

### Grade VIII - English Lesson 9. The Comet-I

Supplementary Reader

Soul of the Chapter

#### Duttada and his Dibya Chakshu for his Lifetime Ambition

It was a moonless night in December. A cool breeze from the window disturbed Indrani Debi's sleep. She felt for the adjoining pillow, knowing already that her husband, Manoj Dutta, wouldn't be there. She knew that he would be occupied with his telescope, observing stars and planets. Indrani Debi cribs about her husband's habits of not having closed the door and not having worn his sweater. Carrying Duttada's sweater, his wife makes her way up to the roof to disturb the meeting between her husband and the one whom she called the designing woman, (the telescope) that had cast a spell over her husband. For Duttada, his telescope, Divya Chakshu or the Divine Eye as he called it, was a mark of fulfilment of a lifetime ambition. As an amateur astronomer, he had hoped to have some spare money and spare time to buy a telescope and observe the heavens. After retirement he had actually had both.

#### Duttada's Secret Mission

Like every other amateur, Duttada too had a secret ambition to discover a comet one day. He knew that comets could be new as they came from remote corners of the solar system and orbited around the Sun. When a comet came close to the Sun it has a longish tail, at times, which gets lit up brilliantly by the sunlight and then it disappears for many years.

Despite, the fact that he only had an eight-inch Dibya or telescope and not the gigantic telescope that the professional astronomers had, he was determined to discover a comet. A reason for this was also that he believed that the professional astronomers were more interested in finding galaxies than insignificant things like comets.

### Duttada's Success Made him Famous

That particular night, Duttada was sure that some success was close at hand. He had seen a faint stranger. He had re-examined and cross checked it with his charts, made calculations and was as it is meticulous with his observations. He realised that what he had been seeing was a



comet. The news of this discovery gets published in the Ananda Bazar Patrika, two days later giving credit to Duttada. The newspaper reported that Indian Institute of Astrophysics had been informed about a comet by Manoj Dutta and its confirmation was awaited. Soon, the comet came to be recognised and was named after its discoverer, 'Comet Dutta.' After this finding, Duttada became the centre of publicity, something that the introvert Duttada didn't like much. Due to the publicity, Duttada regretted having discovered the comet. His wife too agreed with him, but for a different reason. On being asked, she told her husband that comets bring ill luck and she wouldn't have wished her husband to be associated with the discovery of one. Duttada tells her that these are all superstitions and there is nothing harmful about the comets.

#### The Meeting between James Forsyth and John Macpherson

Johnson brought James to the Whitehall after a security check and after having introduced James to Sir John Macpherson, he left. Sir John apologised to James for being summoned in this manner and handed over a typescript to James. This typescript was James paper that was based on Duttada's finding. John had acquired the original manuscript from the editor to whom James had submitted his paper. In the dining hall of King's College, Cambridge, the butler passes down an envelope to the Provost, which was meant for James. James Forsyth was a scientist who had written a paper based on Duttada's finding. The Provost hands over the envelope to James. The envelope contained a note from John Macpherson, Defence Science Advisor in Her Majesty's Government. In the note, John Macpherson had asked James to, come and meet him without any delay and keep his visit confidential.

#### Sir John Discusses James Paper with him

Sir John agrees with James over the fact that his paper is very important. At the same time, Sir John felt that it should never be published. James was sure that there was nothing wrong with the accuracy of the paper, nor did he want his paper to get suppressed. However, known Sir John to be a great scientist, he thought of patiently hearing him out. James paper talked about the collision between Comet Dutta and the Earth.

Sir John was worried about profound implications of a paper that talked about catastrophic effects being published. Sir John spent some time discussing if James findings were correct. But, if they were, this was the news of disaster that they were talking about.



#### The Impending Disaster and Planning an International Meet

James and Sir John discuss how the cometary collisions that they were talking about could occur in less than a year, ten months to be precise. Ten months is all that the living species were left with for their survival on Earth. Sir John felt that it was important to do something to stop all this. More than two brains were required to handle the situation. Sir John wanted to call a meeting. At the same time he wanted the meeting to be as confidential as possible. He was worried about the panic that might be caused by breaking of such news.

Although James disagreed with the feasibility of planning an International Conference in less than a week's time, he gives in to Sir John's scheme of things. Sir John, meanwhile, asks James to tone down his paper, adding several `if's and but's' to make the news less certain, in order to avoid panic.

#### NCERT Folder

#### Comprehension Check-1

#### 1. Why does Indrani Debi dislike Duttada's 'hobnobbing' with Dibya?

Indrani Debi disliked Duttada's 'hobnobbing' with Dibya because he spent most of his time with his telescope.

#### 2. She is complaining and smiling. Why is she smiling?

Indrani Debi was smiling because she thought that her husband didn't bother about the practical problems of living. He hadn't shut the door and didn't even care to wear his sweater, while it was placed on the bedside.

#### 3. (i) What was Duttada's secret ambition?

Duttada's secret ambition was to one day discover a new comet.

#### (ii) What did he do to achieve it?

He had purchased a telescope with the money he got after retirement. He used to spend hours observing the stars in a hope to be able to discover a comet.

#### 4. What is the difference between a planet and a comet, as given in the story?

A planet has a fixed orbit. Comets, on the other hand, could be new as they come from remote corners of the solar system. Like the planets, comets too orbit around the sun, but their orbits are not fixed.



#### 5 Why was Duttada hopeful that he would discover a new comet soon?

Duttada was hopeful that he would discover a new comet soon because only amateur astronomers like him bothered about comets. Professional astronomers didn't pay much attention to comets. Also, against the background of same old stars, Duttada had discovered a faint stranger.

#### 6 Why does Duttada say- "I almost wish I had not discovered this comet"?

Having discovered the comet and the comet's finding been confirmed by the Indian Institute of Astrophysics, the comet was named after Duttada. His name appeared in the newspaper and he gained a lot of publicity. He was also invited to a couple of social functions. Being an introvert, Duttada didn't like this much and therefore regretted having discovered a comet.

#### 7. Why is his wife unhappy about the discovery?

Duttada's wife, Indrani Debi, was unhappy about her husband's discovery because she thought that comets bring ill luck. She didn't wish her husband to be associated with the discovery of something that was ominous.

#### Comprehension Check-2

#### 1. How did Sir John get hold of James' original manuscript?

Sir John got holf of James' original manuscript from the editor of 'Nature', Mr Taylor, to whom James had submitted his paper for publication.

#### 2. What is the important point the paper makes?

The paper talked about Comet Dutta colliding with the Earth, which could mean the end of existence on the Earth.

#### 3. Why does Sir John say that James paper should not be published?

Sir John worried that the paper and its findings might cause panic among the people. He, therefore, asked James to tone down the truth by adding 'if's and but's'.

#### 4. What do the two men finally decide to do?

The two men, finally, decided to involve more scientists and astronomers and old a confidential International Conference to discuss ways to control this disaster.



Chapter Practice

#### Very Short Answer Type Questions

#### 1. What was the name that Duttada had given to is telescope?

Duttada called his telescope Dibya Chakshu-Divine Eye.

#### 2. What had Duttada been waiting for to buy a telescope?

Dutta had longed for enough money to buy a telescope and for enough spare time in which to observe the heavens. He got both after retirement.

#### 3. Who was Nabin Babu?

Nabin Babu was a doct or . He had adviced Dut t ada t o t ake special precautions against the cold.

#### 4 Why did Duttada feel that particular night was going to be the big night?

Duttada believed that particular night to be a big night because against the background of the same old stars he had detected a faint stranger.

### 5. What all did Duttada do to ensure that he was not making a mistake in detecting a comet?

Duttada re-examined the charts with him, checked his Dibya for any smudges on the optics and did some calculations on his pocket calculator to ensure that he was not making a mistake in detecting a comet.

#### 6 In which newspaper was the report about Duttada's discovery printed?

In Anand Bazar Patrika, the news of Duttada's discovery was printed two days later.

#### 7. What was Duttada's limitation as an astronomer, which professional astronomers didn't

#### experience?

Duttada had an eight-inch sized telescope, whereas, the professional astronomers had gigantic telescopes.

#### 8. Who was John Macpherson?

Sir John Macpherson was the Defence Science Advisor in her Majesty's Government.

Short Answer Type Questions

#### 1. Why did Duttada chide his wife?

Indrani Debi thought that the comets bring ill luck. Duttada chided his wife for her superstitious beliefs which he though hadn't got cured even with an MA degree. He tried to



explain his wife that there was no correlation between comets and the calamities on the Earth.

### 2. Who was the bearer of the note written to James? What instructions were given to the bearer?

Johnson, a security officer at Whitehall was the bearer of the note written to James by Sir John Macpherson. He had been given instructions to bring James to Sir John's office in London. Johnson drove James to Whitehall in his Ford Cortina. After having introduced James to Sir John, he left the chambers.

#### 3. Why did the editor of 'Nature' show James paper to Sir John Macpherson?

The editor of 'Nature', Mr Taylor, met Sir John at lunch where Mr Taylor showed James paper to Sir John. Mr Taylor asked Sir John to give his opinions on the paper before he sent the paper to a professional refree.

#### 4. What decision did Sir John take to address the matter of cometary collision?

Sir John decided that in order to prevent this natural catastrophe, more scientists and astronomers from all over the world were required to put their brains together. He, therefore, decided that an International Conference should be conducted at the earliest to have a discussion on the same.

#### 5. What did Sir John say about publication of James' paper?

Sir John asked James to tone down his paper. He told him to insert as many 'if's and but's' to make the conclusion appear not so certain. He also told James that he would exercise his influence and make sure that a similar restraint is exercised in other countries.

Long Answer Type Questions

### 1. What were the rare circumstances that would prevent Comet Dutta's collision with the Earth?

Sir John discussed James paper with. James told Sir John that barring some rare circumstances, the collision of the comet with the Earth was inevitable. James told Sir John that it was possible that the comet might collide with asteroid before reaching Earth. It was also possible that the comet might split up and evaporate when it reached near the Sun. Barring these rarities the collision of the comet with the earth was inevitable.



## 2. What was Sir John's reaction listening to James' notions about the rare circumstances?

Sir John was aware that cometary collisions are expected to occur once in ten million years, but according to James' research this comet could collide with earth in less than an year. If those rare circumstances didn't occur, this comet could collide with Earth in ten months. Sir John gets worried because the rare circumstances presented by James were based on chance events. And such a critical matter could not be left to be decided by fortuitous circumstances.

#### Value Based Question

### 1. Cometary collision was a critical piece of news. Do you think that Sir John was acting right in not getting the news publicised?

Cometary collision indeed was a critical piece of news. It endangered the survival of all living species on earth. This particular comet could have caused destruction within ten months. Sir John didn't wish this news to get publicised because he thought that it would create widespread panic among the people in the world. He thought it better that the matter should be handled by the experts who could at least attempt at doing something to control the situation than the mass hysteria making the matter get entirely out of control.

#### 2. Indrani Debi is educated, yet represents the quelibre sections of the society. Comment

It is true that Indrani Debi was educated and had an MA degree yet, her education failed to pull her out of irrational and illogical superstitious conditioning that she had received from her immediate society. The I society, at large, invests a lot of faith in such ,superstitions rather than developing a more scientific outlook.

# Next Generation School