

# ENGLISH

CLASS IX

## CHAPTER FOUR

### A TRULY BEAUTIFUL MIND

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## CHAPTER 4 – A TRULY BEAUTIFUL MIND

### Thinking about the Text

**Question 1. Here are some headings for paragraphs in the text. Write the number(s) of the paragraph(s) for each title against the heading. The first one is done for you.**

- (i) Einstein's equation – 9**
- (ii) Einstein meets his future wife**
- (iii) The making of a violinist**
- (iv) Mileva and Einstein's mother**
- (v) A letter that launched the arms race**
- (vi) A desk drawer full of ideas**
- (vii) Marriage and divorce**

**Answer:**

- (i) Einstein's equation – 9**
- (ii) Einstein meets his future wife – 7**
- (iii) The making of a violinist – 3**
- (iv) Mileva and Einstein's mother – 10**
- (v) A letter that launched the arms race – 15**
- (vi) A desk drawer full of ideas – 8**

(vii) Marriage and divorce – 11

**Question 2. Who had these opinions about Einstein?**

**(i) He was boring.**

**(ii) He was stupid and would never succeed in life.**

**(iii) He was a freak.**

**Answer:**

(i) He was boring – Einstein's playmates

(ii) He was stupid and would never succeed in life – Einstein's headmaster

(iii) He was a freak – Einstein's mother

**Question 3. Explain what the reasons for the following are.**

**(i) Einstein leaving the school in Munich for good.**

**(ii) Einstein wanting to study in Switzerland rather than in Munich.**

**(iii) Einstein seeing in Mileva an ally.**

**(iv) What do these tell you about Einstein?**

**Answer:**

(i) Einstein left the school in Munich for good because he disliked the school's regimentation and often had arguments with his school teachers.

(ii) Einstein wanted to study in Switzerland rather than in Munich because Switzerland was a city that was much more liberal than Munich.

(iii) Einstein saw an ally in Mileva because just like him, she too was against 'Philistines', i.e., the people in Einstein's family and at the university with whom he was constantly at odds.

(iv) The above things tell us that Einstein was a very liberal person who liked freedom. He was a person who had his own views about life.

**Question 4. What did Einstein call his desk drawer at the patent office? Why?**

**Answer:** Einstein called his desk drawer at the patent office the ‘bureau of theoretical physics’. He called it so because he was secretly developing his own ideas and inventions related to physics.

**Question 5. Why did Einstein write a letter to Franklin Roosevelt?**

**Answer:** Einstein wrote a letter to Franklin Roosevelt because he wanted to warn America that Germany had the ability to build and use an atomic bomb, which if exploded in a port, would destroy the entire port as well as some of the surrounding territory.

**Question 6. How did Einstein react to the bombing of Hiroshima and Nagasaki?**

**Answer:** He was deeply shaken by the extent of destruction due to the bombing of Hiroshima and Nagasaki. He wrote a public missive to the United Nations and proposed the formation of a world government.

**Question 7. Why does the world remember Einstein as a “world citizen”?**

**Answer:** The world remembers Einstein as a “world citizen” because he agitated for an end to the arms buildup and campaigned for peace and democracy in the world.

**Question 8. Here are some facts from Einstein’s life. Arrange them in chronological order.**

[ ] Einstein publishes his special theory of relativity. [ ] He is awarded the Nobel Prize in Physics. [ ] Einstein writes a letter to U.S. President, Franklin D. Roosevelt, and warns against Germany’s building of an atomic bomb. [ ] Einstein attends a high school in Munich. [ ] Einstein’s family moves to Milan. [ ] Einstein is born in the German city of Ulm. [ ] Einstein joins a university in Zurich, where he meets Mileva. [ ] Einstein dies. [ ] He provides a new interpretation of gravity. [ ] Tired of the school’s regimentation, Einstein withdraws from school. [ ] He works in a patent office as a technical expert. [ ] When Hitler comes to power, Einstein leaves Germany for the United States.

**Answer:**

[7] Einstein publishes his special theory of relativity. [9] He is awarded the Nobel Prize in Physics. [11] Einstein writes a letter to U.S. President, Franklin D. Roosevelt, and warns against Germany's building of an atomic bomb. [2] Einstein attends a high school in Munich. [3] Einstein's family moves to Milan. [1] Einstein is born in the German city of Ulm. [5] Einstein joins a university in Zurich, where he meets Mileva. [12] Einstein dies. [8] He provides a new interpretation of gravity. [4] Tired of the school's regimentation, Einstein withdraws from school. [6] He works in a patent office as a technical expert. [10] When Hitler comes to power, Einstein leaves Germany for the United States.

## GRAMMER

### Thinking about Language

**I.** Here are some sentences from the story. Choose the word from the brackets which can be substituted for the italicised words in the sentences.

1. A few years later, the marriage *faltered*. (failed, broke, became weak).
2. Einstein was constantly *at odds* with people at the university. (on bad terms, in disagreement, unhappy)
3. The newspapers *proclaimed* his work as "a scientific revolution." (declared, praised, showed)
4. Einstein got ever more involved in politics, *agitating* for an end to the arms build-up. (campaigning, fighting, supporting)
5. At the age of 15, Einstein felt so stifled that he left the school *for good*. (permanently, for his benefit, for a short time)
6. Five years later, the discovery of nuclear fission in Berlin had American physicists *in an uproar*. (in a state of commotion, full of criticism, in a desperate state)
7. Science wasn't the only thing that *appealed* to the dashing young man with the walrus moustache. (interested, challenged, worried)

**Answer:**

1. A few years later, the marriage became weak. (failed, broke, became weak).
2. Einstein was constantly in disagreement with people at the university. (on bad terms, in disagreement, unhappy)
3. The newspapers declared his work as “a scientific revolution.” (declared, praised, showed)
4. Einstein got ever more involved in politics, campaigning for an end to the arms build-up. (campaigning, fighting, supporting)
5. At the age of 15, Einstein felt so stifled that he left the school permanently. (permanently, for his benefit, for a short time)
6. Five years later, the discovery of nuclear fission in Berlin had American physicists in a state of commotion. (in a state of commotion, full of criticism, in a desperate state)
7. Science wasn’t the only thing that interested to the dashing young man with the walrus moustache. (interested, challenged, worried)

**II. Study the following sentences.**

- Einstein became a gifted amateur violinist, maintaining this skill throughout his life.
- Letters survive in which they put their affection into words, mixing science with tenderness.

The parts in italics in the above sentences begin with –ing verbs, and are called participial phrases. Participial phrases say something more about the person or thing talked about or the idea expressed by the sentence as a whole. For example:

– Einstein became a gifted amateur violinist. He maintained this skill throughout his life.

**Complete the sentences below by filling in the blanks with suitable participial clauses. The information that has to be used in the phrases is provided as a sentence in brackets.**

1. \_\_\_\_\_, the firefighters finally put out the fire. (They worked round the clock.)
2. She watched the sunset above the mountain, \_\_\_\_\_ (She noticed the colours blending softly into one another.)
3. The excited horse pawed the ground rapidly, \_\_\_\_\_ (While it neighed continually.)
4. \_\_\_\_\_, I found myself in Bangalore, instead of Benaras. (I had taken the wrong train.)
5. \_\_\_\_\_, I was desperate to get to the bathroom. (I had not bathed for two days)
6. The stone steps, \_\_\_\_\_ needed to be replaced. (They were worn down).
7. The actor received hundreds of letters from his fans, \_\_\_\_\_ (They asked him to send them his photograph.)

**Answer:**

1. Working round the clock, the firefighters finally put out the fire. (They worked round the clock.)
2. She watched the sunset above the mountain, noticing the colours blending softly into one another. (She noticed the colours blending softly into one another.)
3. The excited horse pawed the ground rapidly, neighing continually. (While it neighed continually.)
4. Having taken the wrong train, I found myself in Bangalore, instead of Benaras. (I had taken the wrong train.)
5. Having not bathed for two days, I was desperate to get to the bathroom. (I had not bathed for two days)

6. The stone steps, being worn down, needed to be replaced. (They were worn down).

7. The actor received hundreds of letters from his fans, asking him to send them his photograph. (They asked him to send them his photograph.)

## Writing Newspaper Reports

Here are some notes which you could use to write a report.

21 August 2005 — original handwritten manuscript of Albert Einstein unearthed — by student Rowdy Boeynik in the University of the Netherlands — Boeynik researching papers — papers belonging to an old friend of Einstein — fingerprints of Einstein on these papers — 16-page document dated 1924 — Einstein's work on this last theory — behaviour of atoms at low temperature — now known as the Bose-Einstein condensation — the manuscript to be kept at Leyden University where Einstein got the Nobel Prize.

Write a report which has four paragraphs, one each on:

- What was unearthed.
- Who unearthed it and when.
- What the document contained.
- Where it will be kept.

Your report could begin like this:

### *Student Unearths Einstein Manuscript*

**21 AUGUST 2005. An original handwritten Albert Einstein manuscript has been unearthed at a university in the Netherlands...**

**Answer:**

### *Student Unearths Einstein Manuscript*



21 AUGUST 2005. An original handwritten Albert Einstein manuscript has been unearthed at a university in the Netherlands.

It was unearthed by a student Rowdy Boeynik while researching papers belonging to an old friend of Einstein.

The 16-page document dated 1924 contained fingerprints of Albert Einstein. It has Einstein's work on this last theory, i.e., the behaviour of atoms at low temperature which is now known as the Bose-Einstein condensation.

The manuscript will be kept at Leyden University where Einstein got the Nobel Prize.

## Dictation

Your teacher will dictate these paragraphs to you. Write down the paragraphs with correct punctuation marks.

**Answer:** Do it yourself.

## Thinking about the Poem

**I.**

**Question 1. What kind of place is Innisfree? Think about:**

- (i) the three things the poet wants to do when he goes back there (stanza I);**
- (ii) what he hears and sees there and its effect on him (stanza II);**
- (iii) what he hears in his “heart’s core” even when he is far away from Innisfree (stanza III).**

**Answer:** Innisfree is a beautiful place where poet has spent a lot of time as a boy.

- (i) The three things the poet wants to do when he goes back to Innisfree are:**

– he wants to build a small cabin of clay and wattles.

– he wants to have nine bean-rows there

– he wants to have a hive for the honeybee

(ii) He hears the cricket sing and sees the midnight glimmer with beauty. He sees the sky glowing purple at noon. He watches the evenings full of the linnet's wings.

All of these have a positive effect on him and he feels very peaceful.

(iii) He hears the lake water lapping by the shore at low sounds in his "heart's core" even when he is far away from Innisfree.

**Question 2. By now you may have concluded that Innisfree is a simple, natural place, full of beauty and peace. How does the poet contrast it with where he now stands? (Read stanza III.)**

**Answer:** The poet contrasts the natural beauty of Innisfree with the roadways and grey pavements of the city he now lives in. "Grey" pavements show the lack of colours and liveliness of the place.

**Question 3. Do you think Innisfree is only a place, or a state of mind? Does the poet actually miss the place of his boyhood days?**

**Answer:** Yes, I think Innisfree is a place in reality. The poet actually misses the place of his boyhood days spent in the natural beauty of Innisfree. He gets reminded of the low sounds of the lake water lapping by the shore. He misses both the place and the peace and contentment the place used to give him.

## II.

**Question 1. Look at the words the poet uses to describe what he sees and hears at Innisfree**

(i) bee-loud glade

(ii) evenings full of the linnet's wings

(iii) lake water lapping with low sounds

What pictures do these words create in your mind?

**Answer:** (i) bee-loud glade creates a picture of a place in a forest that is filled with the soft buzzing sound of honeybees.

(ii) evenings full of the linnet's wings creates an image of a red-orange sky that is full of linnets. Linnets are beautiful birds that add up to the scenic beauty of a place when they flutter their wings and fly.

(iii) lake water lapping with low sounds lets us take a dive into the peaceful scenario where the water of the lake is flowing and producing soothing sound.

**Question 2. Look at these words;**

**... peace comes dropping slow**

**Dropping from the veils of the morning to where the cricket sings**

**What do these words mean to you? What do you think “comes dropping slow...from the veils of the morning”? What does “to where the cricket sings” mean?**

**Answer:** These words mean that one can attain peace slowly and gradually.

Peace is what comes dropping slow from the veils of the morning.

The poet says that peace and serenity spread gradually from the rising morning sky to the ground where the cricket sings.