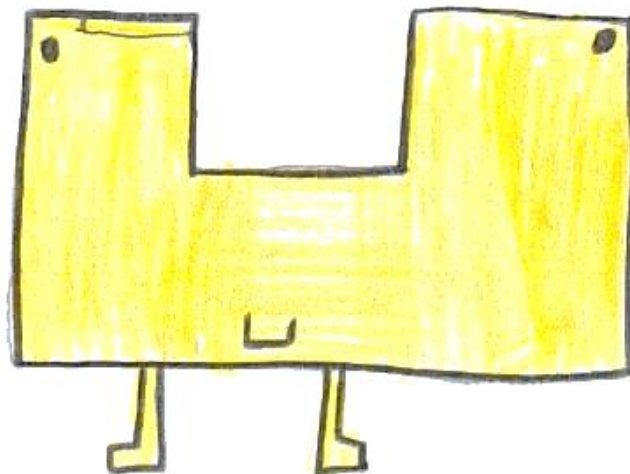
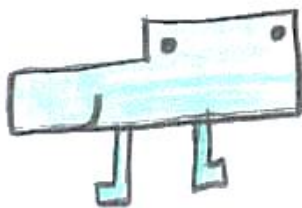
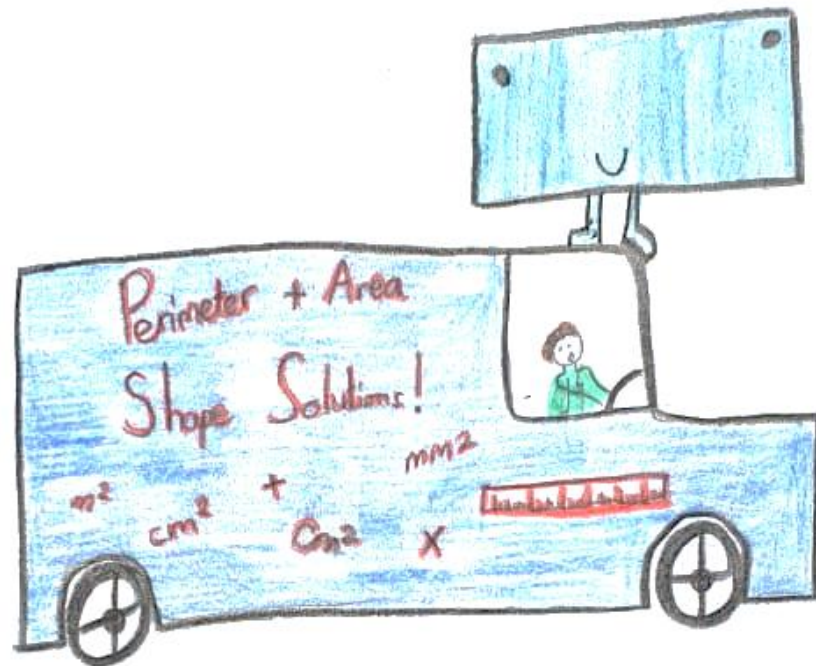
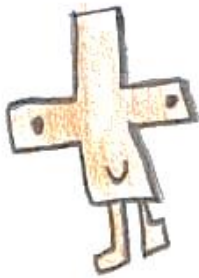


Perimeter and Area Shape Solutions



William Lambert

Once upon a time, there were four children: Ben, Manish, Hope and Akilah. They were all friends and all in Mr Sums' Year 4 Maths class.

Just down their street lived Mr Perimeter Measure and Mrs Area Measure who owned a shape factory: *Perimeter and Area Shape Solutions*.



Akilah



Manish



Hope



Ben



Mrs Area
Measure



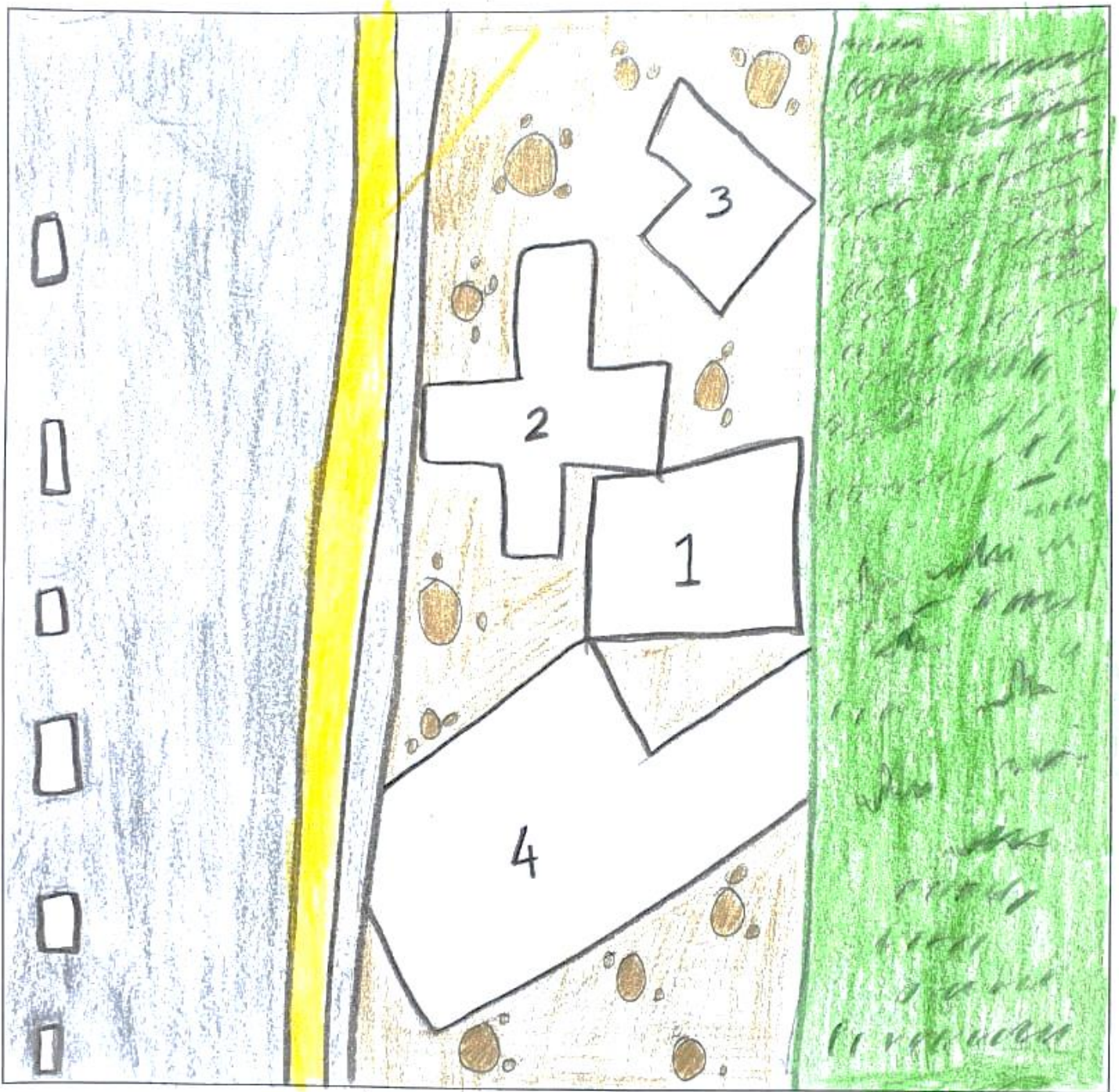
Mr Perimeter
Measure

Today was the Year 4 Maths test – the children were excited, they loved Maths with Mr Sums!

On the way to school they all met at Ben's house to pick him up and help push to school with all his bags.



Suddenly, everything shook vigorously and four enormous fissures appeared in the path that led to school.



“Oh no!” exclaimed Ben, “I cannot get over those holes and there is no other way to get to school.”

Luckily, Mr Perimeter and Mrs Area felt the earthquake and came to the rescue in their van filled with amazing shifting shapes. The truck had four shapes that could shift into different sizes and positions.

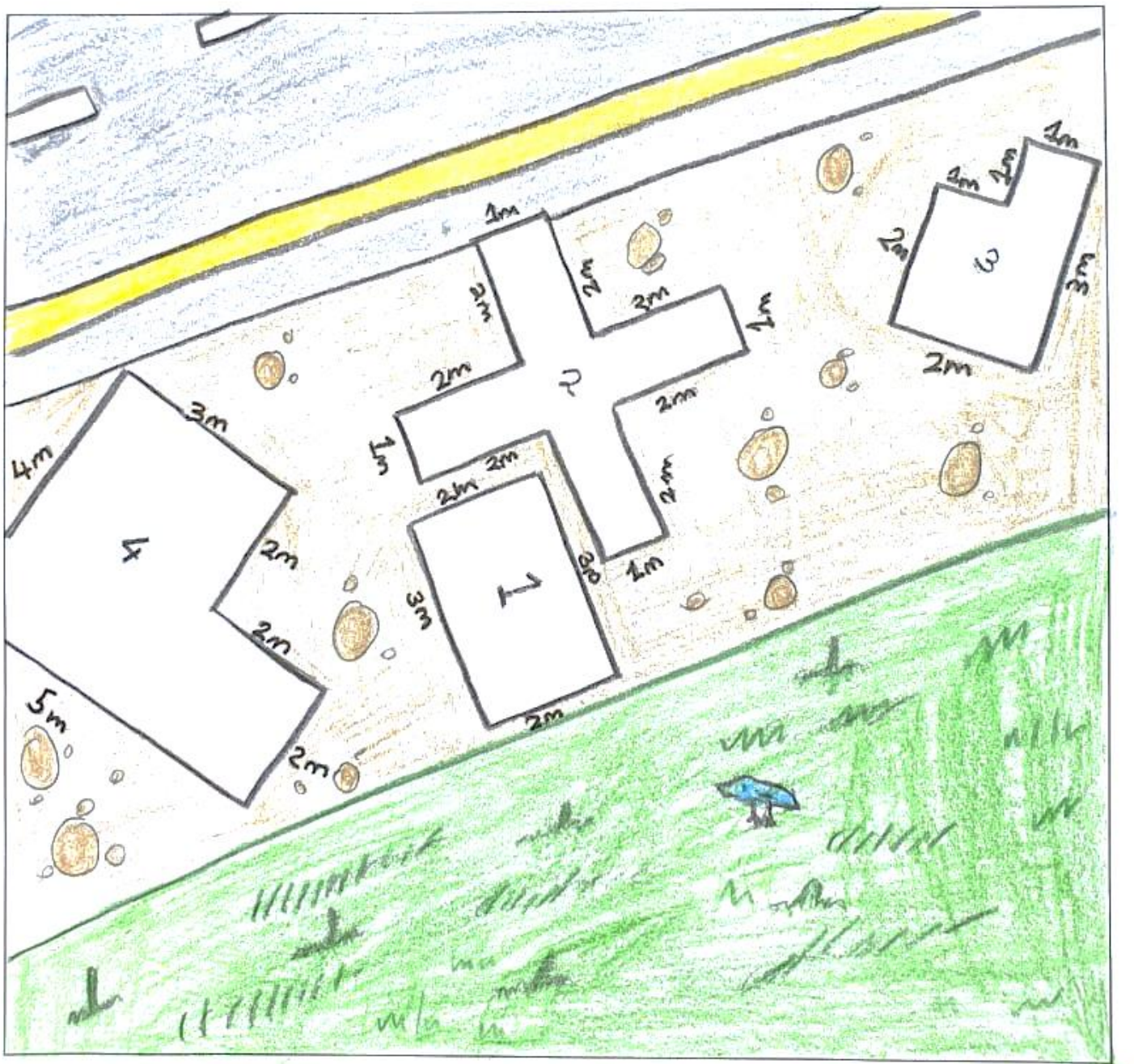


“Do you need help?” Mr Perimeter asked, leaning out of the van window.

“Yes we do!” replied Hope gratefully.

“You need to measure the edges of the holes,” said Mr Perimeter. “Then you can calculate each hole’s area and tell our shapes what size they need to make themselves.”

The children each picked a hole and Mr Perimeter gave them measuring tapes. Mrs Area drew a grid to record their measurements in and Mr Perimeter helped the children measure the holes’ outside edges.

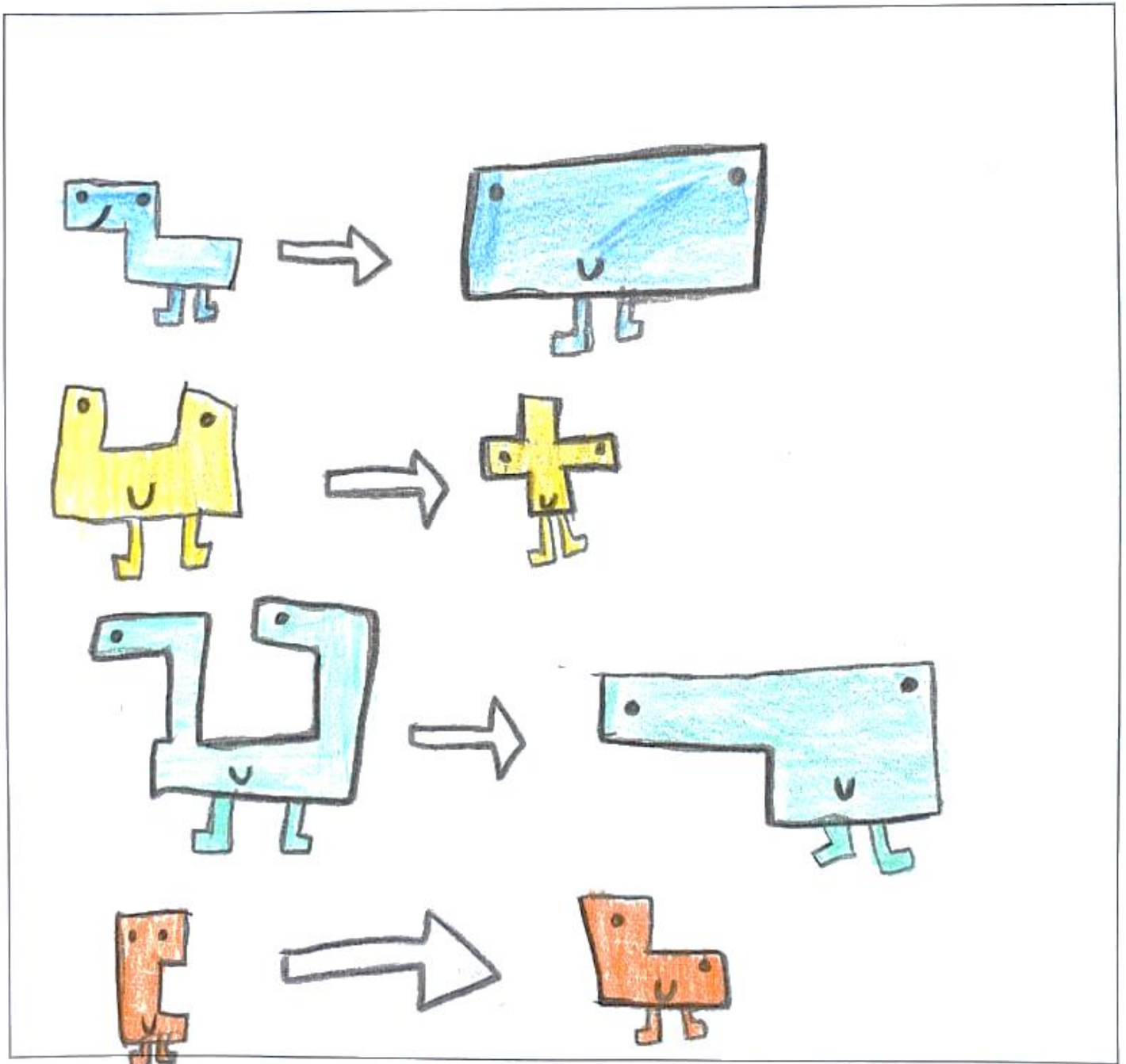


Using their perimeter measurements, the children calculated each hole's area by multiplying the height by the width. They had to split the irregular shapes into smaller even ones to then calculate the area of each smaller shape and add them together to make the area of the full irregular shape.

Hole	Perimeter	Area
1 Ben	$3+2+3+2 = 10\text{m}$	$3 \times 2 = 6\text{m}^2$
2 Hope	$1+2+2+1+2+2+1+2+2+1+2+2 = 20\text{m}$	$1 \times 2 = 2$ $1 \times 2 = 2$ $1 \times 2 = 2$ $1 \times 2 = 2$ $1 \times 1 = 1$ $2+2+2+2+1 = 9\text{m}^2$
3 Manish	$2+2+3+1+1+1 = 10\text{m}$	$2 \times 2 = 4$ $1 \times 1 = 1$ $4+1 = 5\text{m}^2$
4 Akilah	$3+2+2+2+5+4 = 18\text{m}$	$3 \times 4 = 12$ $2 \times 2 = 4$ $12+4 = 16 \text{m}^2$

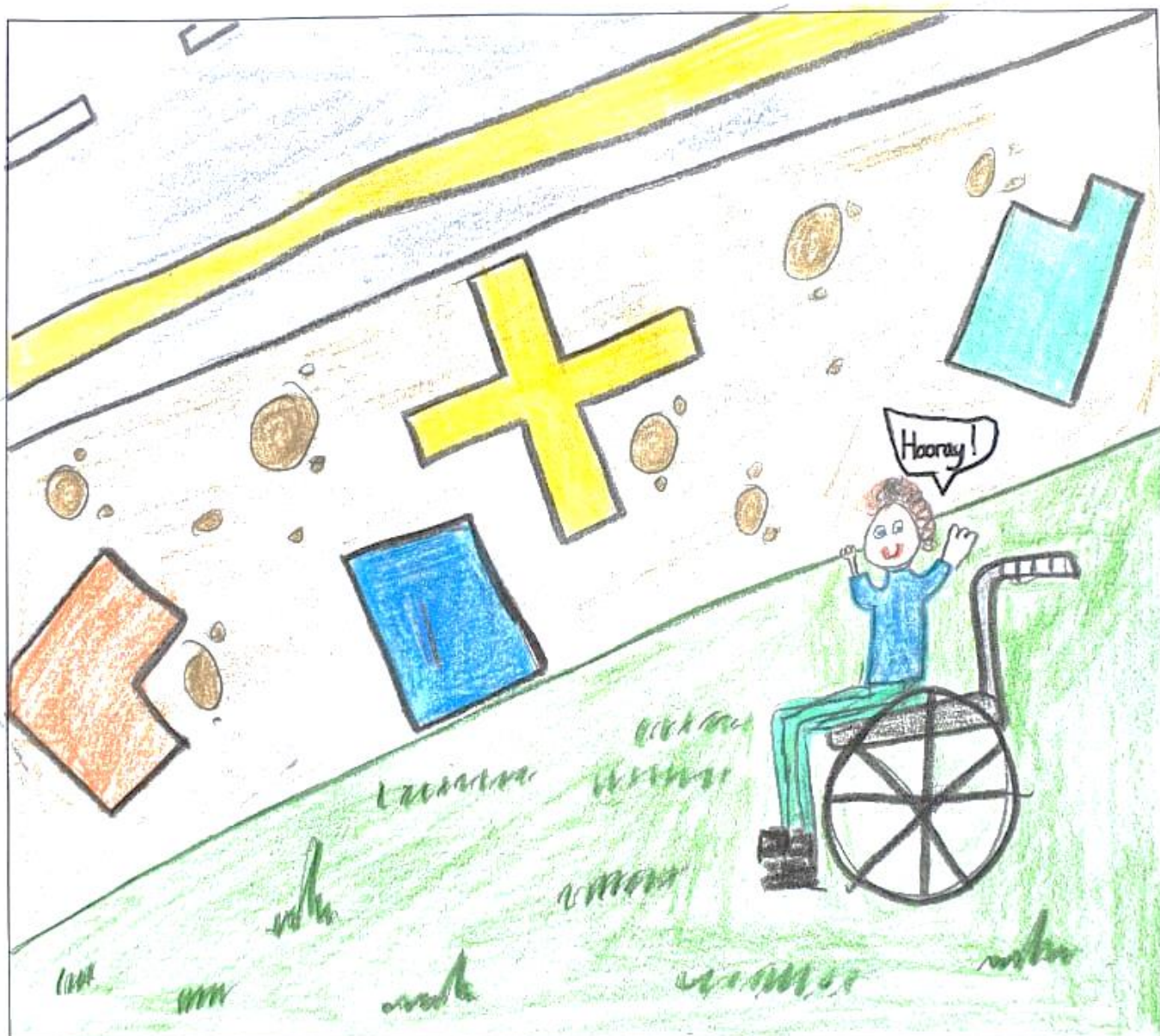
With their calculations in hand the children explained to the shapes what size and form they needed to shift into to fit the holes in the path.

Almost immediately the shapes filled the holes in the ground in their new forms.



“Hooray!” said Ben, “I can get to school now.”

“Thank you Perimeter and Area Shape Solutions!” They all shouted as the van departed.



“We’d better hurry,” said Akilah.

“We might still make the test if we’re quick,” said Manish.

The children rushed along their newly repaired path to school.

When they arrived at school Mr Sums said, "I think you've done enough Maths for one day! No test needed!"



The End

When an earthquake unexpectedly strikes on their way to school, four friends, with the help of *Perimeter and Area Shape Solutions*, work together to fix the path so that they can make their Maths test!

ABOUT THE AUTHOR



My name is William Lambert, I am 9 years old and I live in Dubai, UAE. I attend Jumeirah English Speaking School (JESS), Jumeirah Branch, and I am in Year 4. My inspiration for this story was from my interest in earthquakes and volcanoes and I enjoyed learning about how to calculate area and perimeter in my lessons with Miss Quinn. I decided to write a story that would inspire young mathematicians to use what they learn in class to help them in dangerous situations.