THE BARTON SERIES

THE TRIUMPHS OF BARTON



BY

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(Ages 8 and over)

THE TRIUMPHS OF BARTON

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HOW, WHEN AND WHY

The lunchtime interval at school was always an adventurous and fun-filled time for Barton A. Sandiford. Sometimes the young boy would join his friends in many sporting activities that took place in the schoolyard and on the spacious school grounds at the back of the building. However, there were times when Barton would opt to remain quiet and relaxed and would choose not to indulge in too many rigorous activities.

Instead, Barton might be observed just sitting alone on a bench or under a tree or seen ambling around the compounds, looking, observing, chatting and making new friends with the students around. He was considered to be a very sociable boy. He was amicable and helpful and showed many other traits of a good upbringing.

Barton was not only an excellent student in his schoolwork, but he was an exceptional athlete as well. His prowess, especially in cricket and soccer had often helped considerably in the attaining of great glory for his school. It was easy to understand why the young boy enjoyed the enviable status of being one of the most popular students of the institution.



On this particular day, Barton spotted a group of about five or six junior students having a rather vociferous discussion. They sat under the shade of a large tree and sometimes would stand and wave their hands about, as they tried to make or prove a point. Some, though, would be seen scribbling as the others spoke, but all seemed to be involved in the discussion from time to time. As usual, Barton's curiosity got the better of him and he approached the gathering.

"Barton," they greeted the popular senior, "we are in a serious predicament," they lamented.

"And what seems to be the problem?" queried Barton.

The children looked at Barton and said nothing at first. Then a boy broke the silence whilst all the others looked at him.

"Barton," he said, "all of us are quite adept at the operations in mathematics."

"That is good," complimented Barton, anxious to add some degree of joy onto their sad and confused faces.

"For example," said the boy, "if we are asked to add the numbers 27 and 41, then we proceed to write, 41 + 27 and calculate to obtain the result of 68. We are also aware that 41 + 27 gives the same result as 27 + 41. In other words, the order in which the numbers are placed does not affect the result of the addition."

Barton nodded.

The little boy pointed to another boy who promptly began with his contribution.

"We are all quite adept at subtraction as well, Sir Barton," he explained, unsure of the title he should use to address the popular senior.

"For example, Barton, if we needed to subtract 56 from 98 then we write 98 – 56 and obtain the result of 42," he said with an air of confidence.

"That is excellent," replied Barton, praising the confidence, especially as he noted that the subtraction was done without any form of writing.

"I notice that the working was done in your head," commented Barton, as the little boy smiled and bowed his head shyly.

"We are all good at mental arithmetic," he said.

He pointed unselfishly to his friends as he spoke.

Then, another little boy stepped up and pointed Barton to each member of the small gathering.



All my friends and I can divide and multiply numbers with much expertise," he boasted.

"For example, $7209 \div 9 = 801$ and $42 \times 8 = 336$," he said with both speed and confidence.

Again Barton noticed that the calculations were done without any writing.

"Your work in mental mathematics is quite admirable," complimented Barton, as the group stood around him in a semi-circle.

"Yes," they all replied immediately, "we can subtract, add, divide and multiply numbers with great efficiency, but only when we are asked directly to do so," they confessed to the listener.

Then, a short girl placed her hands on her hips and spoke directly to Barton for the first time.

"Barton," she said, there is a problem that is common to each one of us."

Barton was all ears.

"The problem is not in the computation; it is beyond that," she added, with a tone of sadness in her voice.

Barton listened as the children took a step closer to him and dropped their voices. They appeared not to want anyone else to hear their tale of woes. The little girl addressed Barton.

"Barton, when there is a worded question, we all find great difficulty in deciphering whether we have to add, subtract, divide or multiply," she admitted sadly. "In other words, Barton, the choice of operation is our problem. When a question is under a section of the mathematics book that dealt with addition, we assume that it involves addition and we are generally correct. So too, for questions under sections that dealt with subtraction, division, or multiplication; we assume the said operations and are usually correct."

The girl looked at Barton, who was unmoved. Several thoughts went through the senior boy's head and he thought of classes gone by and when he was younger and in the junior class as were the members of the small gathering. He seemed not to be paying attention to the girl speaking, so she poked him in the side.



"I'm listening," confirmed Barton rather quickly.

"When we look at the questions in the miscellaneous section of our book, it is there that the problem stares us in the face," she continued.

"We guess the operation and often we are incorrect. Barton, many times we obtain the right answer and are not sure why we chose that particular operation."

"It was Elroy's suggestion to this problem that we arguing over when you heard our voices and walked across," suggested the group.

Barton did not answer. Instead, he listened to the girl again as she continued. As she did so, she pointed to Elroy who looked rather forlorn.

"If the question specifically includes the operative words such as add, subtract, divide or multiply, then we simply apply that operation and there is no problem at all," she concluded.

Elroy promptly jumped into the conversation at this junction.

"However, Barton," he said, "not all of the questions are so generous with their prompting and so incorrect answers have now become the sad norm."

"Do you think there is hope for us Barton?" asked the smaller of the two girls.

"Are we poor at mathematics because our parents were poor at mathematics?" asked the other girl.

"Could this handicap ever be overcome?" asked the boy standing next to Elroy.

But before Barton could answer, Elroy tugged at his arm. I had suggested a very sound solution to the problem," he said proudly.

"And what might that be?" inquired Barton, slightly amused at Elroy's burst of confidence.

"Barton," said Elroy, I was suggesting that for every question that we get, we simply supply four answers. One obtained by addition, one found by subtraction, another found by division and a fourth found by multiplication."

Then Elroy raised his hand and punched the air with his fist in a display of intellectual victory.

"One of them has to be correct, mustn't it, Barton?" shouted the excited and deep thinker.

The others jumped in at this time as they voiced their disagreement. Elroy scowled and sulked as they spoke.

"We told him that his suggestion was absurd," they said.

"And what were your reason or reasons for saying so?" inquired the curious Barton. "Why do you think that his plan is not sound?" he asked further, wanting to know just how the members of the group were thinking.

Barton glanced at Elroy whose facial expression now indicated great hurt. He was convinced that there was and perhaps still is much merit in his suggestion.

"After all," muttered Elroy, "one of the four answers must surely be the correct one."

"He will take four times as long to perform the four calculations involving the four different operations," advised one of the two girls. "He would likely only

be able to answer about one-quarter of all the questions in the allotted time for an examination," she added.

"How would one be able to place four answers in a space that is provided for only one?" asked one of the boys who had not spoken too much during the small meeting.

"How would the marker or examiner decide on which one of the four given answers is the one that you meant to be your correct answer," asked the second girl.

"Suppose it is a multiple-choice examination, would you block off all four answers?" she said with a giggle.

"Did you know that if a question required two different operations and you did not know what they are and decided to guess, there are numerous incorrect possibilities," said one of the boys.

Barton was utterly astonished by the boy's foresight. This is an intelligent group of students, he thought. He looked at the keen and anxious little juniors. A few more of their friends had joined them. There were more reasons that they wanted to suggest as to why Elroy's suggestion was not sound, but the wise and sensitive Barton halted them. He had glanced at the poor Elroy who stood meekly and looked almost in tears.

"That's enough," he said softly, but sternly. "All of you are quite right for the reasons you have given. But I haven't heard any of you making a single

suggestion of your own," he pointed. "At least Elroy was seeking a suggestion. You are all only criticising the poor boy, even though he is wrong."

The group fell silent and looked embarrassed. Elroy fought back the tears as the others immediately apologised to him. One of the girls even gave him a comforting and apologetic hug.



"He's my brother,' she said to Barton. "At least he tried, just as you said, and he is an enthusiastic and a hard-working boy," she said to Barton. The others agreed with her, and Elroy forced a smile.

"Well," began Barton, "a mathematics question generally has only one answer," he said.

"Granted, there may be more than one method to obtain the correct answer," he added. "The fact is, there is supposed to be only one correct answer to

these types of questions, that is, provided that the question is not badly stated and prone to misinterpretation."

The group sat quietly as they listened to the mature, friendly and helpful senior. Interestingly, a few more of their friends who were hovering nearby joined them. They squeezed tightly among them in the semi-circle. Barton looked at them and he smiled.

"What is needed is to correctly identify the correct operation," Barton advised.

"But that is our problem," shouted out the children.

"Can you help us?" they pleaded.

"Listen to me carefully," began Barton, to the eager followers. "Sometimes the solution to a question may require addition, but the word addition may not be used. There might be other words that suggest that addition should be done and you would need to understand and to associate these words with the operation of addition."

The students were more engrossed and some scribbled the valuable notes as Barton spoke.

"The same applies to each of the other operations," advised Barton, the lecturer. He looked at the children as they looked at him and he saw their smiling, eager and hopeful faces.

"I shall help you," he said. "Let us begin."

"I shall help you too," said a voice from behind Barton.

The boy looked around only to see the smiling faces of Dane, Kwame, Shanna, Sian, Malaika and Alfredo. The plump figure of Kwame had spoken.