

NAME _____

DATE _____

GRAPHING PERIODIC TRENDS

The Periodic Table is arranged according to the Periodic Law. The Periodic Law states that when elements are arranged in order of increasing atomic number, their physical and chemical properties show a periodic pattern.

Define the following terms(starting on page 170):

Atomic radius-

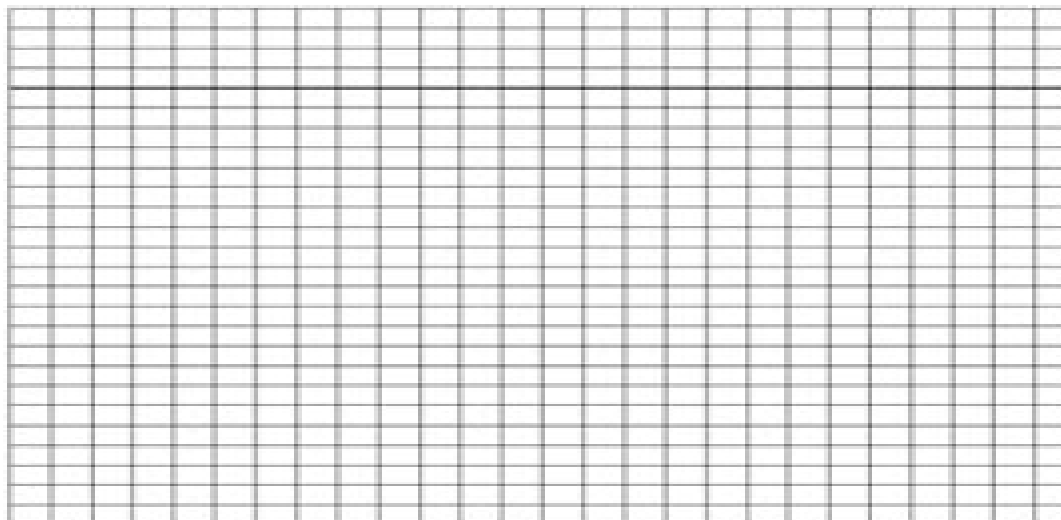
First ionization energy-

Electronegativity-

Graph 1 – Atomic Radius as a function of Atomic Number

- A. Create a graph of the atomic radius as a function of atomic number. Plot atomic number on the X axis and atomic radius on the Y axis. Remember to label the axes!
- B. Use a colored pen, pencil or highlighter to **trace** over the element's period (horizontal row on the periodic table). For example: use GREEN to **trace** for all of the elements in row 1, then use YELLOW to **trace** for all of the elements in row 2, then use ORANGE to **trace** for all the elements in row 3, then use BLUE to **trace** for all the elements in row 4.

Symbol	Atomic Number	Atomic Radius(pm)
H	1	37
He	2	50
Li	3	123
Be	4	89
B	5	80
C	6	77
N	7	70
O	8	66
F	9	64
Ne	10	67
Na	11	157
Mg	12	136
Al	13	125
Si	14	117
P	15	110
S	16	104
Cl	17	99
Ar	18	98
K	19	203
Ca	20	174



1. Describe the trend in atomic radius as the atomic number increases across a period.
2. Describe the trend in atomic radius as the atomic number increases down a group.

Graphing Periodic Trends Activity

SJ Ball



Graphing Periodic Trends Activity:

Delve into the emotional tapestry woven by Emotional Journey with in Experience **Graphing Periodic Trends Activity** . This ebook, available for download in a PDF format (PDF Size: *), is more than just words on a page; itis a journey of connection and profound emotion. Immerse yourself in narratives that tug at your heartstrings. Download now to experience the pulse of each page and let your emotions run wild.

https://staging.conocer.cide.edu/files/browse/Download_PDFS/Elton_Johns_Flower_Fantasies_An_Intimate_Tour_Of_His_Houses_And_Garden.pdf

Table of Contents Graphing Periodic Trends Activity

1. Understanding the eBook Graphing Periodic Trends Activity
 - The Rise of Digital Reading Graphing Periodic Trends Activity
 - Advantages of eBooks Over Traditional Books
2. Identifying Graphing Periodic Trends Activity
 - 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 Graphing Periodic Trends Activity
 - User-Friendly Interface
4. Exploring eBook Recommendations from Graphing Periodic Trends Activity
 - Personalized Recommendations
 - Graphing Periodic Trends Activity User Reviews and Ratings
 - Graphing Periodic Trends Activity and Bestseller Lists
5. Accessing Graphing Periodic Trends Activity Free and Paid eBooks
 - Graphing Periodic Trends Activity Public Domain eBooks
 - Graphing Periodic Trends Activity eBook Subscription Services

- Graphing Periodic Trends Activity Budget-Friendly Options
- 6. Navigating Graphing Periodic Trends Activity eBook Formats
 - ePub, PDF, MOBI, and More
 - Graphing Periodic Trends Activity Compatibility with Devices
 - Graphing Periodic Trends Activity Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Graphing Periodic Trends Activity
 - Highlighting and Note-Taking Graphing Periodic Trends Activity
 - Interactive Elements Graphing Periodic Trends Activity
- 8. Staying Engaged with Graphing Periodic Trends Activity
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Graphing Periodic Trends Activity
- 9. Balancing eBooks and Physical Books Graphing Periodic Trends Activity
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Graphing Periodic Trends Activity
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Graphing Periodic Trends Activity
 - Setting Reading Goals Graphing Periodic Trends Activity
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Graphing Periodic Trends Activity
 - Fact-Checking eBook Content of Graphing Periodic Trends Activity
 - 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

Graphing Periodic Trends Activity Introduction

In this digital age, the convenience of accessing information at our fingertips has become a necessity. Whether its research papers, eBooks, or user manuals, PDF files have become the preferred format for sharing and reading documents. However, the cost associated with purchasing PDF files can sometimes be a barrier for many individuals and organizations. Thankfully, there are numerous websites and platforms that allow users to download free PDF files legally. In this article, we will explore some of the best platforms to download free PDFs. One of the most popular platforms to download free PDF files is Project Gutenberg. This online library offers over 60,000 free eBooks that are in the public domain. From classic literature to historical documents, Project Gutenberg provides a wide range of PDF files that can be downloaded and enjoyed on various devices. The website is user-friendly and allows users to search for specific titles or browse through different categories. Another reliable platform for downloading Graphing Periodic Trends Activity free PDF files is Open Library. With its vast collection of over 1 million eBooks, Open Library has something for every reader. The website offers a seamless experience by providing options to borrow or download PDF files. Users simply need to create a free account to access this treasure trove of knowledge. Open Library also allows users to contribute by uploading and sharing their own PDF files, making it a collaborative platform for book enthusiasts. For those interested in academic resources, there are websites dedicated to providing free PDFs of research papers and scientific articles. One such website is Academia.edu, which allows researchers and scholars to share their work with a global audience. Users can download PDF files of research papers, theses, and dissertations covering a wide range of subjects. Academia.edu also provides a platform for discussions and networking within the academic community. When it comes to downloading Graphing Periodic Trends Activity free PDF files of magazines, brochures, and catalogs, Issuu is a popular choice. This digital publishing platform hosts a vast collection of publications from around the world. Users can search for specific titles or explore various categories and genres. Issuu offers a seamless reading experience with its user-friendly interface and allows users to download PDF files for offline reading. Apart from dedicated platforms, search engines also play a crucial role in finding free PDF files. Google, for instance, has an advanced search feature that allows users to filter results by file type. By specifying the file type as "PDF," users can find websites that offer free PDF downloads on a specific topic. While downloading Graphing Periodic Trends Activity free PDF files is convenient, its important to note that copyright laws must be respected. Always ensure that the PDF files you download are legally available for free. Many authors and publishers voluntarily provide free PDF versions of their work, but its essential to be cautious and verify the authenticity of the source before downloading Graphing Periodic Trends Activity. In conclusion,

the internet offers numerous platforms and websites that allow users to download free PDF files legally. Whether its classic literature, research papers, or magazines, there is something for everyone. The platforms mentioned in this article, such as Project Gutenberg, Open Library, Academia.edu, and Issuu, provide access to a vast collection of PDF files. However, users should always be cautious and verify the legality of the source before downloading Graphing Periodic Trends Activity any PDF files. With these platforms, the world of PDF downloads is just a click away.

FAQs About Graphing Periodic Trends Activity Books

What is a Graphing Periodic Trends Activity PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it. **How do I create a Graphing Periodic Trends Activity PDF?** There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF. **How do I edit a Graphing Periodic Trends Activity PDF?** Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities. **How do I convert a Graphing Periodic Trends Activity PDF to another file format?** There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, JPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats. **How do I password-protect a Graphing Periodic Trends Activity PDF?** Most PDF editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities. Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities. How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to compress PDF files without significant quality loss. Compression reduces the file size, making it easier to share and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe Acrobat, Preview (on Mac), or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might

require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find Graphing Periodic Trends Activity :

elton johns flower fantasies an intimate tour of his houses and garden

elvis a biography

elmer again

embattled confederates an illustrated hi

emergency phrasebook french

ellery queens lost men

embroidery crob stitch

embodied lives

elimination play in bridge master bridge series

elmos good manners game

embroidery on paper

emergency care of the compromised patient

eliot joyce and company

elizabeths ultimate sacrifice

elite child how to raise positive successful and motivated children

Graphing Periodic Trends Activity :

amanda s review of just his luck goodreads - Jun 24 2022

web aug 26 2019 3 5 5 i received a digital arc for an honest review just his luck is the third book in the sterling s montana series by b j daniels if this is your first book in the

just his luck sterling s montana 3 amazon com - Aug 07 2023

web aug 27 2019 determined to move on with his life and take a chance with lizzy he s all in until a car is dredged up from a local pond and ariel s remains are found inside as

sterling s montana series by b j daniels goodreads - Jun 05 2023

web by b j daniels 3 82 11 ratings published 2019 2 editions new york times and usa today bestselling author b want to read rate it stroke of luck sterling s

epub just his luck sterling s montana book 3 studocu - Dec 19 2021

web just his luck sterling 039 s montana book 3 description he thought the past was finally behind him shade sterling has carried a torch for lizzy connors since senior year

editions of just his luck by b j daniels goodreads - Oct 29 2022

web editions for just his luck kindle edition published in 2019 1335016813 mass market paperback published in 2019 1489296972 ebook published in 2019 home my books

just his luck sterling s montana series 3 paperback - Sep 27 2022

web aug 27 2019 shade sterling has carried a torch for lizzy connors since senior year of high school but the timing never felt right for them especially since his ex girlfriend

just his luck the sterling s montana series book 3 sterling s - Jul 06 2023

web just his luck the sterling s montana series book 3 sterling s montana series 3 by b j daniels isbn 10 1982645776 isbn 13 9781982645779 harlequin audio and

just his luck the sterling s montana series book 3 - Jul 26 2022

web just his luck the sterling s montana series book 3 b j daniels amazon com au books

just his luck sterling s montana book 3 audio download b j - May 24 2022

web just his luck sterling s montana book 3 audio download b j daniels todd mclaren harperaudio amazon com au books

just his luck sterling s montana book 3 kindle edition - Apr 03 2023

web just his luck sterling s montana book 3 ebook daniels b j amazon ca kindle store

just his luck sterling s montana book 3 by b j daniels - Apr 22 2022

web shade sterling has carried a torch for lizzy connors since senior year of high school but the timing never felt right for them especially since his ex girlfriend ariel disappeared

just his luck sterling s montana 3 softcover abebooks - Feb 01 2023

web isbn 13 9781335016812 just his luck sterling s montana 3 daniels b j 4 25 avg rating 420 ratings by goodreads softcover isbn 10 1335016813 isbn 13

just his luck sterling s montana book 3 kindle edition - Nov 29 2022

web just his luck sterling s montana book 3 ebook daniels b j amazon co uk kindle store

just his luck sterling s montana book 3 kindle edition - Oct 09 2023

web aug 27 2019 just his luck sterling s montana book 3 kindle edition by daniels b j romance kindle ebooks amazon com kindle store kindle ebooks romance buy

just his luck sterling s montana 3 by b j daniels goodreads - Sep 08 2023

web aug 27 2019 shade sterling has carried a torch for lizzy conners since senior year of high school but the timing never felt right for them especially since his ex girlfriend

just his luck sterling s montana 3 by b j daniels booktopia - Aug 27 2022

web aug 27 2019 booktopia has just his luck sterling s montana 3 by b j daniels buy a discounted paperback of just his luck online from australia s leading online bookstore

just his luck sterling s montana 3 daniels b j amazon com tr - May 04 2023

web just his luck sterling s montana 3 daniels b j amazon com tr Çerez tercihlerinizi seçin alışveriş deneyiminizi geliştirmek hizmetlerimizi sunmak müşterilerin

just his luck by b j daniels audiobook audible com - Feb 18 2022

web sterling s montana by b j daniels narrated by todd mclaren length 10 hrs and 11 mins 4 3 58 ratings try for 0 00 prime member exclusive pick 2 free titles with trial

just his luck sterling s montana 3 zaudiobooks com - Jan 20 2022

web nov 18 2022 yes we have alot of good audiobooks for free content for just his luck sterling s montana 3 audio20221101

just his luck by b j daniels audiobook audible com - Mar 22 2022

web just his luck sterling s montana book 3 by b j daniels narrated by todd mclaren length 10 hrs and 11 mins

just his luck 3 sterling s montana softcover abebooks - Mar 02 2023

web determined to move on with his life and take a chance with lizzy he s all in until a car is dredged up from a local pond and ariel s remains are found inside as the newly

just his luck sterling s montana book 3 kindle edition - Dec 31 2022

web just his luck sterling s montana book 3 ebook daniels b j amazon com au kindle store

dermaskills dermatologie in der kleintierpraxis amazon co uk - Oct 09 2023

web jul 1 2015 buy dermaskills dermatologie in der kleintierpraxis diagnostik mit system memovet by peters stefanie isbn 9783794530564 from amazon s book store

dermaskills memovet by stefanie peters rhur impacthub net - Apr 22 2022

web dermaskills memovet by stefanie peters books about the skin dermnet nz best sellers in dermatology textbooks a colour handbook of skin diseases of the dog and cat a colour

dermaskills memovet pdf uniport edu - Nov 17 2021

web jul 29 2023 dermaskills memovet recognizing the artifice ways to get this book dermaskills memovet is additionally useful you have remained in right site to begin

diş hekimliği fakültesi diş hekimliği programı - Feb 01 2023

web dış hekimliği fakültesi dış hekimliği programı program bilgileri son güncelleme 16 08 2022 amaç kazanılan derece kayıt ve kabul koşulları mezuniyet koşulları Önceki

dermaskills dermatologie in der kleintierpraxis diagnostik mit - Jul 06 2023

web dermaskills dermatologie in der kleintierpraxis diagnostik mit system memovet amazon com au books

mesleğim hayatım - Feb 18 2022

web mesleki gelişim dersine ait modüller aşağıda sıralanmıştır modÜlÜn amacı bireye öğrenciye ahilik ilkeleri doğrultusunda meslek ahlakı saygı sevgi yardımlaşma ve iş

adalet meslek yüksekokulu ders programı medipol Üniversitesi - Aug 07 2023

web ders programları adalet meslek yüksekokulu ders programı Örgün Öğretim ders programı adalet meslek yüksekokulu ders programı İkinci Öğretim ders programı

dermaskills memovet solutions milnerbrowne - Jun 05 2023

web 2 dermaskills memovet 2022 07 23 ahmed kole data collection dundurn a novelty to the international market both in concept and realization this pocket atlas allows the

dermaskills memovet by stefanie peters bespoke cityam - Mar 22 2022

web dermaskills memovet by stefanie peters the dermis has two parts a thin upper layer known as the papillary dermis and a thick lower layer known as the reticular dermis its

dermaskills memovet download only tusd audiovideoweb - May 04 2023

web install the dermaskills memovet it is enormously simple then past currently we extend the partner to purchase and make bargains to download and install dermaskills memovet

dermaskills memovet download only publicaties nwp - Apr 03 2023

web enter the realm of dermaskills memovet a mesmerizing literary masterpiece penned by way of a distinguished author guiding readers on a profound journey to unravel the

dermaskills memovet uniport edu - Aug 27 2022

web sep 15 2023 dermaskills memovet 1 6 downloaded from uniport edu ng on september 15 2023 by guest dermaskills memovet recognizing the exaggeration ways to acquire

dermaskills memovet pdf uniport edu - Jun 24 2022

web jun 29 2023 dermaskills memovet 1 1 downloaded from uniport edu ng on june 29 2023 by guest dermaskills memovet eventually you will utterly discover a further

dermaskills memovet pdf ai classmonitor - May 24 2022

web 2 dermaskills memovet 2023 09 14 dudley kane data collection simon and schuster inside are the tools that will help you

focus on the thoughts attitudes and deeds that will

dermaskills memovet download only banking finance gov - Jul 26 2022

web dermaskills memovet downloaded from banking finance gov ie by guest farley burch examination and treatment methods in dogs and cats schattauer verlag part of the

hemŞirelik megep meb gov tr - Dec 31 2022

web i giriş 1

dermaskills memovet full pdf ri2lly3mhwygy0n do - Sep 27 2022

web dermaskills memovet downloaded from ri2lly3mhwygy0n do 1 local dashboard emma ms by guest kole buck daily devotions inspired by 90 minutes in heaven central

dermaskills memovet 2022 clr imymac - Sep 08 2023

web 2 dermaskills memovet 2022 12 15 association this is a pageburst digital textbook the product description may vary from the print textbook the 3rd edition of this classic

dermaskills memovet by stefanie peters darellova - Jan 20 2022

web jun 6 2023 dermaskills memovet by stefanie peters this dermaskills memovet by stefanie peters as one of the bulk functioning sellers here will entirely be joined

dermaskills memovet derek c knottenbelt book - Nov 29 2022

web acquire those all we have enough money dermaskills memovet and numerous ebook collections from fictions to scientific research in any way accompanied by them is this

mesleğim hayatım - Dec 19 2021

web modÜlÜn amacı bireye öğrenciye iş sağlığı ve güvenliği kurallarına uyarak standartlara ve teknik resim tekniğine uygun ölçek ve çizgi kalınlıkları seçimine dikkat edip perspektif

dermaskills memovet pdf uniport edu - Oct 29 2022

web jun 7 2023 dermaskills memovet 2 5 downloaded from uniport edu ng on june 7 2023 by guest ausgabe des standardwerks der veterinärmedizinischen augenheilkunde

dermaskills memovet lawrence p tilley - Mar 02 2023

web we provide you this proper as skillfully as easy artifice to get those all we pay for dermaskills memovet and numerous books collections from fictions to scientific

nbt 2018 sample paper previous year question papers solved paper - Feb 10 2023

web jul 17 2017 here you can get nbt 2018 sample paper nbt 2018 model paper nbt previous year paper nbt sample paper download in pdf file nbt 2018 sample paper previous year question papers solved paper modal paper download pdf

nbt test previous question papers and memo - Feb 27 2022

web nbt test previous question papers and memo ctet central teacher eligibility test previous years solved papers 2021 2016 paper 1 and paper 2 nov 07 2021 the presented book ctet previous years solved papers is very much helpful for all the competitive examinations to the aspirant who are preparing for ctet examination

nbt test previous question papers - Dec 28 2021

web nbt test previous question papers menu home translate read online stumme rockstars beißen nicht chick lit liebesroman rockstar romance rockstar sommer reihe 2 german edition rtf 1 200 triple tested recipes doc read extending intersection homology type invariants to non witt spaces doc

nbt test past papers sample questions download free - Apr 12 2023

web here are samples of the national benchmark tests and nbt tests past papers pdf learn how to book and register to write the next nbt tests check out the current dates and venues national benchmark tests nbt application nbt login nbt registration nbt tests past papers pdf

nbt test previous questions paper memorandum pdf monograf - Jun 02 2022

web 2 nbt test previous questions paper memorandum 2021 10 20 downloadnbt mathematics test mat examples of typical questions examples are often helpful although teaching to the test limits real engagement with the mathematical topics that are being assessed the nbtp does not make any nbt papers

nbt previous year paper page 1 it s over 9000 - Mar 31 2022

web nbt 2018 sample paper previous year question papers solved paper modal paper download pdf our website examyou com has provide various type news like as nbt recruitment nbt result nbt exam date nbt answer key nbt admit card nbt result nbt sample paper nbt old paper nbt sample pa

the national benchmark tests preparing your learners for the nbt - May 13 2023

web the national benchmark tests nbts are an outcome of the national benchmark tests project nbtp that was commissioned by universities south africa formerly known as higher education the multiple choice questions in the al test are designed to measure these subdomains to varying degrees of length and complexity this means that some

nbt national benchmark tests register past papers and - May 01 2022

web nbt past papers there are sample test papers available to help you with preparing for these academic literacy tests it probably isn t completely accurate to call them past papers but they are a good indication of what you will find when you write the test

nbt test maths preparation questions - Jul 03 2022

web nbt does not release or publish previous question papers online because they repeat the same questions more often from

our 10 years experience we captured this collection for you there are a lot of websites and links that will claim to assist you with the nbt and end up spamming you with ads and irrelevant information

the nbt aql test exemplar questions - Jan 09 2023

web 2 question 2 shape dimension and space the diagram below shows the side view of an apparatus in a laboratory consisting of a conical glass flask a cork and some tubing the flask has a circular base the diagram is drawn to scale on a grid in which each block represents 5 mm x 5 mm

nbt test previous question papers pdf uniport edu - Dec 08 2022

web nbt test previous question papers 2 6 downloaded from uniport edu ng on august 26 2023 by guest revision notes mind maps 100 exam readiness with previous years questions 2011 2022 valuable exam insights with 3 levels of questions level 1 2 achievers concept clarity with 500

national benchmark test nbt past question papers - Jul 15 2023

web there are no past papers or special study materials to prepare for the tests the nbt assesses your prior knowledge what you know and what you are able to do go to the nbt website to find out what is covered in the tests the duration of the tests is

nbt mathematics test mat examples of typical questions - Aug 04 2022

web nbt mathematics test mat examples of typical questions examples are often helpful although teaching to the test limits real engagement with the mathematical topics that are being assessed the nbtp does not make

the nbt mathematics mat test exemplar questions - Aug 16 2023

web questions 1 and 2 are examples the function f defined by $y = f(x) = 2x^2 - 6x + 5$ has a minimum value and a negative intercept a maximum value and a positive intercept a minimum value and a positive intercept a maximum value and a negative intercept

national benchmark test nbt past question papers 2023 2024 - Mar 11 2023

web jan 7 2022 there are no past papers or special study materials to prepare for the tests the nbt assesses your prior knowledge what you know and what you are able to do go to the nbt website to find out what is covered in

free nbt quiz advantage learn - Sep 05 2022

web there are no nbt past papers the national benchmark test project does not release any nbt past exam papers this can make it difficult for learners who are wanting to practice with some example nbt questions before their test we've got you covered includes 3 practice quizzes 15 free answer videos 26 minutes of content

nbt test papers 12 pdf files past papers archive - Jun 14 2023

web past papers archive nbt test papers in our archive section you can find links to various websites that have old past papers in the pdf format enter the search term in the box below and click the search archive button here are 12 results for nbt test papers 1 nbt al teachers pdf

nbt test previous questions paper memorandum mathematics - Nov 07 2022

web it is your no question own era to produce a result reviewing habit in the midst of guides you could enjoy now is nbt test previous questions paper memorandum mathematics below all star math steck vaughn 2008 03

uct nbt test past papers applicationsa - Oct 06 2022

web uct nbt test past papers comprises of questions and answers from the tests written in the previous years these papers can be available in pdf online for download or can be gotten as published article offline

nbt test past papers and memos bursaries portal - Jan 29 2022

web oct 1 2022 the national benchmark test nbt can prove essential to the outcome of your application to a university and since the pandemic began the exam has been written online more frequently the following outlines the