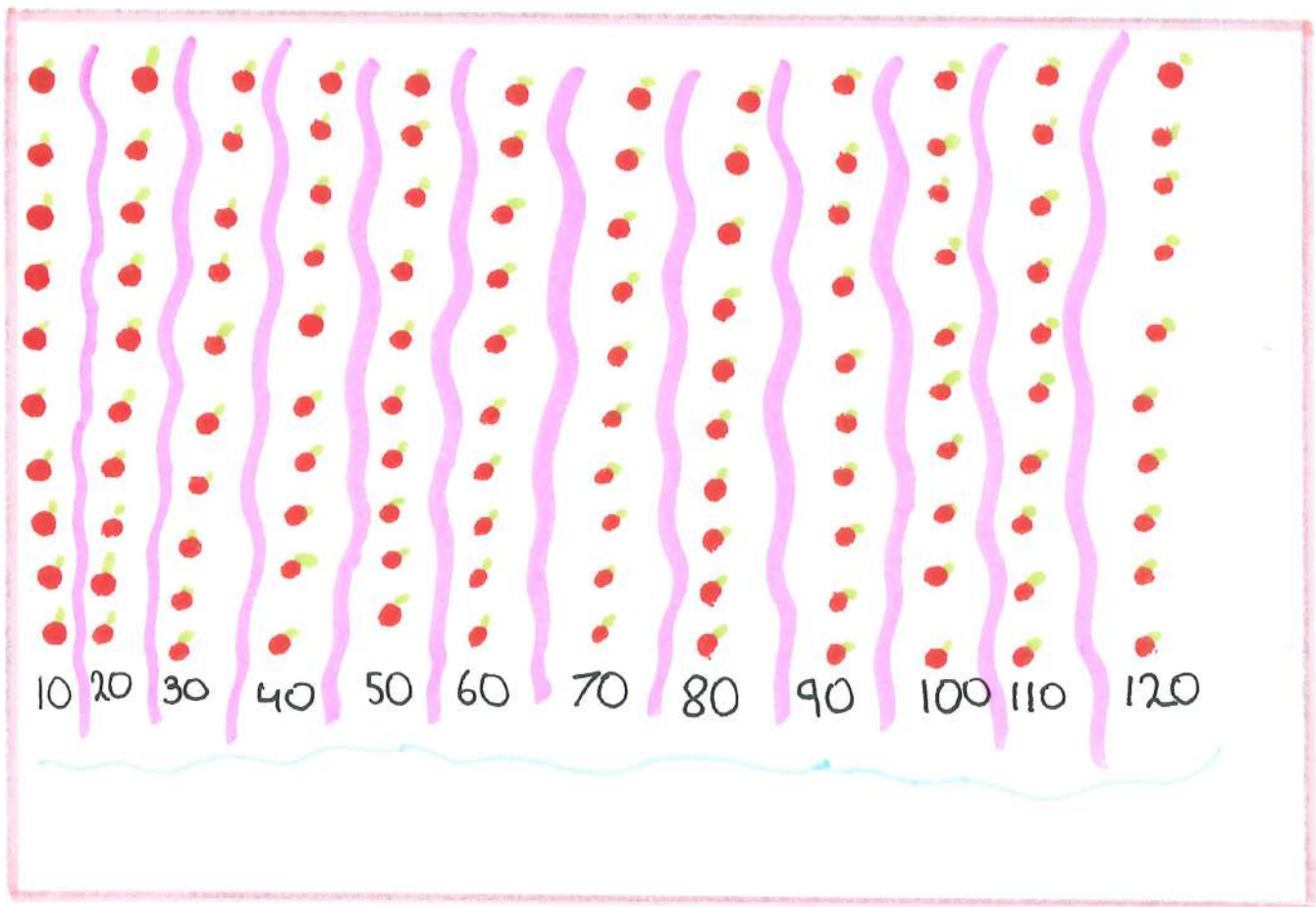"So instead of counting up to 120, you can easily count by tens!"

"What do you mean!" David said while looking at Delilah in a confusing way.
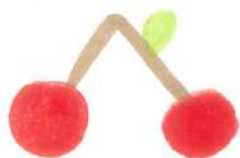
"You see these cherries in the line here?"

"Yea…" David replied. "It's 10 cherries."

"Correct!" Delilah said. "It is 12 rows of 10 cherries, now all you have to do is add ten!"
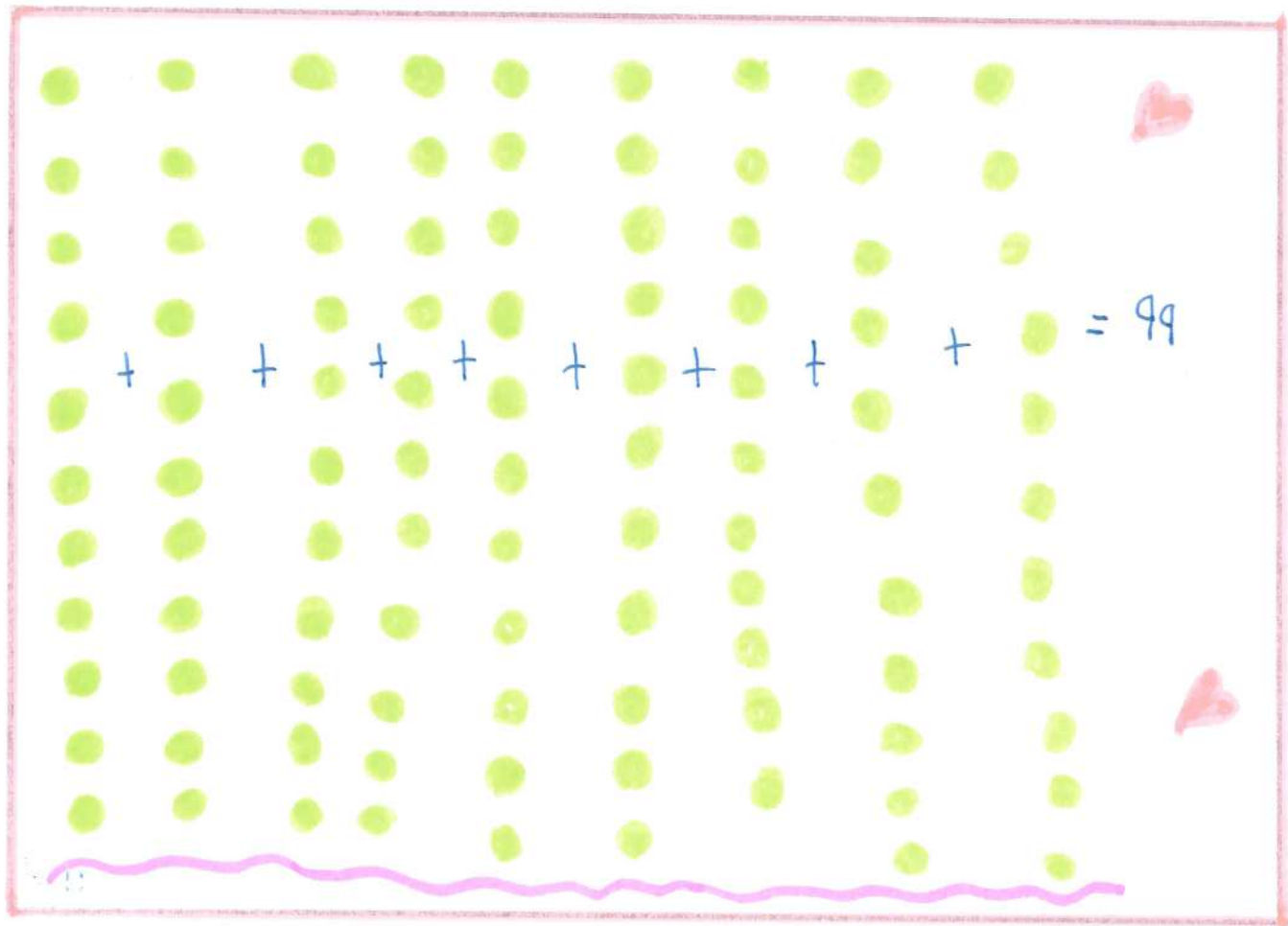
"Oh ok!" David answered.

"Now I want you to do the last example because it's time to leave for school!" Delilah said.

David put 11 small grapes in 9 vertical lines, and said, " Is this 11 x 9?"

"Yes!" Delilah says happily. "Do you know the answer?"

"Yes, first I will add 9 rows of 10 grapes and then add 9 ! So the answer is 99!" David explained.

"Well done! I'm so proud of you!" Delilah exclaimed. "I believe you have understood now the trick of multiplication.

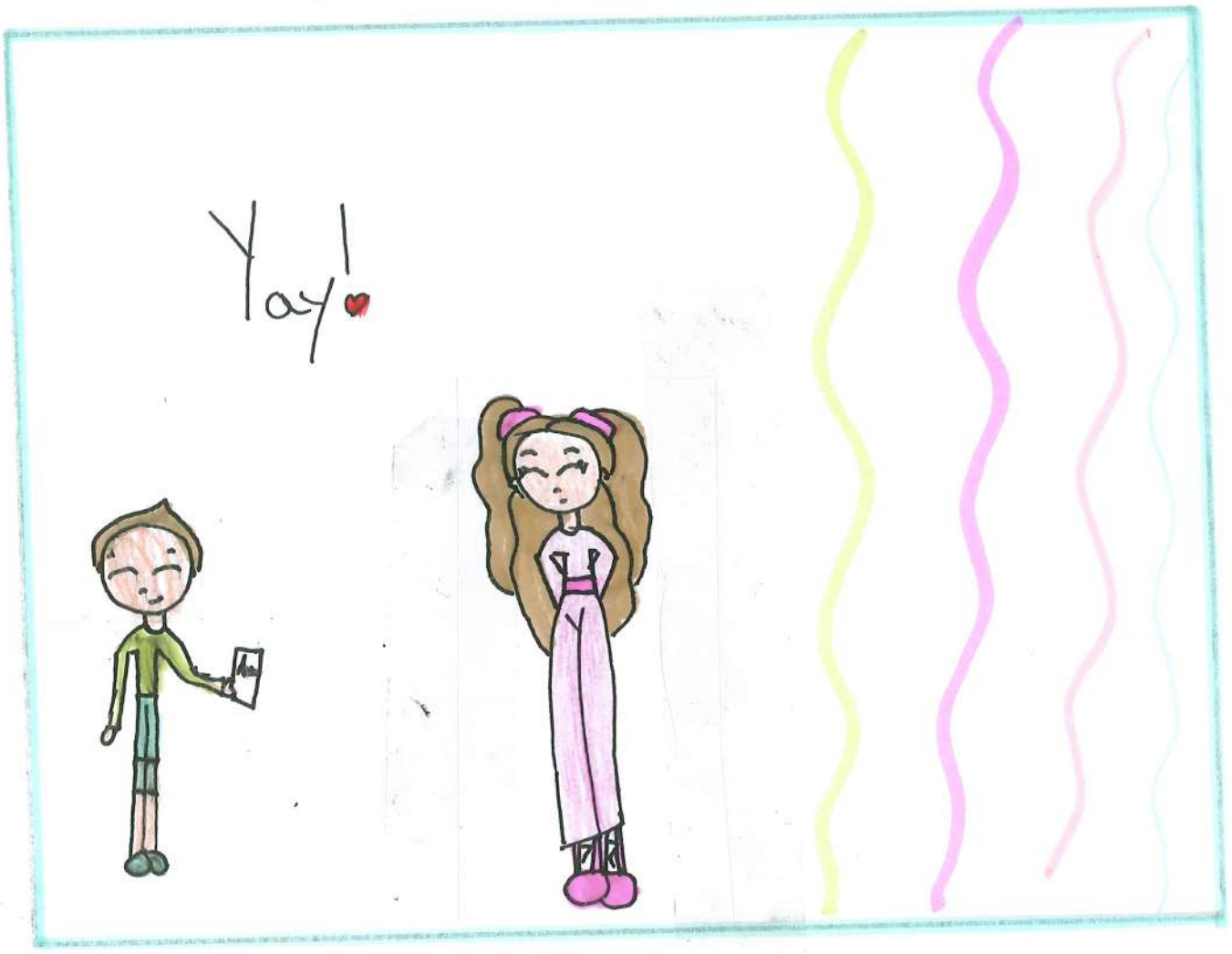Delilah then carried on explaining in a more sophisticating way:

" Multiplication is one very important operation in arithmetic, along with addition, subtraction, and division. Multiplication can actually be considered repeated addition and through this way you can find the answer in multiplication problems by adding repeatedly. In big numbers you can try to simplify the multiplication by splitting the problem into tens and ones."

David got in the car and his mum drove him to school. At school during the test, he remembered the trick his sister taught him, the trick of multiplication. He was feeling confident and that the panic he was feeling before in the morning had gone. Today he had learned a lesson, to not leave everything at the last minute. When you have a test you have to prepare yourself from before, also when you don't understand something you need to ask someone instead of keeping quite. Thank God to his siter helped him this time!

When he got home he brought a paper with an A + on it! Everyone especially his sister were so happy.

This story is about a young boy who "forgot" to study for his multiplication test. He was lucky however to have a sister that was really caring and gave him a quick and clever way to simplify multiplication using fruits. Fruits are not only tasty and full of vitamins but also great to multiply with!

My name is Maria Savvide and I am 10 years old. I live in Cyprus in a beautiful town named Paphos. I am a student at the International School of Paphos and maths is one of my favorite lessons. I was inspired by how much I love to help people and find simple solutions to solve there problems. David was in a very difficult situation so Delilah found a way to help him understand multiplication.