

SASTRI COLLEGE
SCOPE / REVISION FOR FINAL EXAMINATION 2024
GRADE 9

Websites : PAST PAPERS:- testpapers.co.za

SUBJECT	PAPER	DUR	MAX MARK	ASPECTS TO BE TESTED	REVISION
ENGLISH HL	1	2hrs	70	Comprehension Summary Advert Cartoons Language	Study guide Lang/comprehension Notebook
ENGLISH HL	3	2hrs	50	Essay (30) Transactional (20)	Writing notebook Formats Study guide
AFRIKAANS FAL	1	2hrs	70	GEC Comprehension (25) Visual Text (15) Summary (10) Language (20)	Study guide Lang/comprehension Notebook
AFRIKAANS FAL	3	2hrs	30	Essay (20) Short Transactional Text (10)	Notebook Formats Study guide
ISIZULU FAL	1	2hrs	70	Comp- 25 Visual- 15 Summary- 10 Lang- 20	Study guide Language and comprehension Notebook
ISIZULU FAL	3	2hrs	20	Short trans Essay	Notebook Formats Study guide

Grade History Scope For Final Examination

Jicheng Xie



Grade History Scope For Final Examination:

Recognizing the way ways to acquire this books **Grade History Scope For Final Examination** is additionally useful. You have remained in right site to begin getting this info. get the Grade History Scope For Final Examination partner that we give here and check out the link.

You could buy lead Grade History Scope For Final Examination or get it as soon as feasible. You could quickly download this Grade History Scope For Final Examination after getting deal. So, as soon as you require the ebook swiftly, you can straight get it. Its fittingly completely easy and correspondingly fats, isnt it? You have to favor to in this reveal

https://blog.gospelcrusade.org/results/Resources/default.aspx/honda_vtr250_motorcycle_service_repair_manual_1988_1989.pdf

Table of Contents Grade History Scope For Final Examination

1. Understanding the eBook Grade History Scope For Final Examination
 - The Rise of Digital Reading Grade History Scope For Final Examination
 - Advantages of eBooks Over Traditional Books
2. Identifying Grade History Scope For Final Examination
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Grade History Scope For Final Examination
 - User-Friendly Interface
4. Exploring eBook Recommendations from Grade History Scope For Final Examination
 - Personalized Recommendations
 - Grade History Scope For Final Examination User Reviews and Ratings
 - Grade History Scope For Final Examination and Bestseller Lists

5. Accessing Grade History Scope For Final Examination Free and Paid eBooks
 - Grade History Scope For Final Examination Public Domain eBooks
 - Grade History Scope For Final Examination eBook Subscription Services
 - Grade History Scope For Final Examination Budget-Friendly Options
6. Navigating Grade History Scope For Final Examination eBook Formats
 - ePub, PDF, MOBI, and More
 - Grade History Scope For Final Examination Compatibility with Devices
 - Grade History Scope For Final Examination Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Grade History Scope For Final Examination
 - Highlighting and Note-Taking Grade History Scope For Final Examination
 - Interactive Elements Grade History Scope For Final Examination
8. Staying Engaged with Grade History Scope For Final Examination
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Grade History Scope For Final Examination
9. Balancing eBooks and Physical Books Grade History Scope For Final Examination
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Grade History Scope For Final Examination
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Grade History Scope For Final Examination
 - Setting Reading Goals Grade History Scope For Final Examination
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Grade History Scope For Final Examination
 - Fact-Checking eBook Content of Grade History Scope For Final Examination
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning

- Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
- Integration of Multimedia Elements
 - Interactive and Gamified eBooks

Grade History Scope For Final Examination Introduction

In today's digital age, the availability of Grade History Scope For Final Examination books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of Grade History Scope For Final Examination books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Grade History Scope For Final Examination books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing Grade History Scope For Final Examination versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, Grade History Scope For Final Examination books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether you're a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing Grade History Scope For Final Examination books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for Grade History Scope For Final Examination books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public. Open

Library hosts millions of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free access to course materials from the Massachusetts Institute of Technology, and the Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, Grade History Scope For Final Examination books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of Grade History Scope For Final Examination books and manuals for download and embark on your journey of knowledge?

FAQs About Grade History Scope For Final Examination Books

1. Where can I buy Grade History Scope For Final Examination books? Bookstores: Physical bookstores like Barnes & Noble, Waterstones, and independent local stores. Online Retailers: Amazon, Book Depository, and various online bookstores offer a wide range of books in physical and digital formats.
2. What are the different book formats available? Hardcover: Sturdy and durable, usually more expensive. Paperback: Cheaper, lighter, and more portable than hardcovers. E-books: Digital books available for e-readers like Kindle or software like Apple Books, Kindle, and Google Play Books.
3. How do I choose a Grade History Scope For Final Examination book to read? Genres: Consider the genre you enjoy (fiction, non-fiction, mystery, sci-fi, etc.). Recommendations: Ask friends, join book clubs, or explore online reviews and recommendations. Author: If you like a particular author, you might enjoy more of their work.
4. How do I take care of Grade History Scope For Final Examination books? Storage: Keep them away from direct sunlight and in a dry environment. Handling: Avoid folding pages, use bookmarks, and handle them with clean hands. Cleaning: Gently dust the covers and pages occasionally.
5. Can I borrow books without buying them? Public Libraries: Local libraries offer a wide range of books for borrowing.

- Book Swaps: Community book exchanges or online platforms where people exchange books.
6. How can I track my reading progress or manage my book collection? Book Tracking Apps: Goodreads, LibraryThing, and Book Catalogue are popular apps for tracking your reading progress and managing book collections. Spreadsheets: You can create your own spreadsheet to track books read, ratings, and other details.
 7. What are Grade History Scope For Final Examination audiobooks, and where can I find them? Audiobooks: Audio recordings of books, perfect for listening while commuting or multitasking. Platforms: Audible, LibriVox, and Google Play Books offer a wide selection of audiobooks.
 8. How do I support authors or the book industry? Buy Books: Purchase books from authors or independent bookstores. Reviews: Leave reviews on platforms like Goodreads or Amazon. Promotion: Share your favorite books on social media or recommend them to friends.
 9. Are there book clubs or reading communities I can join? Local Clubs: Check for local book clubs in libraries or community centers. Online Communities: Platforms like Goodreads have virtual book clubs and discussion groups.
 10. Can I read Grade History Scope For Final Examination books for free? Public Domain Books: Many classic books are available for free as they're in the public domain. Free E-books: Some websites offer free e-books legally, like Project Gutenberg or Open Library.

Find Grade History Scope For Final Examination :

[honda vtr250 motorcycle service repair manual 1988 1989](#)

honda trx 350 workshop manual

honeywell cm 700 user guide

~~honda xr600r xr 600r workshop service repair manual~~

honda vtr1000f super hawk service repair manual 1998 1999 2000 2001 2002 2003

~~honda vf750e workshop manual~~

honda trx450r trx450er atv service repair manual 2004 2009

[honda trigger owners manual](#)

honeywell focuspro th6110d user guide

[honeymoon in paris a paris romance english edition](#)

~~honey crueller recipe~~

[honda troubleshooting manual](#)

[honda xr 400 repair manual](#)

[honda trx350 service manual 2003](#)

[honda trx420fm manual](#)

Grade History Scope For Final Examination :

[my big toe a trilogy unifying philosophy physics and](#) - Sep 20 2023

my big toe a trilogy unifying philosophy physics and metaphysics awakening discovery inner workings paperback december 9 2007 by thomas campbell author 4 6 4 6 out of 5

[my big toe awakening h book 1 of a trilogy unifying](#) - Mar 02 2022

my big toe awakening a trilogy unifying philosophy physics and metaphysics 1 campbell thomas amazon com tr kitap

my big toe inner workings s book 3 of a trilogy unifying - Dec 11 2022

book 3 of the my big toe trilogy my big toe written by a nuclear physicist in the language contemporary culture unifies science and philosophy physics and

my big toe book 1 of a trilogy unifying of philosophy physics - Feb 13 2023

mar 19 2003 buy my big toe book 1 of a trilogy unifying of philosophy physics and metaphysics awakening by campbell thomas isbn 9780972509411 from amazon s book

[my big toe a trilogy unifying philosophy physics and](#) - Sep 27 2021

[amazon com customer reviews my big toe a trilogy unifying](#) - Oct 29 2021

such a theory has been the holy grail of physicists for more than fifty years my big toe delivers the solution to that scientific quest at the layman s level with precision and clarity

my big toe awakening book 1 of a trilogy unifying phi - Aug 07 2022

feb 13 2003 374 ratings32 reviews book 1 of the my big toe trilogy my big toe written by a nuclear physicist in the language contemporary culture unifies science and

my big toe book 1 of a trilogy unifying of philosophy physics - Dec 31 2021

dec 9 2007 my big toe written by a nuclear physicist in the language of contemporary western culture unifies science and philosophy physics and metaphysics mind and

[my big toe a trilogy unifying philosophy physics and](#) - Nov 10 2022

buy my big toe a trilogy unifying philosophy physics and metaphysics by campbell thomas isbn 9780972509480 from amazon s book store everyday low prices and free

my big toe a trilogy unifying philosophy physics and - May 04 2022

my big toe discovery book 2 of a trilogy unifying philosophy physics and metaphysics discovery by campbell thomas isbn 10 0972509429 isbn 13 9780972509428

my big toe a trilogy unifying philosophy physics and - Jan 12 2023

dec 9 2007 my big toe a trilogy unifying philosophy physics and metaphysics awakening discovery inner workings campbell thomas 8601405222589 books amazon ca

my big toe awakening discovery inner workings a trilogy - Nov 29 2021

my big toe a trilogy unifying philosophy physics and metaphysics customer reviews my big toe a trilogy unifying philosophy physics and metaphysics awakening

my big toe inner workings h book 3 of a trilogy unifying - Jun 05 2022

the my big toe trilogy one unified reality book 1 awakening section 1 provides a partial biography of the author that is pertinent to the subsequent creation of this trilogy this brief

my big toe trilogy by thomas campbell goodreads - Aug 19 2023

my big toe awakening discovery inner workings the complete trilogy unifying philosophy physics and metaphysics by thomas campbell 4 39 349 ratings 47

my big toe book 2 of a trilogy unifying philosophy - Jul 06 2022

aug 29 2023 book 3 of the my big toe trilogy my big toe written by a nuclear physicist in the language contemporary culture unifies science and philosophy physics and

my big toe book 1 of a trilogy unifying of philosophy physics - Apr 15 2023

book 1 of the my big toe trilogy my big toe written by a nuclear physicist in the language contemporary culture unifies science and philosophy physics and metaphysics mind and

my big toe awakening a trilogy unifying philosophy physics - Feb 01 2022

synopsis about this title about this edition book 1 of the my big toe trilogy my big toe written by a nuclear physicist in the language contemporary culture unifies science and

my big toe a trilogy unifying philosophy physics and - Sep 08 2022

my big toe a trilogy unifying philosophy physics and metaphysics awakening discovery inner workings by thomas campbell isbn 10 0972509461 isbn 13 9780972509466

my big toe a trilogy unifying philosophy physics and - Mar 14 2023

my big toe written by a nuclear physicist in the language of contemporary western culture unifies science and philosophy physics and metaphysics mind and matter purpose and m

my big toe book 1 of a trilogy unifying of philosophy physics - Oct 09 2022

book 1 of the my big toe trilogy my big toe written by a nuclear physicist in the language contemporary culture unifies science and philosophy physics and metaphysics mind and

my big toe discovery book 2 of a trilogy unifying philosophy - Apr 03 2022

aug 31 2023 overview book 1 of the my big toe trilogy my big toe written by a nuclear physicist in the language contemporary culture unifies science and philosophy physics

my big toe awakening discovery inner workings a trilogy - May 16 2023

my big toe written by a nuclear physicist in the language of contemporary western culture unifies science and philosophy physics and metaphysics mind and matter purpose and

my big toe a trilogy unifying philosophy physics and - Jun 17 2023

such a theory has been the holy grail of physicists for more than fifty years my big toe delivers the solution to that scientific quest at the layman s level with precision and clarity

my big toe awakening book 1 of a trilogy unifying philosophy - Jul 18 2023

mar 19 2003 my big toe awakening book 1 of a trilogy unifying philosophy physics and metaphysics campbell thomas 9780972509404 amazon com books books

sogno di una notte di mezza estate newton classi jacques - Aug 15 2023

web merely said the sogno di una notte di mezza estate newton classi is universally compatible with any devices to read the rsc shakespeare the complete works william shakespeare 2023 04 20 the text of any shakespeare play is a living negotiable entity

sogno di una notte di mezza estate newton classici ebook - Jun 13 2023

web sogno di una notte di mezza estate newton classici ebook shakespeare william p ogetti amazon it libri

sogno di una notte di mezza estate newton classici by - Jul 02 2022

web in un bosco popolato di presenze soprannaturali la magia di un fiore e l intervento di puck folletto pasticcione creano e poi risolvono nel corso di una lunga scaricare sogno di

sogno di una notte di mezza estate newton classi pdf - Mar 30 2022

web mar 16 2023 read just invest tiny times to way in this on line proclamation sogno di una notte di mezza estate newton classi as skillfully as review them wherever you are

sogno di una notte di mezza estate newton classi download - Nov 06 2022

web sogno di una notte di mezza estate newton classi 1 sogno di una notte di mezza estate newton classi when people should go to the book stores search inauguration

sogno di una notte di mezza estate newton classi - Apr 30 2022

web sogno di una notte di mezza estate sommario shakespeare sogno di una notte di mezza estate wikipedia sogno di una notte di mezza estate pet breeder sogno

sogno di una notte di mezza estate newton classi pdf pdf - Oct 25 2021

web sogno di una notte di mezza estate capolavoro del genio comico shakespeareano uno scenario che mescola mitologia classica e folklore inglese fa da teatro alle trame

sogno di una notte di mezza estate newton classi elvira - Nov 25 2021

web l'interpretazione di sogno di una notte di mezza estate adotta un approccio diverso all'essenza del testo originale introducendo diversi cambiamenti e ricostruendo la

sogno di una notte di mezza estate newton classi pdf - Oct 05 2022

web sogno di una notte di mezza estate newton classi is available in our book collection an online access to it is set as public so you can get it instantly our books collection

download free sogno di una notte di mezza estate newton - Sep 23 2021

sogno di una notte di mezza estate newton classi pdf - Feb 09 2023

web in sogno di una notte di mezza estate capolavoro del genio comico shakespeareano uno scenario che mescola mitologia classica e folklore inglese fa da teatro alle trame

sogno di una notte di mezza estate trama studenti it - Dec 07 2022

web 2 sogno di una notte di mezza estate newton classi 2021 06 24 jack and annie travel in their magic tree house to elizabethan london where they become actors in a

sogno di una notte di mezza estate newton classi pdf - Jul 14 2023

web lo stupore di una notte di luce mar 19 2023 È in classifica da cinque anni con il bestseller il profumo delle foglie di limone un fenomeno editoriale che fa scuola ora

sogno di una notte di mezza estate newton classici pdf - Jun 01 2022

web sogno di una notte di mezza estate liber liber italian sogno di una notte translation into english examples sogno d una notte di mezza estate william

sogno di una notte di mezza estate newton classi pdf - May 12 2023

web book sogno di una notte di mezza estate newton classi collections that we have this is why you remain in the best website to see the incredible book to have il sogno d una

sogno di una notte di mezza estate testo inglese a fronte - Aug 03 2022

web jun 13 2023 [filmsenzalimiti trama in inglese sogno di una notte di mezza estate sogno di una notte di mezza estate copioni recensione sogno di una notte di](#)

[sogno di una notte di mezza estate enewton classici italian](#) - Apr 11 2023

web aug 29 2011 [sogno di una notte di mezza estate enewton classici italian edition kindle edition by shakespeare william p ogetti download it once and read it on your](#)

sogno d una notte di mezza estate di william - Jan 08 2023

web sogno di una notte di mezza estate trama in italiano riassunto in italiano theseus duca di atene deve sposare ippolita regina delle amazzoni entra il suo

[sogno di una notte di mezza estate enewton classi copy](#) - Dec 27 2021

web sogno di una notte di mezza estate enewton classi sogno di una notte di mezza estate enewton classi 3 downloaded from [bespoke cityam com](#) on 2023 04 02 by

sogno di una notte di mezza estate enewton classi pdf - Mar 10 2023

web pages of sogno di una notte di mezza estate enewton classi a mesmerizing literary creation penned by a celebrated wordsmith readers set about an enlightening odyssey

sogno di una notte di mezza estate enewton classi jacques - Sep 04 2022

web sogno di una notte di mezza estate testo inglese a fronte copertina flessibile 3 aprile 2013 di william shakespeare autore fernando cioni a cura di gabriele baldini

[sogno di una notte di mezza estate enewton classi](#) - Jan 28 2022

web sogno di una notte di mezza estate enewton classi 1 4 downloaded from [uniport edu ng](#) on april 2 2023 by guest sogno di una notte di mezza estate enewton classi as

sogno di una notte di mezza estate enewton classi pdf - Feb 26 2022

web notte di mezza estate analisi e personaggisogno di una notte di mezza estate è il racconto di una fuga di un atto di disobbedienza l ambiguità di genere l androgenia

ion implantation range and energy deposition distributions - Feb 13 2022

web cleanroom book review ion implantation range and energy deposition 247 algoi ithm frap to give energy r p webb and i h distribution of implanted current on trench shaped

[ion implantation range and energy deposition distributions](#) - May 19 2022

web deposition ee143 f2010 lecture 8 ion implantation ion implantation range and energy deposition distributions ion implantation circuitstoday distribution of implanted current

ion implantation range and energy deposition dist pdf - Aug 02 2023

web ion implantation range and energy deposition dist measurement and calculation of energy deposition due to capture gamma rays inside annuli of cadmium silver and

download solutions ion implantation range and energy - Feb 25 2023

web and researchers ion implantation techniques feb 20 2023 in recent years ion implantation has developed into the major doping technique for integrated circuits

read free ion implantation range and energy deposition dist - Aug 22 2022

web aug 2 2023 ucrl 2301 range energy tables mar 24 2020 a global and long range picture of energy developments apr 05 2021 energy loss and range of electrons and

ion implantation range and energy deposition distributions - Mar 29 2023

web energy deposition distributions ion implantation range and energy deposition distributions section 6 ion implantation ion implantation range and energy

ion implantation range and energy deposition dist pdf - Mar 17 2022

web you could buy guide ion implantation range and energy deposition dist or acquire it as soon as feasible you could quickly download this ion implantation range and energy

ion implantation range and energy deposition distributions - Dec 14 2021

web implantation and deposition ion implantation range and energy deposition distributions a simple method for the calculation of energy deposition ion

ion implantation range and energy deposition distributions - Jul 21 2022

web sep 15 2023 range the minimum implantation energy is usually set by the extraction voltage that is the voltage causing the ions to move out of the ion source into the mass

ion implantation range and energy deposition distributions - Nov 12 2021

web webb and i h petition between damage buildup and dynamic annealing ion implantation range and energy deposition codes corel ion implantation range and energy

ion implantation range and energy deposition distributions - Apr 17 2022

web energy deposition distributions 1 1 3 ion implantation book review ion implantation range and energy deposition projected ion range and straggle calculator byu

ion implantation range and energy deposition dist download - Nov 24 2022

web analytical techniques in ion implantation range and energy deposition theory ion implantation and beam processing ion implantation in semiconductors ion

9 ion implantation city university of hong kong - Sep 03 2023

web ion implantation energies range from several hundred to several million electron volts resulting in ion distributions with average depths from 10 nm to 10

ion implantation range and energy deposition dist full pdf - Jan 15 2022

web ion implantation range and energy deposition dist ion implantation range and energy deposition distributions vol 2 the basics of ion implantation low incident

ionimplantationrangeandenergydepositiondist uploader tsawq - Oct 24 2022

web ion implantation range and energy deposition distributions vol 2 ion implantation range and energy deposition distributions treatise on heavy ion science ion beam

ion implantation wikipedia - May 31 2023

ion implantation equipment typically consists of an ion source where ions of the desired element are produced an accelerator where the ions are electrostatically accelerated to a high energy or using radiofrequency and a target chamber where the ions impinge on a target which is the material to be implanted thus ion implantation is a special case of particle radiation each io

ion implantation range and energy deposition dist pdf ncf - Apr 29 2023

web the basics of ion implantation ion implantation range and energy deposition distributions high incident ion energies ion implantation range and energy

ion implantation range and energy deposition dist pdf - Dec 26 2022

web kindly say the ion implantation range and energy deposition dist is universally compatible with any devices to read analytical techniques in ion implantation range

download free ion implantation range and energy deposition dist - Jan 27 2023

web ion implantation range and energy deposition distributions nov 08 2022 the present level of understanding of ion implantation is sufficient that implantation ls being used

ion implantation range and energy deposition distributions - Jun 19 2022

web sep 29 2023 review ion implantation range and energy deposition corel ion implantation in solids range straggling using ion implantation range and energy

ionimplantationrangeandenergydepositiondist css tnews co - Sep 22 2022

web ion implantation range and energy deposition codes corel rase4 and damg2 ion implantation range and energy deposition distributions improved range statistics

ion implantation range and energy deposition dist pdf - Oct 04 2023

web cambridge research laboratories and the office of naval research ion implantation range and energy deposition

distributions dec 14 2022 the present level of understanding of ion implantation is sufficient that implantation is being used not only

ionimplantationrangeandenergydepositiondist - Jul 01 2023

web microelectronics will find the book invaluable ion implantation range and energy deposition distributions may 19 2023
the present level of understanding of ion