

THE BARTON SERIES

LITTLE BARTON HAS FUN TOO



By

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(Ages 4 and over)

LITTLE BARTON HAS FUN TOO

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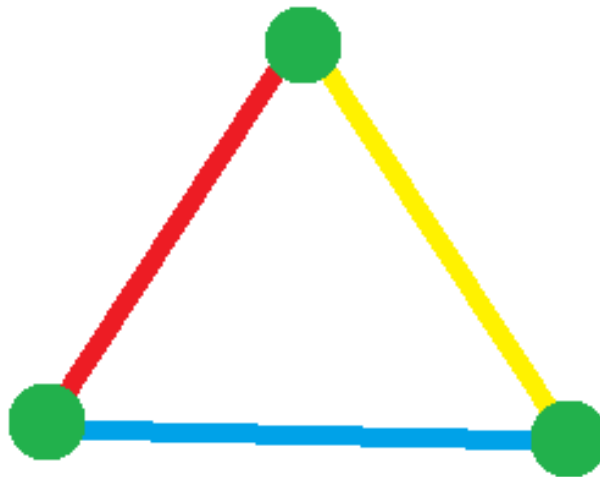
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ALL AROUND

Little Barton, together with the other members of his class, had a particularly interesting mathematics lesson that morning. Miss had given them straws and invited her students to create various shapes and to count the number of sides that each shape possessed.

“Run your fingers along the sides of the shapes that you have formed,” she said, to the excited little sculptors.

Little Barton had created a triangle, by joining three straws, so that each end touched the end of another straw. His triangle was connected by a red straw, a blue straw, and a yellow straw. A small clump of plasticine held the ends of the colourful design together. Others too had created triangles, and they looked around admiring the figures created by each other and complimenting each other on their handiwork.



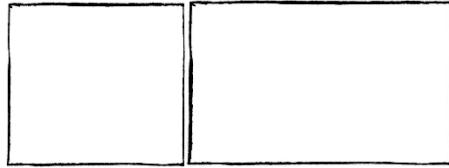
“The ends of your figure are not connected,” whispered Barton to his neighbour. “It looks like the capital letter, N,” he informed the surprised boy.

With little Barton’s aid, the incorrect design of the capital letter N was quickly reconstructed to form a triangle of blue straws.

“Thanks,” whispered the grateful receiver of Barton’s generosity.

Miss walked around the classroom and then up and down both aisles which separated rows of desks. She looked at the triangles that were created by the

young, skilled fingers of her students. Some, like little Barton, and his now well-informed neighbour, had progressed to creating squares and rectangles.



Barton's excited neighbour ventured to complete a figure of five sides. He nudged Barton to notice his masterpiece, as he squeezed plasticine at the ends of the straws.

"I am afraid to lift it," he whispered. "It might fall apart," he explained with a giggle.

"The sides of the figure must be joined," reminded Barton. "Miss said that triangles, squares, and rectangles are enclosed shapes.

"Do you like my five-sided rectangle?" the proud neighbour asked Little Barton.

"It cannot be a rectangle," whispered Barton.

"Miss said that a rectangle has only four sides. Two are longer, which are of the same length and two are shorter, and which are also of the same length," Little Barton advised.



“The longer sides of the rectangle are called its length and the shorter sides are called its width or breadth,” Barton reminded the boy, who nodded in the recollection.

“I do remember that,” the boy confessed, with a little grin. “That was careless of me.

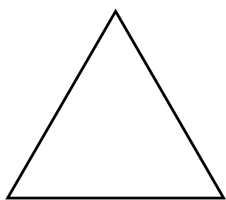
“I believe your figure has a different name,” suggested Barton.

“What is it?” queried the creator.

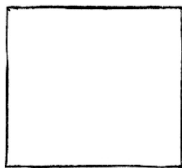
“I don’t know,” was Barton’s response. “But it is pretty with its five sides,” he added, looking on as his neighbour ran his fingers along the sides.



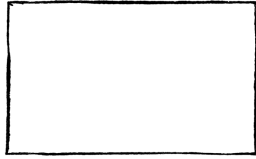
Then Barton wrote on his page.



Triangle **3 sides**

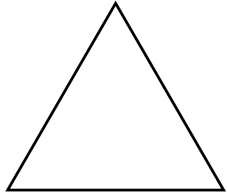


Square **4 sides**

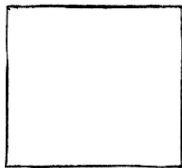


Rectangle **4 sides**

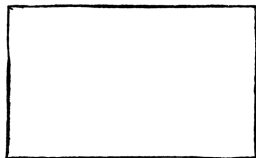
His neighbour's page looked slightly different.



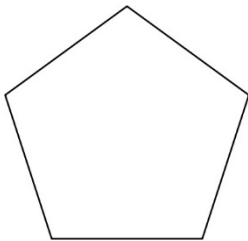
Triangle **3 sides**



Square **4 sides**



Rectangle **4 sides**



----- **5 sides**

“Notice that each shape is bounded by sides,” said Miss. “We can count the sides on the shapes. Different shapes can have a different number of sides,” she added.

“For example, a rectangle or a square has 4 sides and a triangle has 3 sides,” she demonstrated, by counting them.

“That’s exactly what we wrote,” whispered Barton’s neighbour, rather proudly, and pointing to both their books.

“If we wish to measure the total distance all around the shape, then we would have to measure the length of each side and total their lengths. This total distance all around the figure is called its **perimeter**,” said Miss, as she wrote the name on the board.

Miss allowed the class to repeat the name several times before continuing. They practised to write the word and to spell it as well.

“I shall try to write it when I go home, without looking at my book,” promised Little Barton.

“I should do the same,” said the little boy at his side. “It isn’t too difficult as I already know how to spell ‘meter’ and the first four letters spell, ‘peri’,” he explained his observation to Barton.

“So, to find the perimeter of a rectangle we shall have to total distance around its four sides,” continued Miss.

“To find the perimeter of a triangle, we shall have to find the total distance around its three sides. And, to find the perimeter of a square or a rectangle, we shall have to calculate the total distance around its four sides, said Miss.

“Measuring is fun,” said little Barton, holding a ruler in his hand.

The little boy, who sat next to Barton, held his hand upright, as he sought permission to speak. A bright smile endorsed his excited face. Little Barton looked at him, almost as excited, though the reason was unclear.

“Miss,” said the little boy, I have made a five-sided figure.” He was careful not to call it a ‘five-sided’ rectangle, after being cautioned by Little Barton on the apparent incorrectness of that name.

“If I wanted to find the perimeter of my five-sided figure, would I have to measure the length of all five sides and then find the total length of the five sides?” he asked, sounding slightly breathless after his long sentence.

“Yes, you would,” confirmed Miss.

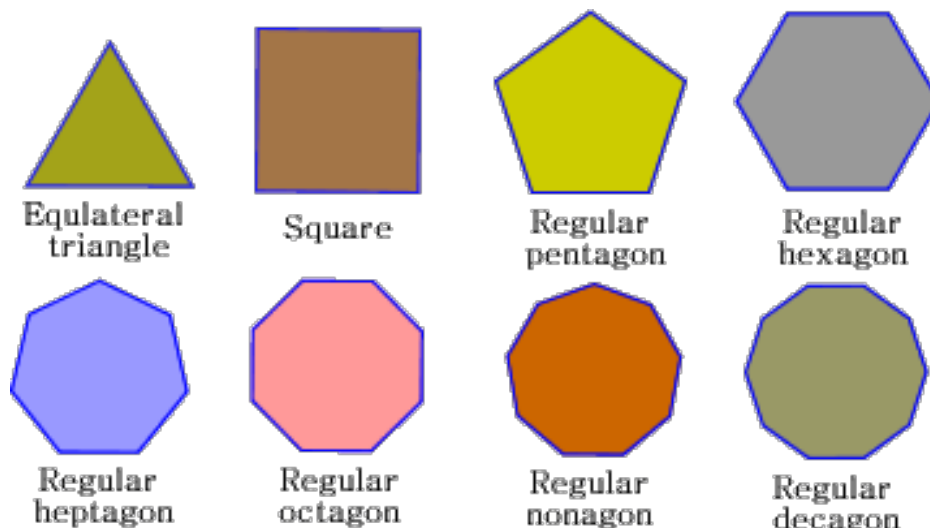
But as she spoke, the little boy proudly attempted to lift his five-sided figure for viewing. Unfortunately, whereas the creation looked stable when placed on the desk, it fell apart when he lifted it.

The poor boy looked sadly at Miss, with one straw held between a thumb and forefinger. The other four sides, though fortified at the ends with ample supplies of coloured plasticine, had collapsed under their weight. The five-sided figure lay in ruins, one straw in his hand and four in ruins on his desk.

Miss, detected the disappointment as she firstly looked at the ruined creation and then at the artist and sculptor. His eyes had sparkled and then clouded, as they recorded the change of his feelings, much like the height of the mercury of a thermometer changing between heat and cold.

“The figure created was beautiful,” she said, sporting a broad smile. “A five-sided figure, just as the one which you so skillfully created, is called a pentagon,” she added.

“Figures that are made up of different numbers of sides, have different names,” she informed her attentive class. “Later on, in mathematics, we shall learn the names of these figures.



Sparkles once more were restored in the eyes of Barton’s neighbour, as he sat down again.

Then, the bell rang for the break.

“Later, we shall work a few examples on finding the perimeter of a rectangle,” Miss promised.

As little Barton cleared his desk before leaving, he kept remembering the word '**PERIMETER**'. It means the distance around a figure, he recalled.

“I have learned to measure and I have learned to add,” he spoke quietly to himself, “I should be able to find the perimeter of a figure.”

Then, with Kwame on one side and Alfredo on the other, the jolly trio sought the adventures and mysteries that lay undiscovered and unsolved, around the school.