



Province of the
EASTERN CAPE
EDUCATION

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

PHYSICAL SCIENCES: CHEMISTRY (P2)

COMMON TEST

JUNE 2014

MARKS: 100

TIME: 2 hours

This question paper consists of 10 pages and a 4 Data Sheets.



Physical Science Memorandum Paper 2 Grade 2014

Christian G. Meyer



Physical Science Memorandum Paper 2 Grade 2014:

The Enigmatic Realm of **Physical Science Memorandum Paper 2 Grade 2014**: Unleashing the Language is Inner Magic

In a fast-paced digital era where connections and knowledge intertwine, the enigmatic realm of language reveals its inherent magic. Its capacity to stir emotions, ignite contemplation, and catalyze profound transformations is nothing in short supply of extraordinary. Within the captivating pages of **Physical Science Memorandum Paper 2 Grade 2014** a literary masterpiece penned with a renowned author, readers attempt a transformative journey, unlocking the secrets and untapped potential embedded within each word. In this evaluation, we shall explore the book's core themes, assess its distinct writing style, and delve into its lasting affect the hearts and minds of those that partake in its reading experience.

<https://crm.avenza.com/About/browse/HomePages/Nouvel%20Allemand%20Sans%20Peine.pdf>

Table of Contents Physical Science Memorandum Paper 2 Grade 2014

1. Understanding the eBook Physical Science Memorandum Paper 2 Grade 2014
 - The Rise of Digital Reading Physical Science Memorandum Paper 2 Grade 2014
 - Advantages of eBooks Over Traditional Books
2. Identifying Physical Science Memorandum Paper 2 Grade 2014
 - 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 Physical Science Memorandum Paper 2 Grade 2014
 - User-Friendly Interface
4. Exploring eBook Recommendations from Physical Science Memorandum Paper 2 Grade 2014
 - Personalized Recommendations
 - Physical Science Memorandum Paper 2 Grade 2014 User Reviews and Ratings
 - Physical Science Memorandum Paper 2 Grade 2014 and Bestseller Lists

5. Accessing Physical Science Memorandum Paper 2 Grade 2014 Free and Paid eBooks
 - Physical Science Memorandum Paper 2 Grade 2014 Public Domain eBooks
 - Physical Science Memorandum Paper 2 Grade 2014 eBook Subscription Services
 - Physical Science Memorandum Paper 2 Grade 2014 Budget-Friendly Options
6. Navigating Physical Science Memorandum Paper 2 Grade 2014 eBook Formats
 - ePub, PDF, MOBI, and More
 - Physical Science Memorandum Paper 2 Grade 2014 Compatibility with Devices
 - Physical Science Memorandum Paper 2 Grade 2014 Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Physical Science Memorandum Paper 2 Grade 2014
 - Highlighting and Note-Taking Physical Science Memorandum Paper 2 Grade 2014
 - Interactive Elements Physical Science Memorandum Paper 2 Grade 2014
8. Staying Engaged with Physical Science Memorandum Paper 2 Grade 2014
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Physical Science Memorandum Paper 2 Grade 2014
9. Balancing eBooks and Physical Books Physical Science Memorandum Paper 2 Grade 2014
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Physical Science Memorandum Paper 2 Grade 2014
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Physical Science Memorandum Paper 2 Grade 2014
 - Setting Reading Goals Physical Science Memorandum Paper 2 Grade 2014
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Physical Science Memorandum Paper 2 Grade 2014
 - Fact-Checking eBook Content of Physical Science Memorandum Paper 2 Grade 2014
 - 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

Physical Science Memorandum Paper 2 Grade 2014 Introduction

Physical Science Memorandum Paper 2 Grade 2014 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. Physical Science Memorandum Paper 2 Grade 2014 Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Physical Science Memorandum Paper 2 Grade 2014 : 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 Physical Science Memorandum Paper 2 Grade 2014 : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Physical Science Memorandum Paper 2 Grade 2014 Offers a diverse range of free eBooks across various genres. Physical Science Memorandum Paper 2 Grade 2014 Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Physical Science Memorandum Paper 2 Grade 2014 Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Physical Science Memorandum Paper 2 Grade 2014, especially related to Physical Science Memorandum Paper 2 Grade 2014, 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 Physical Science Memorandum Paper 2 Grade 2014, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Physical Science Memorandum Paper 2 Grade 2014 books or magazines might include. Look for these in online stores or libraries. Remember that while Physical Science Memorandum Paper 2 Grade 2014, 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 Physical Science Memorandum Paper 2 Grade 2014 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 Physical Science Memorandum Paper 2 Grade 2014 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 Physical Science Memorandum Paper 2 Grade 2014 eBooks, including some popular titles.

FAQs About Physical Science Memorandum Paper 2 Grade 2014 Books

What is a Physical Science Memorandum Paper 2 Grade 2014 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 Physical Science Memorandum Paper 2 Grade 2014 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 Physical Science Memorandum Paper 2 Grade 2014 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 Physical Science Memorandum Paper 2 Grade 2014 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 Physical Science Memorandum Paper 2 Grade 2014 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 Physical Science Memorandum Paper 2 Grade 2014 :

nouvel allemand sans peine

note taking guide episode 301

north west university 2015 prospectus

not for tourists illustrated guide to chicago

northern sunset mills boon modern penny jordan collection

november 2013 grade12 memorandum of geography p1

novel study guides for teachers

northstar pressure washer service manual

noun chm2physical chemistry 2 course material

not that sort of girl

november 2013 intergrated science paper 2 zimsec

nos gloires secregravetes

note taking guide chemistry episode 11answers

note taking guide episode 502

note taking study guide winning the war

Physical Science Memorandum Paper 2 Grade 2014 :

how to access the student s portal kyambogo university - Jun 13 2023

web aug 18 2021 how to access the student s portal by kyambogo university in advertisement kyambogo in media student affairs university news august 18 2021 kindly follow the video for steps then the token will be sent to your kyambogo email

home kyambogo elearning - Nov 06 2022

web kyambogo university elearning resource center find all the resources you need to get started on elearning this resource centre cates for both lecturers and students

online applicantion portal online applications portal - Oct 05 2022

web kyambogo university online application portal login with email login with phone email address password log in did you forget your password click here how to apply register now

systems and portals kyambogo university - Mar 10 2023

web students portal for student enrolment registration results management tuition payment reference number and more

click to login universal payments this portal allows you to generate reference numbers for making payments for certification retake fees more go to the system admissions portal

kyambogo university home knowledge and skills for service - Apr 11 2023

web aug 29 2023 kyambogo university is one of the largest public universities in uganda with 150 academic programmes facilities and over 100 affiliate institutions online portals elearning

kyu student portal login myportal kyu ac ug registration - Mar 30 2022

web follow this quick step to log in to your kyambogo university kyu student account access kyu student portal enter your student number registration number and password tap on the sign button to proceed how to enroll for semester courses at kyu all students are required to enroll in kyambogo university kyu via the student

online application portal online applications portal - Aug 03 2022

web kyambogo university online application portal login with email login with phone email address password log in did you forget your password click here how to apply register now

online portals kyambogo university - Jul 14 2023

web students portal for student enrolment registration results management tuition payment reference number and more click to login universal payments this portal allows you to generate reference numbers for making payments for certification retake fees more go to the system admissions portal

kyambogo university kyu student portal login myportal kyu ac ug - Feb 09 2023

web we are pleased to present to you myportal kyu ac ug as the kyambogo university kyu student portal it also contains the official website benefits of using the student portal steps on how to log in and how to reset recover your

user login page kyambogo university - Jan 08 2023

web student affairs dean students office places of worship students guild games sports guidance counselling e learning eresources alumni service centers academic registrar s department university library department of students welfare finance department directorate of ict services directorate of human resources

istanbul university wikipedia - Dec 27 2021

web istanbul university turkish İstanbul Üniversitesi is a prominent public research university located in istanbul turkey founded by mehmed ii on may 30 1453 a day after the conquest of constantinople by the turks it was reformed in 1846 as the first ottoman higher education institution based on european traditions the successor institution which has

call for applications kyambogo university - Jul 02 2022

web contact admissions in a bid to simplify the application or admission process applicants go through an easy and convenient way through an online admissions portal apply kyu ac ug visit the admissions office for any inquiries

kyambogo university - May 12 2023

web kyambogo university kyu was established with the main aim of promoting and advancing knowledge and development of skills in science technology and education and such other fields having regards for quality equity progress and transformation of society

İstanbul university bridge of the science from history to the - Jan 28 2022

web İstanbul Üniversitesi tarihinden geleceğe bilim köprüsü 1453 social facility members retired students graduated wife husband child of staffs to istanbul university to the extent possible are served with the appropriate fee

kyambogo university student portal myportal kyu ac ug login - Feb 26 2022

web discover the kyambogo university kyu student portal via myportal kyu ac ug and login with your username and password here both new and continuing students of kyu register for their session semester courses online about the kyambogo university student portal how to access the kyambogo university student portal

home kyambogo univeristy help center - Jun 01 2022

web kyambogo help centre is the central channel for all the frequently asked questions by the students community it covers questions concerning ict academic affairs finance welfare and more

how to access the student s portal kyambogo university - Dec 07 2022

web aug 18 2021 kindly follow the video for steps then the token will be sent to your kyambogo email the email is studentnumber std kyu ac ug password student number substitute that with your student number to sign in go to the gmail app then go to add account and select google then enter those details

students portal kyambogo university - Aug 15 2023

web online admission portal online admission portal session expired kyambogo university kyambogo university student portal login to your account student number or reg number password sign in reset my password

kyambogo university students portal login admissions - Apr 30 2022

web the kyambogo university uganda portal is created for formal and prospective students of the university to create an account or log in to perform certain academic actions at ease e g course registration fees payment check result view admission list status acceptance fees payment details transcript view academic calendar extra credit

kyambogo university kyu student portal ekampus kyu ac ug - Sep 04 2022

web oct 12 2019 the authority of the kyambogo university kyu has enabled the student portal the online portal is created for formal and prospective students of the university to create an account or log in to perform certain academic actions at ease e g course registration fees payment check result view admission list status acceptance

2021 august 5 electrical trade theory n2 memo studocu - Mar 29 2022

web electrical trade theory n 4 4 positive electrode 4 negative electrode 4 medium transport of lithium ions from the cathode to the anode or vice versa 3 1 3 10 question 5 dc machines 5 distortion of the main magnetic field entering and leaving the armature caused by the magnetic field of the armature

electrical trade theory n2 april 19 qp studocu - Mar 09 2023

web electrical trade theory n2 april 19 qp 11041872 1 t 570 e a5 t 570 e a8 t national studocu past examination paper with a lots of practise electrical engineering eee2041f students shared 16 documents in this course tutorial 1

electrical trade theory past exam papers and memos mytvvet - Jul 13 2023

web nov these papers are only available for viewing online secure payments by payfast electrical trade theory past exam papers and memos for tvet fet colleges in south africa

n2 electrical trade theory apk for android download - May 31 2022

web may 22 2022 combination exam papers for electrical trade theory problems and solutions this app is tvet n2 electrical trade theory ett it helps tvet students to study and prepare for ett internal tests and external exam it consists of notes problems and solutions from previous exams to help to practice to the max

electrical trade theory n2 question papers and memorandum - Feb 08 2023

web trade theory n2 question paper and marking guidelines downloading section apply filter electrical trade theory n2 question paper nov 2019 1 file s 256 54 kb download electrical trade theory n2 memo nov 2019 1 file s 317 22 kb download electrical trade theory n2 question paper aug

national exam paper for n2 electrical trade theory youtube - Feb 25 2022

web jul 15 2021 76 6 6k views 2 years ago n2 electrical trade theory this is question one for the national examination paper preparation 6 3 dc generators 14k views 2 1

past exam paper memo n2 24 minute - Jan 07 2023

web electrical trade theory n2 11041872 22 november 2016 x paper 09 00 12 00 this question paper consists of 7 pages and 1 formula sheet department of higher education and training republic of south africa national certificate electrical trade theory n2 time 3 hours marks 100

n2 electrical trade theory past papers memorandums - Aug 14 2023

web jun 1 2023 2023 electrical trade theory n2 april 2023 question paper pdf pdf 305 2 kb electrical trade theory n2 april 2023 memorandum pdf pdf 355 4 kb 2022 electrical trade theory n2 february 2022 question paper pdf pdf 279 2 kb electrical trade theory n2 february 2022 memorandum pdf pdf 213 4 kb electrical trade

past exam papers n1 n6 ekurhuleni technical college - Aug 02 2022

web n1 n2 n3 n4 n5 n6 installation rules p1 p2 specialised electrical installation codes p1 p2 engineering studies n1 previous

papers bricklayering and plastering theory n1 exam papers building drawing n1 exam papers building science n1 exam papers

electrical trade theory n2 futuremanagers com - Apr 10 2023

web electrical trade theory n2 t510 e a6 t national certificate electrical trade theory n2 11041872 6 april 2018 x paper 09 00 12 00 this question paper consists of 5 pages and 1 formula sheet department of higher education and training republic of south africa national

2021 august 5 electrical trade theory n2 studocu - Dec 06 2022

web electrical trade theory n 11041872 5 august 2021 x paper 09 00 12 drawing instruments and nonprogrammable calculators may be used this question paper consists of 6 pages and a formula sheet of 2 pages 201q1g nated go department of higher education and training republic of south africa national

n2 electrical trade theory report 191 programmes - Jan 27 2022

web compensating windings air gap and shaft bearings cooling fan armature on completion of this module learners should be able to demonstrate understanding of the the learner must be able to past paper syllabus electrical trade theory n2 may 2021 report 191 programmes syllabus electrical trade theory n2 implementation may 2021

free electrical trade theory n2 previous papers - Jul 01 2022

web jun 21 2019 can anyone help me get the 2016 n1 n2 electrical trade theory n3 electrotechnology reply mildred on 16 03 2021 at 1 29 pm mathematics n1 august 2021 exam paper review mathematics n2 word problem that confused me mathematics n4 youtube lessons recent comments

national exam paper for n2 electrical trade theory youtube - Apr 29 2022

web jul 19 2021 national exam paper for n2 electrical trade theory w kieser 7 26k subscribers subscribe 101 6 3k views 2 years ago n2 electrical

national exam paper with answers for n2 electrical trade theory - Sep 03 2022

web question 6 towards our preparation for the upcoming national exam paper

n2 electrical trade theory pdf syllabus electrical trade - Nov 05 2022

web electrical trade theory n2 will equip students with relevant theoretical knowledge to enable them to integrate meaningfully into electrical apprenticeship electrical learnership electrical contracting environment industrial environment and power utility environment 1 2 specific aims electrical trade theory strives to assist students to

electrical trade theory n2 past papers study guides and notes - Sep 15 2023

web may 30 2022 find electrical trade theory n2 previous exam question papers with memorandums for answers 2023 2022 2021 2020 2019 and more prescribed textbooks and study guides most of the resources are in pdf format for easy download

[electrical trade theory n2 futuremanagers.com](#) - Jun 12 2023

web electrical trade theory n2 11041872 15 april 2021 x paper 09 00 12 00 nonprogrammable calculators and drawing instruments may be used this question paper consists of 7 pages and 1 formula sheet 189q1a2115 department of higher education and training republic of south africa

[electrical trade theory tvet exam papers](#) - May 11 2023

web download electrical trade theory previous question papers our apps tvet exam download electrical trade theory past exam papers and memos from 2005 to 2020 electrical trade theory n1 electrical trade theory n2 2020 april qp memo august qp memo 2019

n2 electrical trade theory exam paper ams istanbul edu - Oct 04 2022

web past exam papers for electrical trade theory n2 electrical trade theory n1 prepexam study notes n2 electrical trade theory ettn2 at n1 electrical trade theory last question papers pdf free past exam paper memo n3 ekurhuleni tech college electrical trade theory n2 study guide past exam paper

trailer dimensions stream logistics - Jun 15 2023

web truck trailer types dimensions an investigation of truck size and weight limits technical supplement volume 4 truck traffic forecasts and ts w limit scenario

trailer sizes dimensions for trailer types dsv - Jul 16 2023

web look into the most popular types of trailers that are commonly used by truckers in the trucking industry explore particular trailer definitions uses load limits dimensions

10 truck trailer types used in north america max truckers - Feb 28 2022

web click on the links below to see illustrations of our different trailers and their sizes and dimensions the dimensions sizes and capacity of the various trailers of our fleet

truck trailer types dimensions 2023 cyberlab sutd edu sg - Mar 12 2023

web aug 29 2023 the average length of a semi truck trailer ranges from 48 to 53 feet however it s essential to remember that the length can vary depending on the type of

types of trailers trucking agents a smart place for smart - Jun 03 2022

web 17 feet eicher capacity of 4 5 5 ton capacity 19 feet eicher capacity of 5 5 10 ton capacity lcv mcv hcv ehcv trailer types of truck sizes light commercial

trailer sizes and dimensions of our trailer types dsv - Oct 27 2021

semi tractor trailer types dimensions specs haulhound - Aug 05 2022

web jun 1 2023 the dimensions of the two types of container semi trailers are as follows side wall trailer dimensions the side wall trailer is widely used and is suitable for the

semi truck and trailer dimensions the gann agency - May 02 2022

web 10 hours ago upper east side manhattan wabc a large tractor trailer is causing traffic on the fdr drive after it got stuck under an overpass officials say the vehicle got

20 types of semi trailers a comprehensive guide freight - Aug 17 2023

web feb 1 2021 the transwest team feb 01 2021 while the term semi trailer is used by the public to refer to the common box trailer tractor cab combinations seen driving down the

trailer specifications and dimensions blue water shipping - Feb 11 2023

web what is a tautliner the correct name is actually curtainside trailer the confusion arose because a tautliner is actually a brand name you can compare it to people who call an

common semi trailer dimensions and types - Apr 01 2022

web trailer sizes and dimensions for our trailer types click on the links below to see illustrations of our different trailers and their sizes and dimensions the dimensions

dimensions of trailers bta international - Oct 07 2022

web trucking agents works with a number of different types of trailers in the trucking industry and we included a list of some below each trailer type offers it s own specific use in

uncovering dimensions how big is a semi truck trailer - Nov 08 2022

web type l w h m³ 13 60mt tilt trailer straight frame 13 60 m 2 42 m 2 40 m 79 m³ 13 60 m 2 42 m 2 60 m 86 m³ 13 60mt jumbo trailer 3 10 m 2 42 m 2 55 m 79 m³

tirport truck dimensions - Dec 09 2022

web specifications max weight 44 000 45 000 lbs dimensions length 48 53 feet width 96 102 inches height 13 6 reefer

trailer sizes and dimensions trailer types dsv - Nov 27 2021

truck types in india transport company truckguru - Jan 30 2022

tirport truck and trailer dimensions - Jul 04 2022

web click here we are listing the top 10 truck trailer types in north america what are the different types of trailers the article provides you with the description height weight

tractor trailer stuck under overpass along fdr drive traffic - Dec 29 2021

20 popular types of trailers in the trucking industry mytee - Apr 13 2023

web semi trailer 2 45 m 13 60 m 3 00 m 100 m³ jumbo tilt semi trailer 2 50 m 13 60 m 2 70 3 00 m 98 m³ tilt truck trailer truck 2 45 m 8 m 3 00 m 114 m³ trailer 2 45

official guide trailer sizes dimensions tp trailers - Jan 10 2023

web below you can find a table with the sizes and dimensions of our box trailer dimensions and capacity may vary depending on manufacture and production year box trailer sizes

trailer sizes and dimensions for our trailer types dsv - Sep 18 2023

web trailer sizes and dimensions for our trailer types click on the links below to see illustrations of our different trailers and their sizes and dimensions the dimensions

box trailer sizes dimensions capacity dsv - Sep 06 2022

web mar 16 2022 standard dimensions of semi trailers there are several types of trailers but most fit into two categories enclosed and open commercial trucks have

semi trailer dimensions length what can you haul - May 14 2023

web trailers and trucks for heavy cargo are available on request download printable version pdf curtain trailer standard length 13 60 m width 2 48 m height 2 70 m door

trailer sizes and dimensions for trucking dsv - Oct 19 2023

web trailer sizes and dimensions for our trailer types click on the links below to see illustrations of our different trailers and their sizes and dimensions the dimensions sizes and capacity of the various trailers of our fleet vary depending on manufacturer