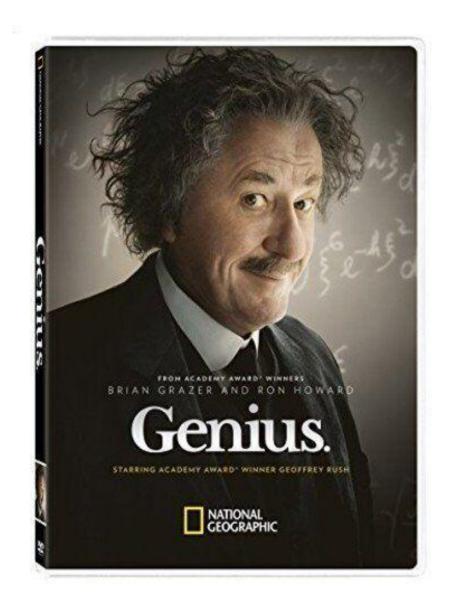
THE GUIDE TO A BIBLIOGRAPHICAL DRAMA TELEVISION SERIES

"Genius"

PART 1
(SEASON 1, EPISODES 1-5)
STUDENT'S BOOK



МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ ПРИКАРПАТСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ ІМЕНІ ВАСИЛЯ СТЕФАНИКА ФАКУЛЬТЕТ ІНОЗЕМНИХ МОВ КАФЕДРА АНГЛІЙСЬКОЇ ФІЛОЛОГІЇ

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Івано-Франківськ 2024

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Рекомендовано до друку
Вченою радою факультету іноземних мов
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Пропоноване видання знайомить з американським біографічним драматичним серіалом «Геній», який ϵ прикладом живої англійської мови, багатої на фразеологічні звороти, ідіоми, колокації, а також наукову термінологію з фізики, математики та астрономії тощо.

Посібник містить розробки до перших 5 серій першого сезону серіалу. Авторами було розроблено вправи спрямовані на збагачення лексичного запасу слів, перевірку розуміння, розвиток навичок спілкування, слухання, письма та збагачення енциклопедичних знань про ключові історичні та політичні події кінця XIX - середини XX століття.

Матеріал посібника можна використовувати у вищих навчальних закладах для роботи зі студентами 3 та 4 курсів, які вивчають англійську як першу чи другу іноземну мову.

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МЕТОДИЧНІ РЕКОМЕНДАЦІЇ

Навчально-методичний посібник містить розробки до перших 5 серій першого сезону американського біографічнного драматичного серіалу «Геній». Серіал висвітлює теми, які доповнюють основний ресурс задіяний на парах із англійської мови: *lifestyle*, *travelling*, *health*, *studying*, *people and society*.

Багато персонажів у серіалі говорять з різними акцентами та діалектами, що відображає їхнє різне походження. Це може бути складно для студентів, особливо тих, які звикли до стандартної англійської, змушуючи їх адаптуватися та розуміти різні мовні патерни. Студентам може знадобитися переглядати окремі сцени повторно або використовувати субтитри для повного розуміння діалогів, особливо тих, що наповнені технічними термінами та поясненнями певних фізичних процесів. В той же час, це змусить студентів більш зосереджено слухати та активізовувати свої слухові навички, а також це допомагає навчитись працювати із різними акцентами та індивідуальними особливостями вимови, що стане студентам у нагоді в майбутній професії усного перекладача.

Серіал «Геній», присвячений життю видатного вченого Альберта Ейнштейна, не лише відкриває студентам світ наукових термінів та концепцій, але й занурює їх у багатство англійської мови. Це дозволяє:

- 1. **Розширити лексичний запас:** Посібник включає різноманітні вправи з розширення словникового запасу, що допомагають учням засвоїти наукову та культурну термінологію, а також розвивати мовні навички.
- 2. **Розвивати навички спілкування:** Занурюючись у контекст діалогів персонажів серіалу, студенти вчаться розуміти і використовувати ідіоматичні вирази, розмовні конструкції та культурні посилання.
- 3. **Формувати культурну компетенцію:** Завдяки серіалу студенти дізнаються більше про культурні та історичні аспекти англомовного світу, що ϵ ключовим для повного розуміння мови та уникнення міжкультурних непорозумінь.

4. **Інтегрувати практичні навички:** Вправи з читання, письма, слухання та мовлення, а також літературні переклади дозволяють застосовувати мову в різних контекстах, розвиваючи практичні навички студентів.

Організація посібника

Посібник поділений на п'ять розділів, кожен з яких присвячений окремій серії першого сезону серіалу «Генія». Кожен розділ включає:

- •цикл завдань BEFORE WATCHING, який містить вправи для підготовки студентів до змісту серії, ознайомлення з новою лексикою та фразеологічними конструкціями. Ці вправи націлені на активізацію пасивного словникового запасу та використання дедуктивного та індуктивного методів. Ці завдання дають студентам необхідний словниковий мінімум для подальшої роботи із серією та виконання наступних завдань. Студентам необхідно запропонувати пояснення слова чи словосполучення та перекласти їх на українську мову. Також у цьому циклі завдань запропоновано ряд вправ із заповнення пропусків, які націлені на сприяння запам'ятовування нововведеної лексики та підготовку до майбутнього контенту через ознайомлення із лінгвістичними інструментами та збагачення словникового запасу загалом. Ці вправи узгоджуються з комплексними стратегіями вивчення мови, поєднуючи словниковий запас, контекст і активне використання для зміцнення лінгвістичних навичок студентів. Рекомендовано надати студентам час для самостійного виконання вправи, за потреби радимо використовувати словник;
- цикл завдань *WHILE WATCHING* складається із вправ, що передбачають визначення персонажу та сцени для кожної з наведених реплік, роботу зі спеціальними термінами, які зустрічаються у кожній серії та інші завдання, які допомагають студентам уважно стежити за персонажами, їхніми діалогами, діями та взаємодією. Ці вправи сприяють розвитку аудіювання та розуміння контексту, а також дозволяють аналізувати мовні аспекти у реальному часі. Завдання на розпізнавання персонажу та окремих сцен із кожної серії допомагають студентам покращувати навички аудіювання, відстежувати діалоги та розуміти сюжет, а також глибше зануритися в діалоги, інтегруючи лексичний запас, граматику та мовні структури. Вправи зі термінами допоможуть

студентам зв'язати мовні терміни з наративом, розуміючи їх у контексті серіалу, і таким чином мимовільно запам'ятовувати складну термінологічну лексику. Рекомендовано виконувати ці вправи під час перегляду серії, за необхідності роблячи паузи під час перегляду чи переглядаючи окремі частини повторно;

• цикл завдань AFTER WATCHING складається із завдань, спрямованих на закріплення матеріалу, зокрема пошукові завдання, націлені на детальніше ознайомлення із культурними та історичними аспектами, пов'язаними із контентом епізоду, вправи, що сприяють поглибленому аналізу стилістичних засобів, таких як метафори, порівняння, алегорії та інші та розуміюння їхнього вплив на мову та зміст епізоду, запитання для перевірки розуміння контенту кожного епізоду, аналітичні завдяння, які передбачають обговорення певних цитат із кожного епізоду та дискусійних запитань по змісту серіалу, а також письмові завдання, зокрема художній переклад окремих уривків відповідних серій та письмовий синопсис кожної переглянутої серії. Пошукові завдання рекомендовано для самостійної роботи із подальши представленням результатів дослідження на парі. Аналітичні та дискусійні завдання рекомендовано виконувати як в парах чи малих групах, так із усіма студентами. Завдання на переклад вказаних уривків та письмове завдання рекомендовано використовувати для самостійної роботи студентів в якості домашнього завдання.

Цільова аудиторія

Посібник призначений для студентів 3-4 курсів, які вивчають англійську мову як першу чи другу іноземну. Його матеріали можуть бути використані в університетах для інтегрованого навчання мовних, культурних та наукових аспектів.

Ці методичні рекомендації допоможуть викладачам ефективно використовувати посібник у своїй роботі, забезпечуючи всебічне навчання студентів.

PREFACE

In an era where technological advancements and media proliferation have transformed the traditional learning landscape, opportunities to grasp the intricacies of a new language have become abundant and multifaceted. One such method, the focus of this recommendation guide, lies within the confines of a vastly popular cultural medium – film and television series. This manual aims at elucidating the immense benefits of this unique approach to language learning, with a special emphasis on the English language through the lens of the acclaimed TV series, Genius, Season 1.

Laying the foundation of this pedagogical proposition, it is first crucial to understand the weight and importance of the English language in today's interconnected global society. A lingua franca for many, English has solidified its position as the de facto language of diplomacy, business, technology, science, entertainment, and much more. It is an indispensable asset that transcends borders, fostering communication, understanding, and mutual respect. Thus, proficiency in English not only aids in personal development and enhances employability, but it also facilitates the participation in the global conversation, thus underlining its vital role in the age of globalization.

The unconventional yet effective approach of using film or TV series to learn English combines the best of pedagogy and entertainment. This methodology, known as 'Edutainment,' merges education and entertainment in a harmonious blend that captivates learners' attention, thus increasing their receptiveness to the content. This immersive method reduces the monotony of textbook learning and directly exposes learners to the cultural and contextual aspects of the English language, creating a comprehensive learning environment.

TV series like Genius, specifically its first season, offers an excellent platform for English language learning. The complex dialogues, the cultural references, and the accurate historical context provide an enriching source of English vocabulary, idioms, phrases, and speech patterns. The nuanced narrative also ensures learners are consistently engaged, making the learning process enjoyable and memorable.

Moreover, visual learning aids comprehension by stimulating the human brain's propensity for imagery, enhancing memory retention, and understanding. Learners can observe the context in which words or phrases are used, see the characters' facial expressions and body language, and hear the correct pronunciation and intonation. Subtitles further assist in learning spellings and linking sounds to words. This multisensory experience creates an interactive learning environment that cultivates critical thinking and develops language fluency.

Furthermore, the rich narrative structure of series like Genius encapsulates the diverse socio-cultural elements of the English language, offering a panoramic view of language use. Characters from different backgrounds provide an array of accents and dialects, presenting learners with a comprehensive understanding of the language's diversity. Such exposure to various accents and dialects equips learners to better comprehend real-world English conversations, fostering their confidence and communication skills.

Cultural competence is an integral part of language learning, and series-based learning helps build this aspect effectively. It goes beyond the syntax and semantics of English, allowing learners to grasp the cultural nuances, societal norms, and historical contexts inherent in the language. Understanding these cultural elements aids in avoiding miscommunication and misinterpretations that could arise from cultural ignorance.

In essence, learning English through series like Genius is a holistic learning approach. It leverages the engaging nature of visual media to create a dynamic and interactive learning environment. This methodology addresses the limitations of traditional language learning methods by focusing on practical, contextual, and cultural aspects of the English language. As such, it imbues learners with a well-rounded understanding and competence in English, equipping them with the tools to navigate the global arena effectively.

In this guide, we will delve deeper into the practical ways to optimize this learning approach, using Genius, Season 1 as a case study. Through methodological

recommendations, the guide aims to maximize your learning experience, fostering not only language proficiency but also a profound appreciation of the art of storytelling and the immersive world of TV series.

Learning English, or any language, is a journey. And in this journey, films and TV series serve as an entertaining and insightful companion. They transform the process from a mere academic exercise to a thrilling adventure, blurring the lines between learning and entertainment. It is my sincere hope that this guide will illuminate this path, making your language learning journey as enjoyable as it is enriching.

Thus, the fusion of learning and entertainment amplifies the efficacy of language acquisition. TV series, specifically Genius, can act as an unconventional yet effective English tutor, cultivating not only language skills but also cultural competence. I invite you to delve into this enriching experience, exploring the realms of language learning through the magic of storytelling.

This manual is a guide to an American drama television series Genius which is an American anthology period drama television series developed by Noah Pink and Kenneth Biller which premiered on National Geographic. The first season, which aired between April and June 2017, followed the life of Albert Einstein, from his early years, through his time as a patent clerk, and into his later years as a physicist who developed the theory of relativity; the season is based on the 2007 book "Einstein: His Life and Universe" by Walter Isaacson.

There are 5 assignments in the manual, each presenting one from the first five episodes of Season 1. Each assignment consists of 3 parts: before watching, while watching, and after watching. Before watching part introduces students to the active vocabulary and comprises different tasks on practising it. While watching part checks students' comprehension of the video and gives the opportunity to specifically practise their listening skills. In after watching part students will find a variety of tasks on grammar, writing, reading, and literary translation. There are also discussion and role-play activities that can help students boost their critical thinking skills and express themselves.

Series overview

Genius Season 1, produced by National Geographic, is an extraordinary journey into the life and work of Albert Einstein. Launched in 2017, this season follows the remarkable path of arguably the most influential physicist of the 20th century.

The series begins with Einstein's early years as a patent clerk in Switzerland, a period during which he first developed the theory of relativity. As we delve into Einstein's life, the series also explores his personal life, providing a comprehensive view of the man behind the scientific brilliance. We learn about Einstein's family, his relationships, and his struggles against the socio-political turmoil in Europe, particularly during the rise of Nazi power.

The season uses a non-linear narrative, alternating between scenes of an elder Einstein (played by Geoffrey Rush) in the United States and flashbacks of his younger years (Johnny Flynn portraying young Einstein). This effective storytelling method enriches the narrative, shedding light on how past experiences shaped Einstein's later life.

Throughout Genius Season 1, the viewers get to witness the genesis of Einstein's groundbreaking ideas, including the theory of relativity and the famous equation E=mc². The season doesn't shy away from the complexities of his theories but instead, it attempts to explain them in an approachable manner, allowing audiences to appreciate the depth of Einstein's intellect.

Equally significant are the series' depictions of Einstein's complex relationships, his romantic endeavors, and his often tumultuous personal life. The series also sheds light on Einstein's pacifist beliefs, his struggles with the rise of fascism, and his eventual emigration to the United States.

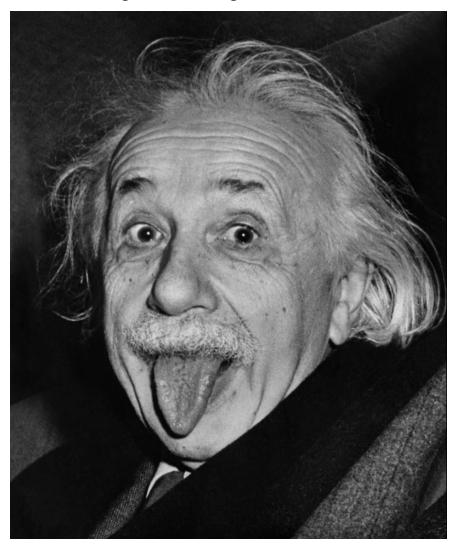
Thus, Genius Season 1 is an inspiring exploration of both the scientific and personal life of Albert Einstein, illuminating not only his brilliant mind but also his human vulnerabilities, his passion, and his unyielding dedication to understanding the mysteries of the universe.

GENIUS

EPISODE 1

BEFORE WATCHING

1. Who is this person in the photo?



- 2. We often regard Einstein purely as a genius scientist. However, like all individuals, he led a multifaceted life. Could you answer the following questions about certain aspects of his life?
- 1. What do you know about Einstein's personal life, his upbringing, and his personal values? How might these aspects have influenced his scientific career?

- 2. What are some of Albert Einstein's most notable contributions to the field of science, particularly Physics? How have these theories changed our understanding of the world?
- 3. Einstein was awarded the Nobel Prize in Physics in 1921, but it was not for his theory of relativity. For which scientific discovery did he receive this prestigious award, and why do you think this discovery was so significant?
- 4. Einstein had a deep interest in philosophy and often integrated it with his scientific theories. What do you know about his philosophical perspectives, and how do you think they might have influenced his approach to science?
- 5. Einstein's contributions extend beyond the realm of science. How has his legacy impacted other aspects of society, such as culture, education, and our collective understanding of genius?

3. Translate the following words and be ready to reproduce them in their context:

to flatter

to convince to overreact

insane loud-mouthed

deceptively to reject [rɪˈdʒekt]

velocity a reject ['ri:.dzekt]

moot esteemed

essential hereby

regurgitation restrain (n) / to restrain (v)

impudent garish

feverish skirmishes

to faint a forefather

eternity a compatriot

to grieve frivolous

to despise disobedient

exceptionalism perennial

scintillating truant

unrepentant

flouter

to chastise sb

heretical

impious

buffoon

treatise

hearsay

the humanities

definable

hedonistic

acceleration

derivative

equitably

relation to

deity

To constitute

to renounce

infantile

measles

a majority

defiant

to endure

simplicity

to induce

heritage

reluctantly

to scintillate

to nurture

hallowed

empirical

abstruse

respectively

to assassinate

fraud

courtship

indulgent

conniving

perception

a fraction

the	sentence structure.
1)	The scientist's work on the new vaccine was, leading to a
	breakthrough in medical science that was celebrated worldwide.
2)	His lifestyle led him away from the lab and into a world of luxury,
	where his research became a secondary concern.
3)	The documentary highlighted the growth of technology in the 21st
	century, emphasizing its effects on human interaction.
4)	The artist's use of colors in her paintings was intended to evoke strong
	emotional reactions from viewers.
5)	The philosopher's on ethics has become a fundamental text for
	students studying the humanities.
6)	Despite the evidence supporting climate change, some skeptics
	continue to question its validity.
7)	Her in the face of adversity inspired her peers to pursue their goals
	with equal determination.
8)	The novel's protagonist was a(n) figure, whose rebellion against
	societal norms sparked a revolution.
9)	He was often criticized for being, speaking out of turn and
	disrespecting his elders.
10)	After years of, the couple finally got engaged, much to the delight of
	their families.
11)	The CEO's decision to his citizenship shocked the business world.
	5. Match the beginning with the end of the phrase. Translate the phrases
and	d be ready to reproduce them in their context:
to 1	nake beam

4. Fill in the blanks with the appropriate words from the list of

vocabulary above. Some modifications of the word form may be necessary to fit

an urgent	for something
to take	the equation
a light	a step back
big demand	message
to solve	a proposition
to have	one's condolences
to offer	a rash
to pass	an exception
to pin up	citizenship
to cloud	application
to make	one's regards
to bend	the entrance exams
to audit	force
to earn	visa
To take	an inquiry
to gain	a threat
to renounce	hair
to approve	momentum
to send	charge of sth
to apply	classes
to obtain	one's vision
to pose	the rules
to conduct	entry to
to grant	a degree

6.Fill in the blanks with the appropriate phrases from the list above. Some phrases may need to be modified to fit the tense or grammatical structure of the story correctly:

Maria had always	dreamed of studying abroad. After months of preparation,
she was finally ready to	for her dream university. The process was not

easy, and there was a to secure a spot in the prestigious institution
However, Maria was determined. She studied hard to and worked
diligently to in her favorite subjects. Her efforts paid off when she
received from the university's admissions office.
Excited to embark on this new chapter, Maria knew she had to
Moving to another country meant she would of her home country and
in her new home.
Upon arrival, Maria quickly realized that adapting to a new culture was like
learning to survive in a completely unfamiliar environment. Initially, the differences
seemed to, making it hard to adjust. However, she remembered to
in her approach to new experiences, even if it meant she had to
occasionally.
One of her first challenges was to Maria was interested in
several subjects that were not part of her major, so she decided to enrol in the modern
art course to broaden her mind. Academically, she thrived, and it wasn't long before
she managed to achieve huge success in her field of study.
Outside of academics, Maria took of a local community project
Her enthusiasm and hard work helped the project, attracting more
volunteers and resources. Despite facing occasional obstacles, Maria never allowed
them to discourage her. Instead, she saw each challenge as an opportunity to learn
and grow.
Maria's journey was not without its hurdles. There was a time when she had
to stay in bed for a whole month due to an unexpected health issue when she
developed after a hiking trip. Nonetheless, her positive attitude and
resilience saw her through.
As Maria's study abroad experience came to an end she reflected on he

As Maria's study abroad experience came to an end, she reflected on her journey. She had not only achieved her academic goals but had also grown personally. Before departing, Maria made sure to express gratitude all the friends and mentors she had met along the way. She knew that the relationships and memories forged during this time would last a lifetime.

7. Match the following phrases with their meanings. Be ready to reproduce them in their context:

1. to delve into	a) to accept that you are in charge of something or that
2. to pick me up	you have caused something to happen.
3. to move in with sb	b) to watch what is happening and be careful
4. to forge ahead	c) to allow someone to enter a place
5. to grasp the idea of	d) an informal way to tell someone to go away
6. to look out for	e) to search, especially as if by digging, in order to
7. to take responsibility for	find a thing or information
8. to bar from	f) to choose one person or thing from a group for
9. to let sb in	special attention
10. to turn out	g) to cause doubts about something
11. to be jealous of	h) a rude way to tell someone to leave or to stop
12. to offend against	annoying you
13. to take sb in	i) to accept an offer or invitation from someone
14. to get the door	j) to discover something by chance, or to meet
15. to spill sth out	someone by chance
16. to buzz off	k) to break a rule or law
17. to show sb in	1) to understand something, especially something
18. to piss off	difficult
19. to take sb up on	m) feeling upset or angry because someone you love
20. to catch up to	seems interested in another person
21. to cut back	n) to provide a place for someone to live or stay
22. to stumble upon	o) to reach someone by moving faster than them
23. to call sth into question	p) to do less of something or use something in smaller
24. to single out	amounts
	q) to improve someone's mood or to invigorate them.
	r) to start living with someone, especially in the same
	house.

	t) to prevent or prohibit someone from doing
	something or going somewhere.
	u) to happen in a particular way or to have a particular
	result, especially an unexpected one.
	v) to go to the door because someone has knocked or
	rung the doorbell.
	w) to cause something to flow or fall out of a
	container.
	x) to lead someone to a place where they can sit or
	stay, especially inside a building
8. Fill in the blanks w	ith the appropriate phrasal verb from the list above.
Make sure to modify the f	form of the verb if necessary to ensure correct tense
and agreement with the sub	oject:
1. After years of su	perficial knowledge, she decided to the
subject, uncovering layers of	complexity she hadn't anticipated.
2. Feeling a bit do	wn after the exam, I really needed something to
before heading t	to the next challenge.
3. They made the b	ig decision to together, marking a new
chapter in their relationship.	
4. Despite numerous	setbacks in the project, the team decided to,
focusing on their ultimate goa	als.
5. It took him a whil	e, but he finally began to quantum physics
after many hours of study and	d discussion.
6. In a big city, it's	important to each other, especially when
navigating through crowded	and unfamiliar areas.
7. Once the mistake	was identified, she didn't hesitate and
worked to rectify the error in	mediately.
8. The club had stric	t rules, and unfortunately, he was entering

because he didn't meet the dress code.

s) to make progress quickly or with determination.

9. During the storm, we decide	ded to the stranded traveler, offering
a warm meal and a place to stay.	
10. The movie	to be much better than expected, with critics
praising its innovative storyline and	dynamic characters.

9. Match the following collocations with their meanings. Translate them and be ready to reproduce them in their context:

an unorthodox idea	A natural ability or talent for something
business in bankrupt	Continuous, unending snoring
an aptitude for something	An unusual or unconventional concept
incessant snoring	A situation where a business is legally declared unable to pay its debts
medically unfit to do sth	The range, scope, or degree of something
nervous breakdown	A group holding marginal or extreme positions in society
the extent of something	Deemed by health professionals as unable to perform a specific action or task due to health reasons
a fringe group	A period of mental distress and inability to function in everyday life, often due to stress or depression
scintillating wit	A person deeply committed to Christian faith and practices
a permanent option	An overly bright or showy display that is often tasteless
a devout Christian	Exceptionally clever and amusing conversational humor

a garish spectacle	A solution or choice intended to last indefinitely.
left-wing radicals	A set of political beliefs or principles.
political creed	Associations with specific political parties or movements
political affiliations	Individuals or groups advocating for extreme changes in society, typically supporting socialist or progressive policies
an artificial formula / formulae	An essay or report written on a particular subject
an arbitrary definition	A theory that is difficult to understand because of its complexity
empirical observation	A child who regularly disobeys authority figures
an abstruse theory	A disease primarily affecting infants and young children
a paper on sth	Man-made or synthetic equations or recipes, often used in scientific or mathematical contexts
a disobedient son	Information gained by means of the senses, particularly by observation and documentation of patterns and behavior through experimentation
perennial truant	A definition based on random choice or personal whim, rather than any reason or system
an infantile disease	Someone, typically a student, who habitually stays away from school without permission

10. Rewrite the sentence using one of the collocations from the list, altering the sentence structure if necessary to accommodate the collocation. Two examples are provided for you.

Examples:

Original Sentence: "The company can't pay its debts anymore." Transformation Task: Rewrite using "business is bankrupt."

Original Sentence: "He's always joking cleverly to lighten the mood." Transformation Task: Rewrite using "scintillating wit."

Sentences for Transformation:

- "He believes very strongly in his Christian faith and follows its teachings every day."
- "The group advocating for extreme environmental changes is gaining attention."
- "She has a natural ability to solve mathematical problems quickly.!
- "Their theory about black holes is difficult for most people to understand."
- "The costume for the parade was so bright and colorful that it almost hurt to look at it."
- "He's not allowed to run the marathon because his doctor says his health isn't good enough."
- "She's thinking deeply about starting her own online business."

11. Translate the following words and word combinations and be ready to reproduce them in their context:

to disapprove of this idea
an unorthodox idea
contemplate the idea of something
business is bankrupt
an aptitude for sth
to refine sth for sth else
incessant snoring
to feel feverish
to deem

medically unfit to do sth

nervous breakdown

the extent of sth

to grasp a language

to bring misery and pain

to regret the circumstances

a fringe group

scintillating wit

a permanent option

have accomplices.

kowtow to bullies

a devout Christian

a handful of supporters

the common sense of

to declare a day of mourning

a garish spectacle

left-wing radicals

quite a turnout for sb

an artificial formula/artificial formulae

an arbitrary definition

publicly-seeking fabrications

empirical observation

an abstruse theory

to be devoid of sth

a paper on sth

to have cramps

a gnat

a disobedient son

perennial truant

unrepentant flouter of authority

to consider an idea

outside our grasp of understanding
to have a definable answer
to hold sb in highest esteem
an infantile disease
to evoke complex emotions
to have sb do sth
induced voltage
to gain capital
human perception
Deputy Consul General
political creed
loyalty
at the request of sb
political affiliation
to sb's satisfaction
12. Fill in the blanks with the appropriate phrasal verb from the list above.
Make sure to modify the form of the verb if necessary to ensure correct tense
and agreement with the subject:
1. The scientist's on quantum mechanics challenged conventional wisdom, inviting both skepticism and admiration.
2. Due to its innovative yet, the startup struggled to find investors
who did not
3. After years of operation, the local bookstore declared that the,
forcing it to close its doors permanently.
forcing it to close its doors permanently. 4. Despite his in six languages, he found the local dialect
forcing it to close its doors permanently. 4. Despite his in six languages, he found the local dialect, requiring more time to

	7. Facing a, he could no longer ignore the symptoms and admitted	d
he	·	
	8. When the took the stage, their was undeniable	٠,
sup	ported by only, but enjoying for suchpolitical	ıl
	.	
	9. His research paper, based on rather than, provided	a
fre	sh perspective on the debated issue.	
	10. The documentary aimed at highlighting the implications of the crisis, despit	e
the	government's attempt to the severity of the situation.	
	11. In the fantasy novel, the characters of helping the villager	S
	all the basic conveniences crucial for their survival.	

13. Match the idioms and idiomatic expressions to their meanings? Translate them into Ukrainian and be ready to reproduce them in their context.

rote memorization	that is logical or understandable
it's (not) sb's concern	to succeed easily and excellently
chin up	others have heard good things about you
	before meeting you
feel like a blink of an eye	a very short period of time
for God's sake	to destroy or ruin a business through poor
	decisions or management
on the grounds that	can't stand or tolerate thinking about a
	particular action or event
that makes sense	to investigate or research in detail
pass sth with flying colors	looking at something based on scientific
	principles
your reputation precedes you	for the reason that
from a scientific perspective	an expression used to emphasize something or

	show frustration
on what offense?	to have no knowledge or experience with something
blind regurgitation	it is (or isn't) someone's business or worry
delve deeper into	to keep up one's spirits; stay positive
plunder a business into the ground	memorizing information through repetition without necessarily understanding the meaning
don't know the first thing about	asking for the reason or cause of something
Can't bear the thought of doing sth	mindlessly repeating information without understanding

14. Make up 15 sen	tences with the	e words, phra	ises and wor	a combinations fro	
Exercises 3-7.					

WHILE WATCHING

1. Identify the speaker and the scene of each of the following lines:

A. Monogamy is not natural. It is a construct of religious authority.

And a foolish faith in authority, my dear Betty, is the worst enemy of truth.

B. I want you to listen to me very carefully, son. Rebellion will get you nowhere in life. You step on enough toes, and I promise you, one day you will trip.

C. Really, Fritz? You're proud of your military service? You may have changed your religion, but don't think for a second you can change your heritage

D. Gentlemen, there is a new war festering. A war against reason, against clarity, against this very institution. Germany and German physics are under threat.

E. Don't let those academic fools in Zurich change you, Albert. Their knowledge is their weakness, while your imagination is your strength.

2. While watching check the meaning of the following terms and word combinations. Write the translation next to them:

trigonometry to solve the equation differential equation laws of sines and cosines C-squared equals subtract multiplied by area of a triangle the natural log of a constant the natural log of one plus V-squared gravity matter derivative of logarithmic functions hydrogen. carbon lithium nitrogen

sound waves

	all-encompassing substance
	to pervade the universe
	heat conduction
	a mathematical equation
	molecule
	galaxy
	Newton's second law of motion
	acceleration is the derivative of velocity
	induced voltage
	magnetic field
	velocity of conductor
	electromagnetic radiation
	Faraday's Law
	Maxwell-Faraday equation
	3. While watching the episode identify the main characters and make some
1	s about them (name, appearance, the problems they face)
•	
-	
-	

a medium

AFTER WATCHING

1. Study the following Mind Map Framework of the proper names mentioned in this episode. Find some extra information about these prominent people and institutions.

Mind Map Framework:

1. Educational Institutions

- Zurich Polytechnic
 - Mileva Maric (Albert Einstein's first wife studied here)
 - Heinrich Weber (Einstein's professor)
- Princeton
- Oxford
- University of Heidelberg
 - Professor Lenard (Worked and researched here)
- California Institute of Technology

2. Scientists & Philosophers

- Chemistry:
 - Fritz Haber
 - James Clark Maxwell
 - Faraday
- Physics:
 - Professor Lenard
 - Sir Isaac Newton
 - Kepler
- Philosophy:
 - Baruch Spinoza
 - Descartes
 - Nietzsche
 - Confucius
- Other:

- Aristotle (philosopher and scientist)
- Euclid (mathematics)
- Empedocles (philosopher)

3. Political & Historical Context

- Germany & Weimar Republic
 - Adolf Hitler
 - National Socialist Party
 - Walther Rathenau
 - Assassinated by Organisation Consul
- Controversial Texts & Movements:
 - The Protocols of the Elders of Zion
 - Zionist (Opposed the misleading representation in the Protocols)
 - a Bolshevik Jew (sometimes wrongly associated with this text)
- U.S. Figures & Entities:
 - J. Edgar Hoover
 - United States Bureau of Investigation
 - Raymond H. Geist (U.S. diplomat in Germany during the rise of Nazis)

4. Geographical Context

- Germany
 - Munich (early activities of Hitler)
- Milan
- Switzerland
 - Zurich Polytechnic
- Bodies of Water:
 - Baltic Sea

5. Arts & Culture

- Music & Composers:
 - Erik Satie

- Wagnerian (related to Richard Wagner's music & philosophy)
- Mythology & Ancient Deities:
 - Aphrodite

2. Comment on the use of the figures of speech in the following examples:

- 1. "You step on enough toes, and I promise you, one day you will trip."
- 2. "Maybe to you two years feels like the blink of an eye, but to me, it's an eternity."
- 3. "What is... time? A deceptively simple question, yet it is the key to understanding relativity. It is also the reason my hair is going gray."
- 4. "Abstruse theories devoid of reality have no place in our field. If we do not fight against them, I promise you, the foreigner will spread through these hallowed halls like a virus. And before we have time to react, German physics will be no more."

3. Comprehension check. Be ready to answer the following questions:

- 1. Describe the contrast in Einstein's life between his younger years and his later years as portrayed in this episode. How does the episode depict these two stages of his life?
- 2. What challenges does Einstein face in his academic journey during this episode? Name at least two significant events or confrontations.
- 3. How does the episode address Einstein's relationships, particularly his romantic ones? Name a significant romantic relationship highlighted in this episode and describe its importance.
- 4. What are some of the political tensions or societal issues depicted in this episode, and how do they influence Einstein's life and decisions?
- 5. How is Einstein's unique perspective on science, particularly his views on time, introduced in this episode?
- 6. Describe Einstein's relationship with his family, particularly his parents. How do they react to his choices in both his personal and professional life?
- 7. Who are some of the significant academic or scientific figures Einstein interacts with in this episode, and what are their roles or influences in his life?

8. The episode uses various stylistic elements, like flashbacks, to tell Einstein's story. Describe a memorable scene or sequence from the episode and explain its significance in Einstein's narrative.

4. Prepare a literary translation of these passages from the series rendering the intended tone of the author.

- 1. Herr Einstein, wake up!
- I wasn't sleeping, sir. I was thinking.
- Oh, really? About what, exactly?
- The secrets of the cosmos, I suppose.
- I suggest you think about trigonometry instead. With your eyes open. And sit up! Laws of Sines and Cosines.
- C-squared equals A-squared plus B-squared subtract two-AB-cosine-C. Area of a triangle. Area equals C-squared Sine-A Sine-B over two-Sine-C.
 - What is the...differential equation?
 - Herr Einstein, are you still too busy contemplating the secrets of the cosmos to solve this equation?
 - Oh, no, sir. I-I've already solved it.
 - Leave. Now.
 - On what offense?
 - Your mere presence spoils the respect of the class for me!
 - That is not an objective reason!
 - Out!
- The natural log of a constant multiplied by X equals the natural log of one plus V-squared. And since V equals Y over X, that gives us the final function: X-squared plus Y-squared minus C-X-cubed equals zero. And speaking truthfully, sir, your mere presence spoils my respect for the future of Prussian mathematics.
 - Out.

2. - Look around you. What do you see?

- I see my impudent son.
- Yes, but what am I made of? Matter. And what keeps my feet on the ground? Gravity.
 - Oh, Albert, I don't have time for... This is not...
- Time, yes, that, too! And light and magnetism. These invisible forces that nobody fully understands. Where do they come from? What are they made of? And why do they act as they do? I want to be the one who solves those mysteries."
- **3**. All right, let us all open our eyes...and return to Germany. Here is our traveling light beam. Now, I will ask you again. How can something... light...travel through nothing... space?
 - It cannot, Herr Professor.
 - Cannot. Good. Therefore, if light is only a wave, then...
 - Space is not empty?
- Exactly. So just as sound waves travel through air, light waves must travel through some sort of medium in space. Scientists called it the ether, an invisible but all-encompassing substance pervading the universe. I believed in it when I was your age. Trust me. I knew everything. But as it turns out, I was wrong."

4. - Herr Einstein?

- I am Professor...
- Weber. Heinrich Weber. Chair of the physics department, I know. I... I read your paper on heat conduction.
- It seems you have read quite a few papers, young man. You passed the mathematics and science sections with flying colors. Where did you learn all of this?
 - I am self-taught, Herr Professor.
 - Ah. That makes sense.
 - Why is that?
- Because you failed everything else. Literature, zoology, botany, French, politics, to be specific.
 - That's... that's quite a few subjects.

- Indeed.
- Oh, my father...Can you make an exception, sir? I-I only want to study physics.
- No, that is not how a university works.
- But literature is a pastime. I-I've never been to a zoo in my life. Botany I place under the same sub-section as literature... bourgeois. And French, well... pourquoi, sir?
 - -You forgot about politics.
- Politics are frivolous. They're only a matter of present concern. But a mathematical equation, Professor, well... that stands forever.
- I tell you what, I am going to bend the rules and invite you to audit my classes and to work in my laboratory.
 - Will I be an official student?
 - No.
- I need to earn a degree, sir. Because without one, I'll never be taken seriously as a physicist. And I'll never get an office like this, will I?
- There is a good school 25 miles west of here. I know a teacher who will take you in. You study for a year, well, you go to a zoo, you learn some French, and then you'll come back here and you'll retake the exam.
 - I won't disappoint you, sir."
- **5.** Newton's Principle, Volume One: "Absolute, true, and mathematical time, of itself and from its own nature, flows..."
- "Equitably without relation to anything external." Time and space are absolute, I know.
 - Yes, well, then, let's move on.
- But when pressed on the subject of absoluteness, Newton said, "The Deity endures forever, "and by existing always and everywhere, He constitutes duration and space." Which, in short, is saying... "I have no idea, but God must, so there."
 - Albert.
 - I-I know. I sh... I should go.

- Sit down. Well, it looks like we are going to have an interesting year. So let us move on to the next chapter. When we are looking at Newton and some of his other ideas...

6. - Oh, I'm sorry.

- For what?
- I must have the wrong room.
- What class are you looking for?
- Physics. Good day.
- Tell me, do you know Empedocles?
- Excuse me?
- Empedocles. The pre-Socratic philosopher who studied cosmogony.
- As I said, I am in...
- Physics. Yes, you made that quite clear. Cosmogony is the study of the origins of the cosmos. And Empedocles, he was the first known person to ask the simple question, what is light?
 - I'm sorry, who are you?
- He believed that Aphrodite, a woman...in case you didn't know...formed the human eye and lit a fire in it, allowing us to see.
- Well, that's ridiculous. If that were the case, well, then we could see equally well at night.
- Empedocles thought the same, so he postulated that the sun's rays may be linked to the rays shooting from our eyes. A fanciful idea, I know, but if not for him, we might not have had the counter-theories of Aristotle, then Euclid, then Alhazen, Kepler, Newton, Faraday, and, finally, James Clark Maxwell. Light is electromagnetic radiation.
 - I apologize. I didn't think...
- That a woman could possibly understand that the curl of the electric field is equal to the negative time derivative of the magnetic field?

4. Dwell on the following quotations from this episode:

"Rebellion will get you nowhere in life."
"Your reputation precedes you"
"But did you know that Spinoza never taught a day in his life?"
"He was a lowly optical lens grinder."
"Why should someone's vocation define his intellect?"
"Because nationalism is an infantile disease."

5. Write th	ie brief su	mmary of	the episod	e.		
					 	

6. Work in pairs or small groups and discuss the following:

- 1. The episode delves into the personal and professional life of Einstein. How do you think his personal experiences, especially during his formative years, influenced his scientific discoveries and perspectives?
- 2. Einstein was often at odds with traditional education and authority figures. How does the episode portray this, and do you think such confrontations were necessary for his intellectual growth?
- 3. The episode touches upon the societal norms and expectations of Einstein's time, especially concerning relationships and marriage. How do Einstein's personal choices reflect or rebel against these norms?

- 4. In this episode, we see the beginnings of Einstein's unconventional approach to science. How does the series depict the interplay between creativity and scientific rigor in Einstein's work?
- 5. The political climate and impending wars of Einstein's time played a significant role in his life and the lives of those around him. How does the episode handle the portrayal of these events, and how do you think they impacted Einstein's worldview?
- 6. Einstein's relationships with fellow academics and scientists are a highlight of the episode. How do these relationships, both supportive and antagonistic, shape his journey in the scientific community?
- 7. The episode showcases some of the challenges and biases Einstein faced, including those related to his Jewish background. How does the series handle these themes, and why do you think it's important to highlight these challenges in Einstein's story?
- 8. Based on this episode, how do you think the series "Genius" aims to humanize iconic figures like Einstein, showing their flaws, passions, and vulnerabilities alongside their monumental achievements?

GENIUS

EPISODE 2

BEFORE WATCHING

horrid

to expand sth

1. Translate the following words and be ready to reproduce them in their context:

refraction		
reversible/irreversible/irrev	ersibility	
to assure sb		
merely		
a menace		
to overlook sth		
impudent		
lame		
to blush		
insufferable		
reluctance		
infinite		
ruddy		
an imposer		
commitment		
to determine		
thickheaded		
a distraction		
obnoxious		
a gimp		

exponentially
to compel sb to do sth
observable
provable

	2. Fill in	the blank	ks with	the co	orrect	word	from	the	list	above.	Make	sure to	O
adj	ust the w	ord form	if neces	sary t	o corr	ectly	compl	lete t	he s	sentenc	e.		

1)	It was a small error, but it caused a huge misunderstanding
among	the team members.
2)	The constant complaints from the guest became, making the
host reg	gret the invitation
3)	Many ancient ruins modern structures, hiding them from the
immedi	ate view of tourists.
4)	His to join the group was obvious, despite the numerous benefits
outlined	d by the leader.
5)	She couldn't help but when she heard her name
mention	ned in the award nominations.
6)	The universe is, a concept that is difficult for the human mind to
fully co	emprehend.
7)	The theory was finally accepted as after years of extensive
researcl	n and experimentation.
8)	His remarks towards the elderly man were met with disdain
from ev	veryone present.
9)	Joining the volunteer program requires a serious to helping
those in	need.
10)	The damage to the painting was deemed, much to the museum
curator	's relief.
11)	Many considered him an, falsely claiming achievements
and hor	nors that were not his

12) The scientist explained how	light when it passes through
different mediums, affecting how we J	perceive colors.
13) He tried to	her fears by confirming his safe arrival in the
storm-hit area.	
14) Her sudden laughter in the n	niddle of the lecture served as
diverting everyone's attention.	
15) The character in the novel	was seen asby the villagers
always plotting schemes to their detrii	ment.
16) The excuse he gave for his	tardiness was sothat no one
believed him.	
17) The new policy is expect	ted to the company's growth
over the next decade.	
18) The judge needed to	whether the evidence presented was
sufficient for a conviction.	
19) Despite clear instructions, his	nature led him to make the same
mistake again.	
20) The critics described the film?	's plot as, failing to provide
any real suspense or intrigue.	
3. Match the beginning with and be ready to reproduce them in t	the end of the phrase. Translate the phrases their context:
to pull sth	track of sb
to clear	up on sth
to lose	with sb
to take sb	a path for sb
to get	sb for sth
to intercede	and bump
to fault	apart

to pique	lost with sb
to jostle	one's interest

4.Read the sentences below and use the appropriate phrasal verb for	rom
exercise 3 to complete the sentences. Some verbs may need to be modified to	o fit
the tense or grammatical structure of the sentence.	

1)	When the negotiations started to fail, the ambassador hadthe leaders to prevent a breakdown in talks.
2)	The mystery novelfrom the first page, and I couldn't put it down.
3)	It's hard being cautious, given his past experiences.
4)	The children decided the old watch to see how it worked inside, despite their parents' warnings.
5)	As the train filled up, passengers began into each other, trying to find space
6)	The crowd beganthe emergency responders, allowing them quick access to the accident site.
7)	We decided to turn off our phones andin the city together, just to see where we'd end up.
8)	During the festival, it was so crowded that I quicklymy friends.

5. Match the following collocations with their meanings. Translate them into Ukrainian and be ready to reproduce them in their context:

1. increase in entropy	a) uundamental particles or substances
	that form a basis for something
2. underlying molecules	b) measure of disorder or randomness in
	a system

3. an underlying principle	c) a fundamental idea or concept that
	supports or forms the basis for
	something
4. idle conversation	d) to behave kindly or favorably towards
	someone
5. in need of	e) the characteristic of being easily
	ignited and capable of burning rapidly
6. a compelling demonstration	f) something at which someone excels; a
	strong point
7. under the impression	g) to be confused or perplexed about
	something
8. on sb's behalf	h) trying to achieve or do something
9. to be entitled to sth	i) to honor or acknowledge the basic or
	essential aspects
10.to find sth reassuring	j) to finish a given task or project
11.to be contrite about	k) failing to do or care for something
12.to complete an assignment	1) an idea or belief about what
	constitutes being feminine
13.to be baffled as to sth	m) to have a right to something
14.to respect the fundamentals	n) representing or acting for someone
15.a notion of femininity	o) chat or talk without serious intent or
	significance
16.in an attempt to do sth	p) to derive comfort or assurance from
	something
17.to neglect to do sth	q) requiring something
18.flammable nature of	r) believing, often mistakenly
19.to be one's forte	s) a powerful and convincing display or
	presentation
20.to treat sb well	t) feeling or expressing remorse or guilt

phrases may need to be modified to fit the tense or grammatical structure of the sentence correctly. 1) Every scientist should understand _____ that guides ethical research. 2) The student worked diligently ______ before the deadline. 3) The old library was _____ renovation to restore its former glory. 4) I was _____ that the meeting had been postponed, only to arrive and find it in full swing. 5) Cooking _____, and she enjoys experimenting with new recipes. 6) They engaged _____ while waiting for the conference to begin, discussing everything but work. 7) The _____ the material made it unsuitable for use near open flames. 8) As a long-term employee, she felt she _____ some recognition for her dedication. 9) The lawyer acted to ensure his rights were protected during the trial. 10) The magician's _____ left the audience in awe, questioning the reality of what they had just witnessed. 11) He always makes an effort , showing kindness and generosity at every opportunity. 12) He _____ inform anyone of his departure, leading to confusion the next day 13) It's important _____ in any field to achieve lasting success. 14) The team worked late hours _____ solve the unexpected problem that arose. 15) The exhibition explored ______ across different cultures and eras. 7. Match the following idioms with their meanings and be ready to reproduce them in their context:

a) a lazy person

1) in distress

6. Fill in the blanks with the appropriate phrases from exercise 5. Some

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nd
rer
to
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8.Fill in the blanks with the appropriate phrases from exercise 7. Some phrases may need slight modification to correctly complete the sentence.

1)	He passed the exam _	, barely making the grade required to advance.
2)	Everything changed	, transforming the landscape of the entire
	industry overnight.	

3)	The old hound was nothing but, lounging in the sun all day without
	a care.
4)	When the ship started sinking, the crew was clearly, signaling for
	help frantically.
5)	Negative people tend, making it harder to remain positive.
6)	His demanding job seemed, leaving little room for personal
	projects or relaxation.
7)	Ever since they met, they, spending every possible moment together.
8)	She thought he would agree with her proposal, but, he rejected it
	outright.
9)	After the minor accident, she, but it didn't stop her from
	completing the marathon.
10)	It takes ask for a raise during these tough economic times.
11)	After years of solitude, she finally decided it was time and started
	dating again.

9. Match the following collocations with their meanings. Translate them into Ukrainian and be ready to reproduce them in their context:

1.	to be starved of sth	a) to be useful or beneficial to someone	
2.	constant derision	b) to regard someone with scorn o	
		contempt	
3.	serve sb well	c) ongoing ridicule or mockery	
4.	scientific pursuit	d) to formally award an academic degree	
		to someone.	
5.	treat sb with disdain	e) to have a considerable effect or	
		influence on something	
6.	to give an offence	f) to be deprived of or lacking something	
		essential	
7.	to look ruddy	g) to not meet the anticipated standards.	
8.	to confer degree on sb	h) to receive a certificate for completing	

		0 1
		a course of study.
9.	to earn a diploma	i) the act of seeking or researching
		within the domain of science.
10.	a stern face	j) a written formal rebuke or
		admonishment.
11.	to fall below expectations	k) a serious or unsmiling facial
		expression.
12.	a letter of reprimand	l) to appear reddish or healthy in
		complexion.
13.	timbre of a musical instrument	m) to be explained or justified by
		something.
14.	to be accounted for by sth	n) because or as a result of doing
		something.
15.	to have the slimmest hope of sth	o) to have very little chance or
		expectation of something.
16.	by virtue of doing sth	p) the distinctive quality or tone of a
		sound produced by a particular
		instrument or voice.
17.	to have a significant impact on sth	q) to cause upset, hurt feelings, or insult

10.Make up 15 sentences with idioms from Exercises 9.

WHILE WATCHING

1. Identify the speaker and the scene of each of the following lines:

- A) I did not come to university to flirt, or to meet a man, and certainly not to find a husband.
- B) And what would your daughter do with such instruction? Chatter in her sewing circle?
- C) Well, no man ever married a woman for her mind, hmm?
- D) Mileva Maric. One doesn't lose track of the sole woman in the room.
- E) How tireless I must be. How strong and cold to have the slimmest hope of being taken seriously. To be given an ounce of the respect you receive instantly by virtue of your manhood!
- **F)** The results will be posted shortly, but you passed your exams. By the skin of your teeth, of course.

2. While watching check the meaning of the following terms and word combinations. Write the translation next to them:

Kinetic theory
electromagnetic theory
methods of Faraday
the speed of sound waves
magnify amplitude
entropy
infinitesimal universe
heat flows
exert different pressures
scientific pursuit
the laws of thermodynamics
equipartition theorem
diatomic gases

velocity	
kinetic theory of heat and gases	
neat flows	
to exert pressure	
the law of cooling	
the heat transfer coefficient	
volume	
collision	
equal increments of temperature	
molecular makeup	
the degree of curvature	
cartography	
3. List the main characters introduced in this episode. For each charact	er,
3. List the main characters introduced in this episode. For each charact note their relationship to Einstein and their significance in his life.	er, –
	er, _ _ _
4. Describe Einstein's emotions and feelings towards each of the ma	
4. Describe Einstein's emotions and feelings towards each of the ma	

distribute the energy

5. Highlight any crucial turning points in Einstein's life as depicted in this
episode.
6. Identify any scientific theories or concepts that Einstein discusses or
works on in this episode.
AFTER WATCHING
AFIER WAICHING
1. General knowledge. Research and summarize information on the
following individuals, presenting the findings in your own words.
Michele Besso
Marcel Grossmann
Wolfgang Amadeus Mozart
Ludwig Boltzmann
George Green
Carl Friedrich Gauss
John Winteler
Ernst Mach



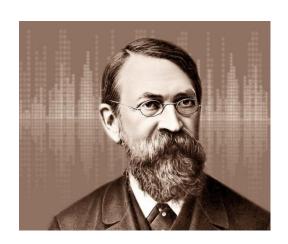




Einstein with Marcel Grossmann (left) and Michele Besso (right)



Wolfgang Amadeus Mozart



Ernst Mach



Ludwig Boltzmann



2. Identify the stylistic devices used in the following abstracts from this episode.

- a) You see knowledge as a baton to be passed....
- b) Let us not fault him for being eager.

Eager? He's a lazy dog. He hasn't completed a single one of my assignments.

- c) Your body's so soft, your face is so stern, just like a little porcelain doll....
- d) Expectations are for small minds. For men like Weber, who are slaves to convention...

3. Dwell on the following quotations from this episode:

- a) "Heidelberg does not, nor will not confer degrees on women".
- b) "How tireless I must be. How strong and cold to have the slimmest hope of being taken seriously. To be given an ounce of the respect you receive instantly by virtue of your manhood!"

4. Prepare a literary translation of these passages from the series rendering the intended tone of the author.

- 1. Sorry about your pencils.
- Oh, no. No apology necessary. It was a-a compelling demonstration, actually.
- Yes, for a moment, I thought we'd bear witness to an explosive transfer of energy from Professor Weber's skull.
- Well, that would have been ... fantastically irreversible.
- Marcel Grossmann.
- Uh, we were just headed for some lunch. Would you care to join us?
- Why not?"
- 2. Miss Maric! Miss Maric. What a kind gesture, leaving this book for mI couldn't help but think about the pencils. From our first class? If we think of entropy as Boltzmann does, as a measure of probability, well, then, the process is irreversible, because the number of possible configurations for the pencils outside of the box is

nearly infinite, whereas there's only a handful of possibilities for the way they fit back in...

- I'm glad you enjoyed it. Now if you'll excuse me...
- Don't go.
- We don't have much time left in the term, and there are... things I want to talk to you about, like...
- -... The probability of chaos.
- You move me.
- You're playing a trick.
- No. I... What? What do you mean?
- I know you're spoken for. Herr Grossmann told me. ...about Marie.

So this is, what, a little fun at my...

- Stop.
- 3. I've been trying to understand equipartition theorem and if it applies to the case of diatomic gases. How do I distribute the energy?
- As a matter of fact, it does indeed apply, and you use the theorem in exactly the same way as before.
- Uh, so then, you divide the energy equally, giving the rotational and vibrational modes the same amount as the translational ones?
- You have an impressive command of this material. With whom else have you studied?
- On equipartition theorum? Only you, sir. Though I did some reading while studying at Polytechnic in Zurich. I found the instruction on thermodynamics there... lacking.
- So you are here, auditing my lectures for... your enjoyment?
- No, sir. I mean, yes. I've enjoyed them very much, but... I've written an essay on kinetic theory. I was hoping you might make time to read it. And if you find it worthy, that you might write to the administration on my behalf? I've petitioned to be allowed to take the entrance exam.
- I admire your spirit, Fraulein, but the Swiss are much more liberal than the Germans. Heidelberg does not, nor will not confer degrees on women. You should return to

Zurich and earn your diploma. After that, I might be willing to consider you for a research position, hmm?

- Thank you, but, sir..."

5. Write the brief summary of the episode.					

6. Work in pairs or small groups and discuss the following:

- a) What challenges does Einstein face in this episode, both personally and professionally?
- b) How does Einstein's character evolve from the previous episode?
- c) Are there any moral or ethical dilemmas presented? How do the characters navigate them?
- d) Based on the events of this episode, make predictions about what might happen in the next episode.
- e) Speculate on how certain events in this episode might influence future occurrences in Einstein's life.
- f) Compare and contrast this episode's portrayal of Einstein with what you know of him from other sources or prior knowledge.
- g) Map out the significant scientific advancements of the time and see how they align with Einstein's personal milestones

GENIUS

EPISODE 3

BEFORE WATCHING

1. Translate the following words and be ready to reproduce them in their context.
disquisition
frankly
impudent/impudence
intimidating
discreet
wretch
illustrious
a breakthrough
to ambush sb
to deduce sth
to comply
to condone sth
to dazzle sb
to dunk
cast iron
eardrums

to linger
pompous
austere
haggard
humble
charade
acclaim
mind-set
a stipend
to eradicate
riveted
a sabotage
a clerkship
a peculiarity
2. Fill in the blanks with the correct word from the list above. Make sure to
adjust the word form if necessary to correctly complete the sentence.
1. The smell of freshly baked cookies in the kitchen, making everyone's
mouth water.
2. The company's policy is not to any form of misconduct among its employees.
3. The scientist's latest discovery was hailed as a major, changing the
way we understand quantum mechanics.
4. His behavior at the formal dinner embarrassed his colleagues and
drew the ire of the host.

5. The author received widespread	for her novel, including several			
prestigious literary awards.				
6. After weeks of surveillance, the detection he left his apartment.	ves decided to the suspect as			
7. Despite his wealth, he preferred an	lifestyle, devoid of any luxury.			
8. The look of the abandoned teenagers from exploring it further.	I house was enough to deter the curious			
9. She spoke about the challe nothing out.	enges she faced during the project, leaving			
10. History remembers her as an country.	leader, whose policies transformed her			
11. Scientists are working hard to	the disease within the next decade			
12. The internship offers a monthly	to cover basic living expenses.			
13. His magic tricks the audi performed such feats.	ence, leaving them wondering how he			
14. The bridge's structure en	sured its durability over many decades.			
15. Listening to loud music through headr time.	ohones can damage your over			
16. She applied for a at the loproceedings.	ocal courthouse to gain experience in legal			
17. Changing one's can often circumstances.	be more challenging than changing one's			
3. Match the beginning with the	end of the phrase. Translate the phrases			
and be ready to reproduce them in their context:				
to get	sb in sth			

to make	oneself
to sneak	to (no) religion
to indulge	inquiries
to duplicate	guilty as charged
to plead	zipping past sb
to impale	one's outcome
to subscribe	with sb
to nag	about
to go	up with sth
to come	sb
to be done	settled

4.Use the phrasal verbs from exercise 3 to complete the sentences. Make sure to adjust the verb form to match the tense and grammatical structure of each sentence.

1. After moving to the new city, it took them a few weeks to	_ in their new
apartment.	
2. Before buying the house, they decided to about the neigh	iborhood's
safety and nearby schools.	
3. The research team was ecstatic when they were able to o	f their initial
experiment, confirming the results.	
4. During the medieval reenactment, one of the actors pretended tosword for dramatic effect.	on a
5. The mother had to her son to clean his room every day used id it.	ntil he finally

6. The team needed to a new strateg	gy to improve their sales after the
previous plan failed.	
7. The cat tried to through the garde	en without being noticed by the dog.
8. After years of unreturned calls and messages, her and moved on.	he finally decided he was
9. As they sat in the café, they watched cars street outside.	the pedestrians on the busy
10. She made it clear that she does not to explore spiritual ideas independently.	any particular religion, preferring
11. For her birthday, they planned torelaxation.	her in a day of spa treatments and
12. At the trial, the defendant chose tosentence.	as charged to receive a lesser

5. Match the following idioms with their meanings and be ready to reproduce them in their context:

to keep up appearances	This means to quickly or suddenly gain
	acknowledgment or fame, often implying it was done
	in a competitive or aggressive manner.
to take flight	This is a metaphor for being betrayed, especially by
	someone trusted. It implies a surprise or deceitful
	action against someone by a friend or confidant.
to be stabbed in the back	To provide something that is missing or lacking; to
	replace something that is absent, often in an
	emotional or existential context. It's about addressing
	a felt emptiness or need.
to snatch recognition	This refers to an audience that is compelled to listen
	or watch, often because they have no other choice.

	It's typically used in situations where the audience
	cannot leave, either due to politeness or physical
	constraints.
to be in (dire) straits	This means to maintain an outward show of
	prosperity or well-being, often when it's not the case.
	It's about preserving a façade or image for the sake
	of social perception.
captive audience	Literally, it means to start flying (as a bird or plane
	does). Figuratively, it can mean to flee or escape
	rapidly from a situation.
Long live sth/sb	To be in a very difficult or dangerous situation. The
	word "dire" adds emphasis, suggesting extreme
	severity or urgency.
to cinch an anchor around	This means to have high ambitions or goals; to aim
one's neck	for great or lofty achievements. It implies optimism
	and looking beyond immediate circumstances.
to have your eyes set on the	It suggests burdening oneself with a heavy and
stars	inescapable responsibility or problem, much like
	carrying an anchor.
to fill the void	This is an exclamation used to express the wish for
	the longevity or continued success of someone or
	something. It's often used ceremonially or in
	celebrations.

6.Rewrite the following sentences using one of the idioms from exercise 5, altering the sentence structure if necessary to accommodate the chosen idiom or collocation.

Example:

Original sentence: They continue to show off their luxurious lifestyle on social media, despite their financial troubles.

Transformed sentence: Despite their financial troubles, they continue <u>to keep up</u>

<u>appearances</u> on social media, showcasing a luxurious lifestyle

- **1.** After losing his job, he found himself in a very tough situation.
- 2. As soon as he saw the police, he ran away as fast as he could
- 3. After his dog passed away, he adopted a new puppy to help cope with the loss
- **4.** I felt betrayed when my coworker took credit for my work
- **5.** He dreams of becoming an astronaut and exploring space
- **6.** She quickly became famous after her novel was published.
- 7. By buying that old house, they've taken on a huge and difficult responsibility
- **8.** The students had no choice but to listen to the long lecture.

7. Match the following collocations with their meanings. Translate them into Ukrainian and be ready to reproduce them in their context:

to deserve the credit	An injection or supply of funds into a business or project, typically to stimulate growth or development.
unfortunate circumstances	Regular, consistent working hours, without significant changes or unpredictability.
to live up to sb's endorsement	A change or alteration made to something, usually to improve it or make it more suitable.
to put in a word with sb	An official governmental office where patents are filed, processed, and granted.
to be mortified	A very young baby that is making quiet, whimpering, or crying sounds.

fundamentals of a subject. To gain or receive something as a result of winning a wager or bet made with another person. To intercede Former students of a school or university who have the necessary skills, education, or credentials. Impeccable hearing Rude, rough, or insensitive behavior, lacking in refinement or civility. To be dismissed or turned down, often in the context of a proposal, application, or relationship. To provide a valid reason or explanation for something, often making it seem acceptable or necessary.
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to set sb up in some place To provide a valid reason or explanation for something, often making it seem acceptable or
something, often making it seem acceptable or
necessary.
taxing experience To establish or arrange a place for someone to
live or work.
to be rejected Vacations or breaks that are luxurious,
extravagant, or opulently celebrated.
to win sth in a bet with sb Extremely precise or accurate auditory
perception.
to justify sth Urgent or important financial issues or problems
that need to be addressed.
qualified alumni A very engaging or fascinating story (yarn is a
colloquial term for a story).
a modification to sth To intervene on behalf of another person,
typically to resolve a problem or dispute.
steady hours To sing gentle, soothing songs that are often
used to help a child fall asleep.

a patent office	An experience that is very demanding or
	exhausting, physically or mentally.
infusion of capital	To be worthy of recognition or praise for
	something done or contributed.
pressing money concerns	To speak to someone on behalf of another
	person, usually to offer support or a
	recommendation.
lavish holidays	Situations or events that are unfavorable,
	unlucky, or adverse.
rudimentary learning	To meet or fulfill the expectations or standards
	associated with someone's public support or
	approval.
a mewling newborn	A fair or adequate amount of pay for work done.
boorish behaviour	To feel extremely embarrassed or ashamed.

8.Use the appropriate collocation from the exercise 7 to complete each sentence. Make sure to adjust the form to match the tense and grammatical structure of each sentence

Sti ucture of each sentence.
1. She was looking for a job with, preferring a predictable and balanced
work-life schedule.
2. The university is proud of its, many of whom have gone on to achieve
great things.
3. After years of hard work and innovative research, she truly for the
prestigious award.
4. I'll for you with the hiring manager; they value my opinion, so it
might help.
5. The diplomat had to on behalf of the detained journalist to secure
their release.

study.
7. They decided to in a cozy apartment downtown to help him start his
new life in the city.
8. The new position offered a, which was significantly higher than what
she was previously earning
9. The project had to be postponed due to beyond our control.
10. Despite the noisy crowd, her allowed her to hear the subtle notes of
the hidden speaker.
11. She was when she realized she had sent the confidential email to the
wrong person.
12. Despite their, they make sure to set aside time for simple family
activities.
13. The sound of the filled the room, drawing immediate sympathy from
all the visitors.
14. Their forced them to reconsider their budget and cut unnecessary
expenses
15. Working at the allowed him to be at the forefront of technological
advancements.
9. Match the following idioms with their meanings and be ready to reproduce
them in their context:
to snatch the credit
don't be thick
get sth all hot and bothered
to hardly add to sth
to be remiss to do sth
much to one's regret
your record does your credit

6. The scientist had to _____ the use of such a controversial method in his

I swear it	
to stick one's head above grass for sb	
the world is beating down your door	
the well is dry	

10.Ma	10.Make up 15 sentences with the idioms from Exercises 9.						
					· · · · · · · · · · · · · · · · · · ·		
					 		

WHILE WATCHING

1. Identify the speaker and the scene of each of the following lines:

- 1. He's snatched the credit you justly deserve.
- 2. I taught you never to rely on a man for anything.
- 3. Your father's business needed another infusion of capital, darling. I can't go to my brother again. I'm afraid the well is dry. You'll have to manage on your own.
- 4. I'm just getting started with my life. I'm-I'm worried that if I marry her, I'll never take flight.
- 5. An unmarried, pregnant woman traveling on her own. What will people say?
- 6. You are the most brilliant man I've ever met. You're going to do great things. But not if you cinch an anchor around your neck
- 7. And Rontgen has a Jewish heart. He's a rat, like the Jews. And rats must be eradicated.

combinations. Write the translation next to them:
cathode ray tube (CRT)
capillary effect
verbose style
quanta
radiation quanta
the ether
the medium
disturbance
X-rays
emissions of metal
Planck's concept
3. Create a timeline of the significant events in Einstein's life as depicted so far in the series.
AFTER WATCHING
1. General knowledge. Research information on the following individuals geographical locations and scientific awards. Be ready to present information in your own words:
Wilhelm Rontgen
Maurice Solovine
Conrad Habicht
The Nobel committee

2. While watching check the meaning of the following terms and word

The Nobel Prize

Serbia

Milan



2. Choose the correct preposition to form corresponding prepositional phrases, translate them into Ukrainian and be ready to reproduce them in the context:

in / at / on/ after search of sth

at / on / under / with sb's behalf

beyond / behind / after / towards notority

at / in/ on / under most

to occur in / to / on / at sb

to count /at / in / on / under sth

to ruminate on / at/ in/ under sth

be untethered by / on / in / before sth

to sacrifice sth to / under / with / after / sth else

to abide with / on / to / for/ after sb

to sniff on / in / at / after sth

to say nothing of sth

3.Identify the stylistic devices used in the following abstracts from this episode.

- 1....Like a pig digging for truffles....
- 2. ...it was like peeking through a keyhole to our future...
- 3. ... Someone else can rot in a patent office...
- 4.Physics is the next logical subject in my illogical curriculum...
- 5. ... Avaricious hunger for sth...
- 6.flank and front of my selfless deed...
- 7. ...I'm afraid the well is dry. You'll have to manage on your own...

4. Prepare a literary translation of these passages from the series rendering the intended tone of the author.

- 1. I was given the impression that the job was mine but for a formality. I've made many inquiries in search of answers, but I've been met with silence.
 - So you have come for help, then.
 - Just... a small favor, Herr Professor, a letter of recommendation, perhaps.
- Perhaps, uh, like, uh, this one. "Esteemed Herr Weber, forgive my impudence "in writing you directly, but I beg you to intercede on behalf of my poor Albert. As a concerned father..."
- My father? Herr Professor, I... I had no idea. I would... I would never ask my father to intercede on my behalf. Frankly, I'm mortified.
 - As you should be.
- Like any other recent graduate, I am only asking that you put in a word with potential employers.

- Oh, but I have. Many universities have sought my counsel on your intellect and your character. But in good conscience I have not and I cannot... recommend your character.
 - You gave me an unfavorable recommendation?
 - Several, in fact.
 - But that's sabotage.
- You openly challenged my authority. You publicly disrespected me. How am I to justify sticking my head above the grass for you when there are so many qualified alumni who have actually earned my respect?
 - But this is my reputation we're talking about.
- And mine, too! If I recommend someone and they fail to live up to my endorsement, how do I look?
 - But you don't understand, sir. I have... I have obligations.
- Obligations. You are what? 22? An unknown, unattached, healthy young man. What obligations could you possibly have?
- 2. I've got a physics question. So, I was in my bathtub this morning, and I dunk my head at the same time as I knock my hairbrush in with my toe. And it hits the cast iron, and it sounds quite loud underwater. Why is that?
- Well, um... Indulge me in something that I like to call a thought experiment. Let's make waves. A hammer hits a string, causing a vibration which spreads out as a waveform. In this case, the medium is a disturbance of the air, which, when it hits your eardrums, is interpreted as sound. Unlike matter, waves travel better through denser materials. That's why your hairbrush sounded loud. Put your ears to a rail, and you can hear locomotives from miles away when all is silent an inch above the track.
 - That's... fantastic.
 - Yes.
- But do you want to know what I've really been thinking about? It's light, because light from this candelabra, say, is a wave, just like sound. But if waves travel better

through denser materials, then why can I put up my hand and block out the brightest of lights?

- Yes. Why?
- Well, scientists think that light travels through its own special, invisible medium. They call it the ether.
 - Yeah, but if it's invisible, then how do we know it's there?
- We don't. People have been trying to understand this for years. We can't... We can't see it o-or feel it, but everywhere that light travels, the ether is there.
- That sounds pretty fantastical. I agree. But it's the best idea we've got. A wave needs a medium.
 - But why?
 - I don't know. But I intend to find out.
 - Damn fine show, Einstein.

5.Write the brief summary of the episode.						
		 				
						

7. Work in pairs or small groups and discuss the following:

1. How did the conventional academic world of early 20th century Europe stifle Einstein's genius? Discuss the challenges he faced in the academic environment and how it affected his career path .

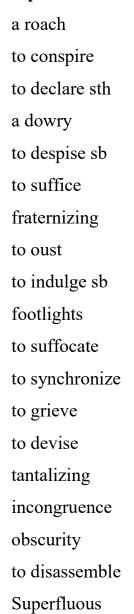
- 2. Explore the subplot involving Philip Lenard's jealousy and anti-Semitism. How did these attitudes impact the scientific community at the time, and what challenges did they pose for Einstein ?
- 3. The episode addresses Mileva's life in Serbia, including her waiting for Einstein, delivering and losing a baby girl. Discuss the impact of Einstein's personal life and relationships on his scientific work and mental state
- 4. Einstein's attempts at tutoring were unsuccessful, and one of his students even received lower grades after his lessons. What does this tell us about Einstein's skills as a teacher and his approach to physics? How did his interactions with the Olympia Academy influence his thoughts on radiation packets (Quanta) and the nature of light
 - 5. Discuss the cinematography, costume design, and setting of the episode.
- 6. How do these elements contribute to the storytelling and the portrayal of Einstein's era?

GENIUS

EPISODE 4

BEFORE WATCHING

1. Translate the following words and word combinations and be ready to reproduce them in their context.



2. Fill in the blanks with the appropriate words from the list above. Some words may need to be modified to fit the tense or grammatical structure of the story correctly:

Once upon	a time, in a town overshadov	wed by	, a you	ıng woman
received a	as part of her inher	ritance. Desp	ite this, she	was often
by h	ner peers, leading her to	with the	ose of kinder	spirits. Her
brother, a playwr	right, worked tirelessly by the o	candle light to		a play that
would capture to	he beauty of th	eir homeland	. However, t	their father
conspired to	him in favor of a me	ore pragmatic	sibling. Refu	using to let
this break their sp	pirit, the siblings	their efforts to	support each	other. The
sister decided to	her brother by a	llowing him t	to use her do	wry for his
production. As th	ne play's success grew, it	to dra	w attention fr	om far and
wide,	the local critics. The	between	n the siblings'	vision and
the critics' expe	ctations was evident, yet the	love and su	pport they sl	hared were
enough to endure	e any hardships. In the end, th	neir collaborat	tion proved th	hat even in
, star	rs could shine bright, and their	shared succes	ss was more tl	han enough
to th	neir critics' doubts.			

3. Match the beginning with the end of the phrase. Translate the phrases and be ready to reproduce them in their context:

1. to pursue	with sb
2. to ease	recognition for sth
3. to indulge	sentiment
4. in correspondence	(no) footnotes
5. to take	one's passion
6. a nice	with the naked eye
7. to provide	one's burden
8. be confirmed	the notion

4. Fill in the blanks with the correct phrases from exercise. Some phrases may need to be modified to fit the tense or grammatical structure of the story correctly:

After years of hard work,	Sarah finally decided to _	, leaving her
corporate job to become an artist	. Her friends tried to	by supporting her
first exhibition. While some	that her career	change was impractical,
Sarah found herself	with fellow artists who sh	ared her dreams. At her
debut exhibition, she didn't	for her works; in	stead, she credited her
success to her mentors. Many v	risitors commented on the	behind her
artwork, though they noticed th	e exhibition	Despite skepticism, the
beauty of her art could	, proving her critics wron	g.

5.Match the beginning with the end of the following phrasal. Translate the phrases and be ready to reproduce them in their context:

to make	a trench
to toil	away indulgences
to dig	an experiment
to lung	detained
to put	in a split second
to conduct	a mark with one's ideas
to be / get	in a fraction of a second
to pass	in
to pass	short of expectations
to fall	with sb
to be confronted	at sb

6. Fill in the blanks with the appropriate phrases from the list to complete the sentences:

1. The activist for protesting without a permit but was released
shortly after.
2. The soldiers began around the perimeter to prepare for the
incoming attack.
3. It's time to and focus on healthier habits for the New Year.
4. The scientist decide to test the new theory on quantum
mechanics.
5. Many athletes know that years of training canif they're
not constantly pushing their limits.
6. After years of research, she managed by developing a
new sustainable energy source.
7. Life-changing decisions can sometimes, making us
realize the importance of every moment.
8. The team hadharsh conditions to complete the project on
time.
9. In a heated debate, he didn't hesitate his opponent with
strong arguments.
10. When he his mentor, he knew he had to defend his thesis
with confidence
7 Match the following idioms with their meanings and he ready to

7.Match the following idioms with their meanings and be ready to reproduce them in their context:

to save your breath	To be given a certain amount of time,		
	usually for a specific purpose.		
bloated windbags	To be thinking of a particular person for a		
	specific reason or role.		
to be granted a parcel of time			
	used in the context of family		
	resemblance.		

to relinquish a privilege	A strong feeling of fear or anxiety about
	something that might happen.
to have sb in mind	To force assistance or advice on someone
	who doesn't want it.
to accept a favor from sb	To be very close to a negative outcome or
	danger, usually as a result of potential
	error.
to be the split and image of sb	To receive help or a service from
	someone, usually with an implication of
	gratitude or a need to reciprocate.
the weather is turning	An expression indicating a change in
	weather conditions, usually towards
	something worse.
to be one misstep away from sth	To stop talking or explaining because it is
	unnecessary or won't be effective.
a sense of dread	An expression of regret, disappointment,
	or sadness about a situation.
to shove your help down my throat	Occasionally, from time to time.
but alas	To voluntarily give up a special right or
	advantage.
at the behest of	A derogatory term for people who talk a
	lot but say little of value, often full of
	self-importance.
now and then	At the request or order of someone.

8.Rewrite each sentence using the idiom provided. Ensure the new sentence keeps the original meaning but incorporates the idiom naturally.

Example:

Original Sentence: "You don't need to keep telling me; I already know."

Transformed Sentence: "You can save your breath; I already know."

- 1. "He looks exactly like his father."
- 2. "I couldn't have finished moving without my neighbor's help."
- 3. "The company decided to give me two weeks to complete the project."
- 4. "Please stop explaining the rules to me; I already understand the game."
- 5. "She decided to give up her right to the throne."
- 6."I know exactly who I want for this job."
- 7."It looks like it might start raining soon."
- 8. "This politician spends hours talking during the meetings without contributing anything useful."
- 9. "She's very close to losing her job due to these mistakes."
- 10."I can't shake this feeling that something bad is going to happen."
- 11."I see my old friends from high school occasionally."
- 12."I hoped we could fix it, but it seems we can't."
- 13. "She organized the event because her boss asked her to."
- 14."He kept offering me advice on my project, even though I didn't ask for it."

9. Match the following collocations with their meanings. Translate them into Ukrainian and be ready to reproduce them in their context:

heuristic point of view	Very high or ambitious targets, often challenging to achieve.		
lofty goals/ ideas/ ambitions	A commercial deal or exchange of goods, services, or funds between parties.		
an ample supply of	High moral standards or ideals that are often regarded as noble and admirable.		
a business transaction	To be in a stable or strong situation, often in a job or argument.		
lofty principles	A more than sufficient or abundant amount of something.		
to have a solid position	An approach or perspective that involves		

	learning or problem-solving through		
	practical, experimental, or trial-and-error		
	methods.		
a prized heifer	An action taken to comfort someone or		
	offer sympathy in a time of		
	disappointment or grief.		
a gesture of consolation	An unusual or unexpected characteristic		
	in a mathematical context, often an		
	anomaly or a peculiar result that is not		
	typical.		
a mathematical quirk	A highly valued female cow, often		
	recognized for its quality or breeding		
	potential.		

	10.Make up	10 sentences	with t	the words,	idioms	and	collocations	from
exe	rcises 3, 5, 7, 9							
								· .
								

WHILE WATCHING

1.Identify the speaker and the scene of each of the following lines:

1. What are you aiming for, Albert? A piece of paper you can frame and hang on the wall?

- 2. Albert, you of all people have no interest in a baby
- 3. I didn't marry you for a dowry, Dollie. I married you because I love you.
- 4. And how could she despise the woman who gave birth to her only grandson, huh?
- 5. We clean up after our husbands more than our children.
- 6. Mileva, darling, if there's one thing my Albert doesn't need help with, it's his science.
- 7. Well, I suppose we all fall short of expectations now and then.
- 8. Yes, I heard you had a son. Hold him tight, Albert. You think his childhood will last forever, but I promise you, it will pass in a fraction of a second.
- 9. Darling, open your eyes. You are not his partner. You are his librarian. You are his clerk.
- 10. No, no, tools don't make discoveries, doctor. People do.
- 11. History is full of bad jokes, I suppose.

2. While watching check the meaning of the following terms and word combinations. Write the translation next to them:

rudimentary device
mirrored quadrant electrometer
ionization chamber
sufficient dielectric
an electromagnetic signal
absolute simultaneity
a light ray
to be propagated from sth
a finite number of sth
photoelectric effect
prove the duality of light
radioactivity
to dissolve

3. W	That is the significance of the "theory of special relativity" that Einstein
deve	elops in this episode?
AFT	TER WATCHING
1. L	ook up some information about these personalities. Mention their major
cont	tributions, awards, and significant life events:
•]	Marie Sklodowska CuriePierre Curie
•]	Max Plank
• .	Jacobus Henricus van't Hoff
•]	Hendrik Antoon Lorentz
•]	Henri Becquerel
• (Gustav Kirchhoff
• (Galileo Galilei
•]	Max von Laue



Max Planck



Marie Sklodowska Curie



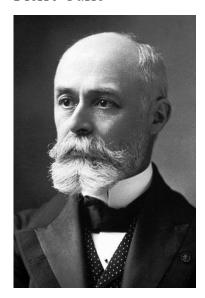
Pierre Curie



Jacobus van't Hoff



Hendrik Antoon Lorentz



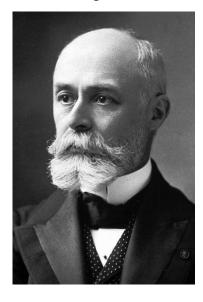
Henri Becquerel



Gustav Kirchhoff



Galileo Galilei



Max von Laue

2.Identify the stylistic devices used in the following abstracts from this episode:

- 1. You can either wait for those dinosaurs to give you permission to engage in the scientific world, or you can show them.
- 2. Four weeks since I was published! Four weeks and not a peep! Were you expecting a parade?
- 3. It was one paper. I'll simply write another. And if no one takes any notice, I'll write another. They can't ignore me forever. We only need to find a problem. It seems to me you have an ample supply of those.
- 4. An incongruence, a paradox that nobody else sees molecular mechanics, the ether, light, space... Ah yes, the whole of physics. Shouldn't be too difficult.
- 5. If I could be granted the smallest parcel of time...

Time, Herr Einstein, is a privilege you relinquished when you accepted this position. He's a tyrant!

It's unbearable!

6. He gives me four times the work as the other dolts in the office because I'm the only one who understands mechanical engineering!

Poor thing. A boss who respects your intellect and a full time job that pays twice as much as mine?

- 7. How does it feel accepting a favor from the swine who dishonored your sister-in-law?
- 9. Our marriage is not a business transaction! You are not a prized heifer to be bought and sold.

That's very noble of you, Albert, but your lofty principles will not help me cook, clean, and raise a child all while midwifing your papers.

11.I care about science living and breathing in the present and not suffocating in the past.

3. Prepare a literary translation of these passages from the series rendering the intended tone of the author.

- 1. May I help you, Mademoiselle?
- You gave me a shock. This is an original piezoelectric meter, yes?
- I'm sorry, but who are you?
- As a rudimentary device, it's quite effective. But it would be far more precise with the addition of a mirrored quadrant electrometer and an ionization chamber.
- When I built the first model, I considered an ionization chamber but wasn't convinced that air would be a sufficient dielectric.
- You invented the piezoelectric meter?
- Is there something I can do for you, mademoiselle?
- I'm looking for laboratory space to conduct my experiments. I'm studying at the Sorbonne.
- Physics?
- Magnetism to be specific.
- You haven't told me your name.
- Marie Sklodowska.
- It's a pleasure to meet you. Pierre Curie.
- **2.** Do you remember the Curies' paper on radioactivity? Working tirelessly, side by side, without heat in their lab or funding for their research. It's romantic, no?
- The Curies spent four years on that paper. I have only three hours until the patent office opens.
- You should get some rest. You can't think properly without sleep.
- I don't need sleep. I need more coffee.
- What is it?
- Do you remember our thought experiments on gas theory at university? Those weeks we spent holed up in my room?
- I remember quite a lot of experimentation, yes. Not all of it to do with science.
- What if we were going about it all wrong? What if, instead of studying gases, we studied a cup of coffee?
- You really must sleep, Albert.

- Jacobus v'ant Hoff's Nobel paper from 1901: Particles in a solution behave like a gas. When sugar dissolves in coffee, water surrounds glucose and tears it from the sugar crystal, correct? The more sugar I add, the thicker the coffee becomes. If we can calculate the osmotic pressure, perhaps we can deduce the precise number of...
- You want to prove the existence of molecules...
- Too ambitious?
- No. It's brilliant...
- **3.** And three-x-by-t-squared equals r by t-squared...
- 4. And then apply it back to three dimensions and the coefficient...
- Michele, you're brilliant!
- Michele, what a nice surprise.
- Sorry I'm late.
- One dimension, Mileva. Michele's great insight. We calculate in one dimension! It's so...Elegant.
- I'm not sure I understand...
- Here, pretend I'm drunk.
- You don't drink.
- Pretend! If I had as much to drink as Michele, I'd be staggering everywhere, yes? Like pollen wiggling in the water. But where am I going? To the bar, the toilet, to the street?
- It's impossible to predict. We've been over this...
- Precisely. Michele's helped me see that we can't predict exactly where I'll go, but using simpler math, we can calculate how far I'll go over a period of time. Turns out it's six microns per minute. Exactly. Six microns per minute! I proved the existence of molecules and nobody believed me. And now I've proved how they move, and it can be confirmed with an ordinary microscope!
- That's wonderful...
- To Albert!

4. Write the brief summary of the episode.

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5. Work in pairs or small groups and discuss the following:

- 1. What challenges does Albert Einstein face while working at the Bern patent office?
- 2. How does Einstein manage to write four new scientific papers despite his day job? Discuss his work-life balance.
- 3. How does Einstein's new wife support him during this period?
- 4. Which of Einstein's papers attracts the attention of Max Planck, and why is this significant?
- 5. Describe the struggles and successes of Einstein during his "miracle year."
- 6. How does this episode depict the relationship between Einstein's personal life and his scientific achievements?

GENIUS

EPISODE 5

BEFORE WATCHING

1. Translate the following words and word	combinations	and	be	ready	to
reproduce them in their context.					
consumption					
hysteria/hysterical					
disproportionate					
oscillating					
to disregard sth					
to lurk					
to unnerve sb					
a taskmaster					
intimidating					
a disgrace					
trifling					
suspicious					
to scold					
redefinition of sth					
to fathom sth					
to suffocate					
late					

bearable / unbearable
fragile
rigorous
sickly
eminent
a barge
a shovel
a tramp
schizoid
discontent
2. Fill in the blanks with the appropriate word from the list above:
1. After watching the thriller movie, she couldn't shake off the feeling that someone was in the shadows of her home.
2. The committee's to the mounting evidence of environmental
damage was criticized by activists.
3. His laughter during the tense meeting only added to the already
strained atmosphere.
4. The levels of pollution in the city are causing an increase in
respiratory diseases among its inhabitants.
5. The critique from her supervisor left her questioning her decision
to pursue a career in academia.
6. Known for his training methods, the coach was both respected and
feared by the athletes.
7. The from his peers was unbearable after he mistakenly sent the
confidential email to the entire company.

8. They embarked on a of the	e term "freedom," arguing it should
encompass digital privacy rights.	
9. His ability to the complex	kity of quantum physics made him an
figure in the scientific community	7.
10. Despite the comments, s	she found the feedback valuable and not
at all to her progress.	
11. The fluctuating market prices have	left farmers in a state of,
unsure of the future.	
12. To someone with just a	glance is a skill that some find,
especially in negotiations.	
13. Finding the garden filled	d with water, he grabbed and
started to clear the muddy aftermath of the s	torm.
14. The notion that art is ap	oursuit is a to those who
dedicate their lives to creating beauty.	
15. Living in a cramped apartment wit	h no ventilation felt like,
making the move to a house with a yard a m	uch more situation.
2. Match the beginning with the end of th	ne phrase. Translate the phrases and be
ready to reproduce them in their context:	
to count	one's needs
to put	without something
to do	to sb
to meet	with sb
to prattle a	a principle

to swallow	carefully
to devise	up with sth
to spit	on sth
to despise	one's blessings
to tread	sth/sb
to throw	one's pride
to be acquainted	sth out
to be drawn	doubt on sth

	4.Fill in	the blan	ks with	the	correct	word	from	the	list in	exercise	· 3.	Make
sure	to adjust	the word	d form i	if nec	cessary	to cor	rectly	com	plete	the sent	enc	e:

9. When confronted about the secret, he finally	_ the truth,
revealing what everyone had suspected all along.	

10. During the meeting, she couldn't help but _____ about her weekend adventures, much to her colleagues' amusement.

3. Match the following collocations with their meanings. Translate them into Ukrainian and be ready to reproduce them in their context:

a slight croup	a social structure in which classes are
	determined by heredity, often found in
	certain traditional societies.
a prevailing theory	refers to a mild case of croup, a condition
	that causes a distinctive cough and
	difficulty breathing, usually in children.
	The term "slight" suggests it's not severe.
to apply to something	to acknowledge or recognize someone's
	contribution or responsibility for
	something.
warmongering monarchy	to create a distinct and typically positive
	image or opinion about oneself in the
	minds of others over a period of time.
a caste system	this is a theory that is currently widely
	accepted or most common among a
	specific group or in a particular field.
to declare a religion	a trait or characteristic that is common
	among family members, often due to
	genetic inheritance.
credit someone for something	means to make a formal request or to be
	relevant or pertinent to something. For

	example, "to apply to a university" or "rules that apply to a situation."
establish a reputation for oneself	a monarchy that aggressively promotes or is eager to engage in war.
make an advancement	to possess the quality of being humble enough to do something, often implying that the action requires swallowing one's pride or acknowledging one's limitations.
run in the family	to formally announce one's religious belief or affiliation
have a delusion	a concept or thought that is bizarre, unusual, or outside the norm.
bout of melancholy	to formally give up one's citizenship or nationality of a country.
have the humility to do something	literally, to extinguish a fire. Figuratively, it can mean to resolve a crisis or calm down a situation
put out the fire	to achieve progress or development in a particular area, like technology, career, or science.
to renounce one's citizenship	to hold a belief or impression that is contradicted by reality or rational argument, typically as a symptom of a mental disorder.
an outlandish idea	having more than enough time to complete a task or achieve something.

to be blunt	to deal with or address a situation that is
	unique or specific to a particular field or
	context.
to cover a specialized circumstance	to speak in a direct, straightforward manner, often without regard for diplomacy or softening the impact.
ample time to do something	a short period of feeling sad or pensive without a specific cause.

6. Fill in the blanks with the correct collocation from the list in exercise 5. Make sure to adjust the word forms if necessary to correctly complete the sentence:

Schitch	
1	. The firefighters worked tirelessly before it could spread to
nearby	houses.
2	. The breakthrough in medical research was considered a major
	in the fight against cancer
3	. Musical talent seems, with each generation boasting at
least or	ne professional musician.
4	. After living abroad for many years, she decided,
adoptin	g her new country as her home.
5	. This law was created not encountered in general
practice	e
6	among scientists is that dark matter makes up a significant
portion	of the universe's mass.
7	, your performance this quarter has not met our
expecta	ations.

8. The child developed	after being exposed to the cold
weather, causing concern among his parer	
9. In many societies,order and hierarchy.	has been used to maintain social
·	ed, giving us to complete
our research thoroughly.	
11. After losing his job, he went thro	ough, struggling to find his
purpose.	
12. Proposing that we could live on	Mars within a decade was
that sparked much d	ebate
13. This scholarship	_ students who excel in the arts as well as in
academics.	
14. The history book described	that led its people into
numerous unnecessary conflicts.	
15. The new king decided	as the official state religion,
marking a significant shift in policy.	
7. Match the following idioms	with their meanings and be ready to

7. Match the following idioms with their meanings and be ready to reproduce them in their context:

to have sb in mind	To be stopped or delayed in progress,
	often referring to projects, plans, or
	vehicles.
at the behest of sb	To cause a situation to become even more problematic or difficult.
in response to sth	To experience a feeling of deep anxiety, nervousness, or unease.
tongue-tied	To experience periods of feeling sad,

	depressed, or pessimistic.
to be stalled	Reacting to or answering something,
	such as a question, action, or event.
to make matters worse	On the command or request of someone.
	This implies that the action is taken
	because someone else has asked for it or
	ordered it.
to overcome fears	Unable to speak or express oneself
	smoothly or effectively, often due to
	nervousness or shyness.
to have (no) quarrel with sb	To be in a more advantageous situation
	or condition by not having a particular
	thing or person in one's life.
to be flattered	To feel a complete loss of hope about
	something.
to get a pit in my stomach	To be hesitant or unwilling to do
	something.
to have dark moods	To be thinking of a particular person for
	a specific reason or purpose, such as
	considering them for a job or task.
to be better off without sth/sb	To have (or not have) a disagreement or
	argument with someone.
to be in despair about sth	To feel honored or pleased by
	something, often a compliment or
	positive attention.
to be up in the air about sth	To be not involved or not connected

	with something.
to have nothing to do with something	To be uncertain or undecided about something.
to be reluctant to do something	To be a person or thing that is regarded as very foolish or ridiculous, often a subject of mockery.
to be a laughingstock	To successfully deal with or gain control over fears or phobias.

8.Read the following story about Liam, a young man from a coastal town with dreams bigger than the sea. Some parts of the story are missing, represented by numbered blanks. Fill in the blanks with the correct phrase from exercise 7, based on the context of the story. Each phrase can only be used once.

A Tale of Courage and Change

Liam had always been (1) He lived in a small coastal town where
fishing was the way of life for most, including him. However, Liam dreamed of
exploring beyond the sea that bordered his home. His heart yearned for adventure in
the vast world beyond, yet the thought of leaving everything behind (2)
His best friend, Sophie, knew all about his dreams and always encouraged him.
"You're (3) staying stuck here all your life," she would say. But Liam was
(4) leaving his family and the only life he knew.
The opportunity came unexpectedly. An explorer visited their town, seeking
crew for a journey to uncharted lands. This was Liam's chance, but he (5)
when trying to express his interest. The fear of the unknown and the possibility of
becoming (6) if he failed held him back.
One evening, (7)Sophie, Liam met with the explorer. They talked
long into the night, and for the first time, Liam felt (8) that someone

believed in his hidden potential. The explorer had (9) for a role that
required creativity and bravery, not just strength.
Facing his fears, Liam decided it was time (10) that anchored him.
His decision (11) his family initially, but they soon realized he needed to
follow his heart. They had (12) him pursuing his dreams; they just feared
for his safety.
The night before his departure, Liam couldn't sleep. The thought that he
(13) the fisherman's life anymore filled him with both excitement and
sadness. He was (14) of doubt and step into the unknown.
As the ship sailed away, Liam looked back at his town, feeling (15)
but also a sense of freedom. He knew the journey would be challenging and that he
would need (16) in the face of danger. Yet, the support of his friend and the
explorer's confidence in him made him believe he was prepared for whatever lay
ahead.
In the end, Liam's journey taught him about the importance of chasing one's
dreams, regardless of the fears and uncertainties that come with it. He discovered new
lands, but more importantly, he discovered his true self. He realized that life is about
embracing change and that sometimes, (17) the unknown is the greatest
adventure of all.
9.Make up 10 sentences with the words, idioms and collocations from
exercises 1, 3, 5, 7.

WHILE WATCHING

1. Identify the speaker and the scene of each of the following lines:

- 1. The last thing I want to do is paint on a smile and chatter about the weather with strangers.
- 2. A man can't avoid his fears. To overcome them, he must face them, pass through the inferno.
- 3. Prague's a caste system. Germans on top, Jews in the middle and the poor Czechs beneath them both.
- 4. I think, of all the mysteries in the universe, people are the hardest for me to fathom.
- 5. Scientists must take risks. Otherwise we'd never make any advancements. 6. You've established a strong reputation for yourself. You should tread carefully. It's not hard to go from genius to laughingstock.
 - 7. Your father is a human being. Human beings make mistakes.
- 8. Don't you sometimes think that, well, life isn't worth living without someone to love.

2. While watching check the meaning of the following terms and word combinations. Write the translation next to them:

acceleration

inversely proportional

directly proportional to sth

scattering of light

constant speed

emission theories

conjecture

resistance

gravitational force
to pull nitrogen out of thin air
psychiatry
a perpetual process of decay
sub-atom
disintegration
the ratio of the diameter
circumference
Pi
four dimensions
3. Choose one of the scientific concepts discussed in the episode. Write a
brief essay or prepare a presentation on how this concept was understood at the
time of the characters' lives versus how it is understood today.

AFTER WATCHING

1. Study the following Mind Map Framework of the proper names mentioned in this episode. Find some extra information about these prominent people, places, institutions etc.

Mind Map Framework:

Academic Figures and Institutions

Professor Max Planck

Professor Hermann Minkowski

Karl-Ferdinand University in Prague

Sigmund Freud

Historical and Political Context

Austro-Hungarian Empire

Count Von Sturgkh

The Holy Crown

Geographical Locations and Landmarks

Saltsburg

Brussels

The Alps

Mount Kaferberg

Scientists and Scholars

Fritz Haber

Ernst Rutherford

Paul Langevin

Erwin Freundlich

Cultural and Literary Figures

Franz Kafka

Science and Education

Arnold Sommerfeld

Henri Poincaré

Influential Conferences and Events

the Solvay Conferences

Miscellaneous Individuals

Jakob Laub

2.Identify the stylistic devices used in the following abstracts from this episode.

- 1. With my patients, I've found whatever's troubling them on the surface, fear of speaking, for example, there's something much more fascinating lurking in the unconscious.
- 2. Why should I be happy in a new city? It will just be more of the same. Wash dishes, change diapers, buy groceries. I might as well be a mule tied to a cart. When do I get to use my mind?
- 3. With respect, Doctor, I'd rather not be analyzed. I'd prefer to remain in the dark.
 - 4. Prague is a like pretty girl with a cold heart.
 - 5. It's not hard to go from genius to laughingstock.
 - 6. You look like a tramp
- 7. That feels like eons ago. Love is a chemical reaction. Sometimes, it burns itself out.
- 3. Prepare a literary translation of these passages from the series rendering the intended tone of the author.
- 1. I'd like to continue our work together, so why don't you come to Prague with me, Jakob? Maybe I could get you a position at the University. We'd have time to work on accelerated motion.
- Albert, I'm flattered, but I've received another offer.
- A professorship?
- No. Assistant to Philipp Lenard.
- Well, Lenard's a genius. Of course, you must accept.

- Yes, but he's got a bit of a reputation. Quite a taskmaster, apparently. Honestly, I get a pit in my stomach just thinking about it.
- I know how you feel. In Salzburg, I was so nervous before my lecture, I thought my heart was going to stop right in the elevator. Actually, I... I imagined something very strange, as though the elevator were falling, and I was just floating inside it. It was terrifying at first...but then, suddenly, it was as if, well...as if I had no weight at all. Because a falling man does not feel his own weight. Me, the floor, my papers, were all falling at the same rate, so I couldn't feel the pressure of the floor on my feet. But what if the elevator was rising? I'd be accelerating in the opposite direction. It would produce the opposite effect.
- You'd feel the floor.
- I'd be glued to it, as I am now.
- But that's gravity.
- Exactly! I should have seen it before. It is so simple, so beautiful. Acceleration and gravity are the same thing. This is the idea I've been missing to complete relativity. This may just be one of the happiest thoughts of my life.
- **2**. What did you think of my elevator thought experiment?
- Mm. I'm still up in the air about it.
- I've realized another wonderful consequence of my idea.
- Hmm.
- Gravity bends light.
- That is a completely new conception, Albert. But even if you're right, you'd need a huge gravitational force to show it.
- The sun would do, wouldn't it? Imagine that log is a particle of light. Now think of the river as space. And you see the barge, there? That's the sun. Now watch. The sun's gravity changes the shape of space.

- I will credit you for originality, Albert. But is it possible that you've gone a bit too far?
- No. It's so beautiful that it must be right. And an astronomer could prove it.
- Then I suppose you'd bettter find a good astronomer.
- 2. Herr Professor, what an unaxpected pleasure. What-What brings you to Zurich?
- Well, to begin with, I've found you an astronomer. Name is Freundlich. He's young, but ambitious.
- You must tell me all about him, but first, take a look at the spider on the record.
- Ah.
- Agelena labyrinthica, I think.
- So, you know each other? Ask her what's the ratio of the diameter of the record to the circumference.
- Pi, of course.
- Not to the spider, it isn't. Because of relativity, the circumference is shorter in the direction of rotation.
- I'm not sure I follow.
- This beautiful little creature has given me the key to formulating general relativity. It cannot be done with three-dimensional geometry. Dr. Jung made me realize Minkowski was right. I need four dimensions.
- This is wonderful, don't you see?
- I hope that you'll think that this is wonderful, too.
- The Prussian Academy.
- It's an official offer.
- My God. It's good money.
- Mm

- But I don't know if I can accept.
- I thought you'd be thrilled.
- It's complicated. Berlin is
- Berlin is what?
- I'm sorry, I need some time to consider.
- It wasn't easy for us to get you this offer, albert. I can't very well go back to Berlin without an answer.
- Why don't you take a little hike up Mount Kaferberg?
- A hike?
- It's a lovely view of the city. It'll take you two hours. I'll meet you at the bottom with my answer.
- Very well.
4. Write the brief summary of the episode.

5. Work in pairs or small groups and discuss the following:

1. How do the personal struggles of Albert Einstein, as depicted in this episode, impact his scientific work? Do you think his personal experiences influenced his approach to science?

- 2. Episode 5 highlights the challenges faced by Mileva and Marie Curie in balancing family life and scientific careers. Discuss the portrayal of these challenges and their relevance to contemporary issues faced by women in science.
- 3. Analyze the conversation between Edward Einstein and Carl Jung regarding forgiveness. How is forgiveness portrayed as a healing process, and do you think it's accurately represented?
- 4. Discuss the societal expectations and constraints placed on Mileva and Marie Curie. How do these constraints differ, and what do they reveal about the societal norms of their time?
- 5. Explore the relationship between Albert Einstein and his son Edward. How does the show depict the impact of Albert's career on his family life, and what are the consequences of this portrayal?
- 6. Discuss the depiction of Einstein's realization that gravity and acceleration are the same force. How does the show use visual elements to convey complex scientific concepts?
- 7. Evaluate the balance between historical accuracy and dramatization in this episode. Which elements do you believe were accurately portrayed, and which were dramatized for television?
- 8. Analyze the conversation between Mileva and Marie Curie about the feminist dilemma of their time. How does this conversation reflect the ongoing struggles of women in academia and professional fields?
- 9. How does the episode explain Einstein's struggle to expand his theory of special relativity? Discuss the significance of his theories in the context of the episode.
- 10. The episode touches on various moral and ethical issues, including the blame game in the family and societal judgments. Discuss how these issues are presented and their relevance to the characters' development.