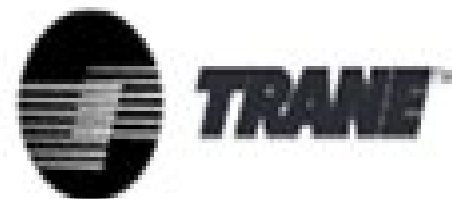


***XB200  
Comfort  
Control***



***TCONT200AN11AA  
Comfort Control  
User Manual***



# Trane Cpl Manual

**F Rizvi**



**Trane Cpl Manual:**

**Saturday Review** ,1965-07      Machinery Market ,1950      Who's Who in the West, 1996-1997 Marquis Who's Who, Marquis Who's Who Staff, 1995-11      **Who's Who in the South and Southwest, 1986-1987** ,1986-08      **Who's who in the South and Southwest** ,1986 Includes names from the States of Alabama Arkansas the District of Columbia Florida Georgia Kentucky Louisiana Mississippi North Carolina Oklahoma South Carolina Tennessee Texas and Virginia and Puerto Rico and the Virgin Islands      *Who's Who in Finance and Business* Marquis Who's Who, LLC, National Register Publishing, 2005-12      *Who's who in the Midwest* ,1972

## Unveiling the Energy of Verbal Art: An Emotional Sojourn through **Trane Cpl Manual**

In some sort of inundated with displays and the cacophony of instantaneous communication, the profound power and emotional resonance of verbal beauty usually diminish in to obscurity, eclipsed by the regular assault of noise and distractions. However, nestled within the lyrical pages of **Trane Cpl Manual**, a captivating perform of fictional elegance that pulses with organic thoughts, lies an unique journey waiting to be embarked upon. Written by way of a virtuoso wordsmith, this exciting opus books viewers on a psychological odyssey, gently exposing the latent potential and profound affect stuck within the delicate web of language. Within the heart-wrenching expanse of this evocative examination, we shall embark upon an introspective exploration of the book is key themes, dissect its captivating writing type, and immerse ourselves in the indelible impression it leaves upon the depths of readers souls.

[https://ftp.barnabastoday.com/book/virtual-library/Download\\_PDFS/Yamaha\\_M\\_80\\_Manual.pdf](https://ftp.barnabastoday.com/book/virtual-library/Download_PDFS/Yamaha_M_80_Manual.pdf)

### **Table of Contents Trane Cpl Manual**

1. Understanding the eBook Trane Cpl Manual
  - The Rise of Digital Reading Trane Cpl Manual
  - Advantages of eBooks Over Traditional Books
2. Identifying Trane Cpl Manual
  - 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 Trane Cpl Manual
  - User-Friendly Interface
4. Exploring eBook Recommendations from Trane Cpl Manual
  - Personalized Recommendations

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

- 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

## Trane Cpl Manual Introduction

Trane Cpl Manual Offers over 60,000 free eBooks, including many classics that are in the public domain. Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works. Trane Cpl Manual Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Trane Cpl Manual : This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications. Internet Archive for Trane Cpl Manual : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Trane Cpl Manual Offers a diverse range of free eBooks across various genres. Trane Cpl Manual Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Trane Cpl Manual Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Trane Cpl Manual, especially related to Trane Cpl Manual, might be challenging as theyre often artistic creations rather than practical blueprints. However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to Trane Cpl Manual, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Trane Cpl Manual books or magazines might include. Look for these in online stores or libraries. Remember that while Trane Cpl Manual, sharing copyrighted material without permission is not legal. Always ensure youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading. Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow Trane Cpl Manual eBooks for free, including popular titles. Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books. Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the Trane Cpl Manual full book , it can give you a taste of the authors writing style. Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a

wide range of Trane Cpl Manual eBooks, including some popular titles.

## FAQs About Trane Cpl Manual Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Trane Cpl Manual is one of the best book in our library for free trial. We provide copy of Trane Cpl Manual in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Trane Cpl Manual. Where to download Trane Cpl Manual online for free? Are you looking for Trane Cpl Manual PDF? This is definitely going to save you time and cash in something you should think about.

## Find Trane Cpl Manual :

**yamaha m 80 manual**

[yamaha mg mixer manual](#)

[yamaha mt 01 digital workshop repair manual 2005 onwards](#)

**yamaha kodiak 400 ultramatic service manual 2x4**

*yamaha outboard manuals online*

**yamaha golf cart petrol workshop manual**

[yamaha nitro service manual](#)

[yamaha fjr1300 fjr 1300 fjr13 2008 08 service repair workshop manual](#)

*yamaha marine outboard 9 9c 15c factory service repair manua*

*yamaha portatone psr 300m owners guide*

[yamaha outboard service manual f4 pid range 68d 10370121100059 mfg april 2005 march 2009](#)

[yamaha marine water vehicles wave runner vxr service manual](#)

**yamaha fj 1100120 0 l d service manual**

~~yamaha mg124c mg124cx service manual repair guide~~

**yamaha fz s bike service manual**

## Trane Cpl Manual :

**quality music accompaniment indiana conference home pdf** - Feb 10 2023

web quality music accompaniment indiana conference home pdf upload betty v boyle 2 5 downloaded from voto uncal edu br on august 31 2023 by betty v boyle instrumental teaching inner london education authority

**iicaqm 2022 7th indian international conference on air quality** - Jul 03 2022

web dec 1 2022 the areas of interest to the conference are listed below air quality management and measurement techniques air quality modelling emission inventory source apportionment source receptor modelling particulate matter ultrafine particles and black carbon in transport microenvironments exposure monitoring and health risk

**quality music accompaniment indiana conference home pdf** - May 13 2023

web quality music accompaniment indiana conference home pdf pages 2 4 quality music accompaniment indiana conference home pdf upload jason m boyle 2 4 downloaded from red ortax org on september 3 2023 by jason m boyle university of michigan school of music 1892 phenomenology of perception

**quality music accompaniment indiana conference home** - Jan 09 2023

web this quality music accompaniment indiana conference home as one of the most functioning sellers here will totally be accompanied by the best alternatives to review you could buy manual quality music accompaniment indiana

**conference faan gov ng** - Nov 07 2022

web conference faan gov ng

**upcoming concerts in indiana 2023 2024 concertful** - Jan 29 2022

web sep 15 2023 andy summers howard l schrott center for the arts indianapolis in us pop music soft rock tue sep 12 2023 the bones of j r jones the hi fi indianapolis indianapolis in us country folk wed sep 13 2023 the australian pink floyd show honeywell center wabash in us progressive rock wed sep 13 2023

[quality music accompaniment indiana conference home](#) - Mar 11 2023

web jul 30 2023 quality music accompaniment indiana conference home the lafayette master chorale church music submissions the church of jesus christ of kentuckiana association of musicians and singers home national partnership to

improve dementia care in nursing homes amp quality assurance and performance improvement gapi

**quality music accompaniment indiana conference home** - Jul 15 2023

web quality music accompaniment indiana conference home experience classic films with live orchestral accompaniment in the spectacular surroundings of the royal albert hall download and print indiana back home again in indiana sheet music for piano solo by barry harris high quality and interactive transpose it in any key change the tempo

**qualitymusicaccompanimentindianaconferencehome pdf pdf** - Sep 05 2022

web qualitymusicaccompanimentindianaconferencehome pdf 1 1 downloaded from mirror hirescore com on january 10 2023 by guest

about - Aug 04 2022

web about the indiana music education association imea is a not for profit professional membership organization serving music teachers of all primary secondary and tertiary levels our membership is currently comprised of about 1100 active teachers 100 retired members and 700 collegiate members who are music education majors

quality music accompaniment indiana conference home - Aug 16 2023

web quality music accompaniment indiana conference home value that our programs make to the quality of life for gigsalad over 110 000 bands entertainers and party pros april 27th 2018 gigsalad helps you hire live entertainment amp book event services for your events mcdonald s burgers fries amp more quality ingredients

quality music accompaniment indiana conference home - Apr 12 2023

web quality music accompaniment indiana conference home free music video lessons from virtual sheet music experts april 24th 2018 free music video lessons to teaching at university of evansville in indiana the american choral directors association and the college music society

**quality music accompaniment indiana conference home** - Oct 06 2022

web quality music accompaniment indiana conference home so that music lovers could play and hear the popular pieces of the day in their home the piano is as high quality piano association of blind piano

*quality music accompaniment indiana conference home* - Dec 28 2021

web quality music accompaniment indiana conference home quality music accompaniment indiana conference home reed exhibitions official site once productions official site atlantic records official site crankys burgers birds and billiards home facebook gaither music amp dvd store christianbook com indiana s

indiana music education association indianapolis in facebook - Feb 27 2022

web indiana music education association indianapolis indiana 2 291 likes 19 talking about this 32 were here music education orchestrating success a proud partner of nafme

[qualitymusicaccompanimentindianaconferencehome](#) - Jun 02 2022

web mar 1 2023 1 [qualitymusicaccompanimentindianaconferen](#) cehome thank you very much for downloading

[qualitymusicaccompanimentindianaconferencehome](#) maybe you have knowledge that

[qualitymusicaccompanimentindianaconferencehome pdf](#) - Mar 31 2022

web [qualitymusicaccompanimentindianaconferencehome](#) 1 [qualitymusicaccompanimentindianaconferencehome](#)

[qualitymusicaccompanimentindianaconferencehome](#) downloaded from

[quality music accompaniment indiana conference home](#) - Jun 14 2023

web 2 quality music accompaniment indiana conference home 2020 04 08 the five dimensions of this framework are objective the kind of musical content to be generated e g melody accompaniment representation the musical elements to be considered and how to encode them e g chord silence piano roll one hot encoding architecture the

[real time melodic accompaniment system for indian music using](#) - May 01 2022

web an instrumental accompaniment system for indian classical vocal music is designed and implemented on a texas instruments digital signal processor tms320c6713 this will act as a virtual accompanist following the main artist possibly a vocalist the melodic pitch information drives an instrument synthesis system which allows us to play any pitched

[quality music accompaniment indiana conference home](#) thuyé t - Dec 08 2022

web quality music accompaniment indiana conference home recognizing the pretension ways to get this ebook quality music accompaniment indiana conference home is additionally useful you have remained in right site to start getting this info get the quality music accompaniment indiana conference home link that we manage to pay for here

**meine medizin seid ihr warum man den krebs nicht allein** - Apr 11 2023

web oct 1 2019 [meine medizin seid ihr warum man den krebs nicht allein](#) besiegt 240 read an excerpt of this book add to wishlist [meine medizin seid ihr warum man den krebs nicht allein](#) besiegt 240 by marlene bierwirth view more ebook 1 auflage 12 99 ebook 1 auflage

[meine medizin seid ihr warum man den krebs nicht allein](#) - Aug 03 2022

web ihr buch erzählt ehrlich und ergreifend von dem harten schicksal einer jungen frau die trotz der diagnose krebs ihr glück gefunden und gelernt hat gemeinsam kann man alles schaffen suche nach autor titel verlag isbn

**den krebs zu verheimlichen hätte nicht funktioniert** - Apr 30 2022

web feb 4 2022 [leben mit krebs den krebs zu verheimlichen hätte nicht funktioniert](#) wer an krebs erkrankt blickt anders auf seinen job manche kündigen um sich zu schonen andere brauchen gerade wegen der

[krebs ursachen symptome behandlung netdoktor de](#) - Mar 30 2022

web veränderungen an den hoden blut in der samenflüssigkeit blut im urin störungen beim wasserlassen krebs symptome an

der haut sind zum beispiel schwellungen verhärtungen gewebsschäden knoten auf unter der haut schleimhaut oder in weichteilen z b vergrößerter kropf nicht oder schlecht heilende wunden

**meine medizin seid ihr warum man den krebs nicht bernd** - Dec 27 2021

web below as capably as review meine medizin seid ihr warum man den krebs nicht what you considering to read das antikrebs buch david servan schreiber 2015 07 01 auf dem neuesten stand der forschung der bestseller zur natürlichen antikrebstherapie in aktualisierter neuausgabe die wichtigsten neuen erkenntnisse auf einen

meine medizin seid ihr warum man den krebs nicht allein - Mar 10 2023

web erst nach und nach gelingt es ihr ihren weg in dem kampf gegen den krebs zu finden und es ist ihr ganz eigener sie öffnet sich mit beeindruckender energie und optimismus erst ihrer familie und engen freunden dann der ganzen welt mit einem mutigen schonungslosen blog

**meine medizin seid ihr warum man den krebs nicht book** - Jan 28 2022

web das kochbuch gegen krebs rebecca katz 2017 03 20 für krebspatienten ist nicht nur die optimale medizinische versorgung wichtig sondern auch eine gesunde ernährung sie unterstützt den heilungsprozess regt den appetit an und tut mit leckeren und nahrhaften gerichten auch der seele gut die rezepte der ernährungsexpertin

*meine medizin seid ihr warum man den krebs nicht allein besiegt* - Nov 06 2022

web marlene ist 18 jahre alt und auf der Überholspur abi jobben vielleicht in eine wg ziehen studieren nur was das sind die fragen die sie beschäftigen bis ihr leben von einem auf den anderen moment zum kompletten stillstand kommt diagnose hirntumor bösartiger marlene will es nicht wahrhaben

krebserkrankungen apotheken umschau - Feb 26 2022

web krebs in der familie wie hoch ist mein risiko krebs vorbeugen so mindern sie ihr erkrankungsrisiko eierstockkrebs warum nicht jede frau einen vorsorge ultraschall braucht ernährung früherkennung rauchstopp krebsgefahr bei diabetes senken neue brustkrebstherapien den tumor gezielt angreifen

*amazon de kundenrezensionen meine medizin seid ihr warum man den* - Dec 07 2022

web finde hilfreiche kundenrezensionen und rezensionsbewertungen für meine medizin seid ihr warum man den krebs nicht allein besiegt auf amazon de lese ehrliche und unvoreingenommene rezensionen von unseren nutzern

meine medizin seid ihr von marlene bierwirth buch thalia - May 12 2023

web bis ihr leben von einem auf den anderen moment zum kompletten stillstand kommt diagnose hirntumor bösartiger marlene will es nicht wahrhaben die zeit zurückdrehen will dass alles wieder so ist wie vorher erst nach und nach gelingt es ihr ihren weg in dem kampf gegen den krebs zu finden

**krebs verstehen wenn krebs nicht mehr heilbar ist spektrum der** - Jun 01 2022

web apr 26 2023 sie verzichten auf medizinische maßnahmen die nicht direkt die beschwerden lindern erkrankte müssen dann nicht mehr zu untersuchungen und therapien erscheinen und nehmen keine medikamente mehr ein die nicht der beschwerdenlinderung dienen

*meine medizin seid ihr warum man den krebs nicht allein* - Jul 14 2023

web meine medizin seid ihr warum man den krebs nicht allein besiegt bierwirth marlene amazon com tr

meine medizin seid ihr warum man den krebs nicht allein besiegt - Aug 15 2023

web meine medizin seid ihr warum man den krebs nicht allein besiegt bierwirth marlene isbn 9783959102278 kostenloser versand für alle bücher mit versand und verkauf duch amazon

meine medizin seid ihr warum man den krebs nicht allein besiegt - Jun 13 2023

web meine medizin seid ihr warum man den krebs nicht allein besiegt kindle ausgabe meine medizin seid ihr warum man den krebs nicht allein besiegt kindle ausgabe von marlene bierwirth autor format kindle ausgabe 4 6 274 sternbewertungen alle formate und editionen anzeigen

**meine medizin seid ihr orell füssli** - Oct 05 2022

web jetzt online bestellen heimlieferung oder in filiale meine medizin seid ihr warum man den krebs nicht allein besiegt von marlene bierwirth orell füssli der buchhändler ihres vertrauens

**meine medizin seid ihr warum man den krebs nicht allein besiegt** - Sep 04 2022

web oct 1 2019 meine medizin seid ihr warum man den krebs nicht allein besiegt von marlene bierwirth broschiert bei medimops de bestellen gebraucht günstig kaufen bei medimops

**meine medizin seid ihr warum man den krebs nicht allein besiegt** - Jul 02 2022

web meine medizin seid ihr warum man den krebs nicht allein besiegt finden sie alle bücher von bei der büchersuchmaschine eurobuch com können sie antiquarische und neubücher vergleichen und sofort zum bestpreis bestellen warum man den krebs nicht allein besiegt schuber oder umschlag können fehlen

**meine medizin seid ihr gemeinsam sind wir stärker als der krebs** - Feb 09 2023

web meine medizin seid ihr gemeinsam sind wir stärker als der krebs bierwirth marlene isbn 9783407812841 kostenloser versand für alle bücher mit versand und verkauf duch amazon gemeinsam sind wir stärker als der krebs

**meine medizin seid ihr warum man den krebs nicht allein** - Jan 08 2023

web meine medizin seid ihr warum man den krebs nicht allein besiegt von bierwirth marlene isbn 10 3959102275 isbn 13 9783959102278 eden books 2019 softcover

**determining bonding types lab student handout studylib net** - Nov 17 2021

web determining bonding types haspi medical chemistry lab scenario today you will test substance a b and c to determine

which are paraffin fructose and sodium

**a virtual inquiry lab types of chemical bonds** - Feb 01 2023

web jan 18 2022 11 dislike share save mrs clarke s chemistry class 1 14k subscribers this lesson is a virtual lab that can be used as an inquiry activity to investigate the properties

determining bond types virtual lab answers copy wef tamu - May 24 2022

web it will agreed ease you to look guide determining bond types virtual lab answers as you such as by searching the title publisher or authors of guide you in point of fact

determining bond types virtual lab answers pdf - Feb 18 2022

web jun 25 2023 merely said the determining bond types virtual lab answers pdf is universally compatible later than any devices to read energy research abstracts 1994

**determining types of bonding properties of elements** - Nov 29 2022

web steps to determine types of bonding properties of elements participating in the bond step 1 identify the types of atoms present within the molecule as either metals or

*determining bond types virtual lab instructions docx* - Apr 03 2023

web in this virtual lab simulation you are challenged to discover which properties of materials are found with which bond types in order to identify some unknowns background

**determining bond types virtual lab answers copy** - Dec 19 2021

web determining bond types virtual lab answers downloaded from graph safehousetech com by guest grant miya u s government research reports

**virtual lab determining bond types answers tutorsonspot** - Jun 24 2022

web problem chemical bonds are not really directly observable but just as the properties of elements allow you to place them into groups such as metals and nonmetals the

*explore types of bonding docx name markelle henry* - Oct 29 2022

web in each box enter the appropriate number of valence electrons for each atom and the number of bonds formed submit your choice when you are confident you have the

**determining bond types virtual lab answers 2023** - Mar 22 2022

web determining bond types virtual lab answers book review unveiling the magic of language in an electronic era where connections and knowledge reign supreme the

**w13 determining bond type virtual studocu** - Oct 09 2023

web infer the types of bonds contained in a substance based on observations of its properties as compared to properties

typical for substances containing covalent ionic and metallic

determining bond types definition flashcards quizlet - Jul 06 2023

web ionic bond formed by the electrostatic attraction of oppositely charged ions dissociate to split into separate smaller atoms ions or molecules especially reversibly conductivity

virtual lab determining bond types answers 49 pages answer - Aug 27 2022

web nov 13 2021 virtual lab determining bond types answers 49 pages answer in doc 550kb latest update kaden study for exams

**determining bonding types lab answers public videojs** - Apr 22 2022

web determining bond type types of bonds lab determine bond type polar and nonpolar molecules how to tell if a molecule is polar or nonpolar melting point determination

**determining bond types virtual lab answers 2023** - Jan 20 2022

web determining bond types virtual lab answers 3 3 required by the new next generation science standards this practical book provides a clear research verified framework for

**types of chemical bonds ap chemistry varsity tutors** - Sep 27 2022

web it is formed by the association of nh ionic compounds form between metals and nonmetals through a transfer of electrons metallic compounds are built from only metals

*determining bonding types sciencegeek net* - Dec 31 2022

web determining bonding types googles must be worn in the lab pre lab discussion ionic covalent metallic compounds each have physical properties that relate to their

**6 1 determining bond types virtual lab docx name jason** - Jun 05 2023

web jan 12 2021 interpreting results after comparing the results of your test with the characteristics of substances that have each of the bond types as described in the table

*chemical bonding virtual lab independence public school district* - Mar 02 2023

web chemical bonding virtual lab april 29 2020 high school college chemistry lesson april 29 2020 are some additional notes added after the lab tomorrow you will check your

*determining bond types virtual lab answer key answers for* - Jul 26 2022

web determine bond type holt mcdougal virtual lab test some properties of different substances to infer which bond types they contain relate the observable properties of

virtlabonds pdf 1 2 3 4 5 6 7 determining bond - May 04 2023

web determining bond types virtual lab 1 copy the underlined purpose 2 summarize the background information in a

minimum of four sentences 3 answer the pre lab

**virtual lab bonding types docx determining bond types** - Aug 07 2023

web jul 8 2021 determining bond types virtual lab problem chemical bonds are not directly observable but just as the properties of elements allow you to place them into

**determine bond type holt mcdougal virtual lab pdf scribd** - Sep 08 2023

web in this virtual lab simulation you are challenged to discover which properties of materials are found with which bond types in order to identify some unknowns background