All Subjects Scheme Of Work

The Unified Scheme Of Work For Junior Secondary School 3 (JSS3) Is Designed To Help Teachers Meet Learning Objectives, Provide Comprehensive Class Notes, And Ensure Students Receive The Education They Deserve

Includes:

- · Schemes of Work
- Recommended Textbooks



www.syllabus.ng y 6



The JSS3 scheme of work was sourced from the Lagos State Ministry of Education: Unified Scheme of Work for Junior Secondary Schools

Jss3 Scheme Of Work For All Subjects

SA Adler

Jss3 Scheme Of Work For All Subjects:

Embark on a breathtaking journey through nature and adventure with is mesmerizing ebook, Natureis Adventure: **Jss3 Scheme Of Work For All Subjects**. This immersive experience, available for download in a PDF format (*), transports you to the heart of natural marvels and thrilling escapades. Download now and let the adventure begin!

https://staging.conocer.cide.edu/public/detail/HomePages/manual%20for%20nanny%20clock.pdf

Table of Contents Jss3 Scheme Of Work For All Subjects

- 1. Understanding the eBook Jss3 Scheme Of Work For All Subjects
 - The Rise of Digital Reading Jss3 Scheme Of Work For All Subjects
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Jss3 Scheme Of Work For All Subjects
 - 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 Jss3 Scheme Of Work For All Subjects
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Jss3 Scheme Of Work For All Subjects
 - Personalized Recommendations
 - Jss3 Scheme Of Work For All Subjects User Reviews and Ratings
 - Jss3 Scheme Of Work For All Subjects and Bestseller Lists
- 5. Accessing Jss3 Scheme Of Work For All Subjects Free and Paid eBooks
 - o Jss3 Scheme Of Work For All Subjects Public Domain eBooks
 - Jss3 Scheme Of Work For All Subjects eBook Subscription Services
 - Jss3 Scheme Of Work For All Subjects Budget-Friendly Options
- 6. Navigating Jss3 Scheme Of Work For All Subjects eBook Formats

- o ePub, PDF, MOBI, and More
- ∘ Jss3 Scheme Of Work For All Subjects Compatibility with Devices
- Jss3 Scheme Of Work For All Subjects Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Jss3 Scheme Of Work For All Subjects
 - Highlighting and Note-Taking Jss3 Scheme Of Work For All Subjects
 - Interactive Elements Jss3 Scheme Of Work For All Subjects
- 8. Staying Engaged with Jss3 Scheme Of Work For All Subjects
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Jss3 Scheme Of Work For All Subjects
- 9. Balancing eBooks and Physical Books Jss3 Scheme Of Work For All Subjects
 - Benefits of a Digital Library
 - o Creating a Diverse Reading Collection Jss3 Scheme Of Work For All Subjects
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Jss3 Scheme Of Work For All Subjects
 - Setting Reading Goals Jss3 Scheme Of Work For All Subjects
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Jss3 Scheme Of Work For All Subjects
 - Fact-Checking eBook Content of Jss3 Scheme Of Work For All Subjects
 - 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

Jss3 Scheme Of Work For All Subjects Introduction

In the digital age, access to information has become easier than ever before. The ability to download Iss3 Scheme Of Work For All Subjects has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Jss3 Scheme Of Work For All Subjects has opened up a world of possibilities. Downloading Jss3 Scheme Of Work For All Subjects provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Jss3 Scheme Of Work For All Subjects has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Jss3 Scheme Of Work For All Subjects. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Jss3 Scheme Of Work For All Subjects. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Jss3 Scheme Of Work For All Subjects, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of the websites they are downloading from. In conclusion, the ability to download Jss3 Scheme Of Work For All Subjects has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a popular choice for students, researchers, and book lovers worldwide. However, it is crucial to engage in ethical downloading practices and prioritize personal security when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

FAQs About Jss3 Scheme Of Work For All Subjects Books

What is a Iss3 Scheme Of Work For All Subjects 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 Iss3 Scheme Of Work For All Subjects 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 Jss3 Scheme Of Work For All Subjects 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 Jss3 Scheme Of Work For All Subjects 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 Jss3 Scheme Of Work For All Subjects 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 Jss3 Scheme Of Work For All Subjects:

manual for nanny clock manual for motors aveo manual for peugeot 406 diesel manual for coaching youth basketball

manual for nec 288 manual for pffaff attachments

manual for massey ferguson post hole borer manual for renault megane scenic sport alize manual for bosch dishwasher model she45mo5uc manual for mercury 500 thunderbolt manual for hobart tr 250

manual for hobart tr 250 manual for onan marquis 7000 manual for ipaq 3630

manual for mariner 50hp outboard serial number manual for t-mobile phone

Jss3 Scheme Of Work For All Subjects:

millennium remote control center operators guide johnson controls - Aug 15 2023

web the york millennium remote control center rcc is a microprocessor based control system capable of remote chiller condensing unit control it is capable of controlling cooling setpoints load limit setpoint daily holiday schedule and the remote start stop most unit operational and history data is available on the rcc

vork millennium remote control center operating instructions - Jan 28 2022

web the york millennium remote control center rcc oper data is a microprocessor based control system capable of remote chiller condensing unit control it is capable of page 4 no run perm shows that either the flow switch or when this message appears discharge pressure limit air proving switch is open or a remote start stop con

<u>york millennium control center 371 02742 101 sahibinden</u> - Jun 13 2023

web york millennium control center 371 02742 101 isı havalandırma endüstri makineleri uygun fiyatlarla ilan ve alışverişte ilk adres sahibinden com da

millennium remote control center for air - May 12 2023

web general the york remote control center option 371 02400 102 provides chiller operating data and control from a remote location this data includes system status op erating information fault information and chiller oper ating history at the push of a key

york ycal0014sc ycal0080sc millennium - Jul 02 2022

web millennium control center the york microcomputer control center is a micro processor based control system designed to provide the entire control for the liquid chiller the control logic em bedded in the microprocessor based control system will provide control for the chilled liquid temperatures as

millennium tm product documentation johnson controls - Feb 26 2022

web control center condenser fig 1 model yk millennium chiller oil pump compressor control panel cooler front view motor 28815a ld01338 notes all dimensions are approximate certified dimensions are available on request for compact water boxes shown above determine overall unit length by

york millennium manual pdf download manualslib - Jan 08 2023

web view and download york millennium manual online remote control center for style f air cooled screw chiller millennium remote control pdf manual download

vork millennium control center hos by - Mar 10 2023

web specifications downloads york millennium control center specifications request offer print this page company video hosby europe s largest specialist for used

york millennium 28971ar user manual pdf download manualslib - Oct 05 2022

web york s unit controls will optimize operation without nuisance high pres sure safety cutout however the system designer must consider potential performance degradation access to the unit control center assumes the unit is no higher than on spring isolators

unit controls york millennium control center introduction - Sep 04 2022

web york ycal0080sc user manual millennium unit controls york controlling center york pumps manuals dir manualsdir com online owner users library get directory brands yorker manuals pumps microprocessor board spittin ycal0080sc user manual page 58 millennium team controls york control center text type

unit controls vork millennium control center introduction - Apr 11 2023

web millennium control center the york microcomputer control center is a micro processor based control system designed to provide the entire control for the liquid chiller the control logic em bedded in the microprocessor based control system will provide control for the chilled liquid temperatures as well as sequencing system safeties

unit controls york millennium control center introduction - Dec 07 2022

web york ycal0080sc user manual millennium unit controls york control center york pumping reference directory manualsdir com online owner owners library search directory fire york manuals pumps integrated board york ycal0080sc user manual page 58 millennium unit features york control center print mode

used millennium control center for sale york equipment more - Jun 01 2022

web search for used millennium control center find york for sale on machinio usd usd united states dollar us eur euro gbp british pound used millennium control center trusted seller york ycaa b 120 used manufacturer york chiller control panel programming and data - Dec 27 2021

web the york millennium reciprocating chiller control panel is a microprocessor based control system fitted to year liquid chillers it is capable of multi refriger ant system control to maintain chilled liquid tempera ture within programmed limits and to provide safety control of the chiller

unit controls york millennium control center introduction - Feb 09 2023

web unit controls york millennium steering center the yeah microcomputer control center is a micro cpu based control system designed to provide which completely control fork of liquid chiller

millennium product documentation johnson controls - Apr 30 2022

web millennium 28376a new expanded user guide included see section 3 section 1 rcc hardware and setup general the york remote control center option $371\ 02485\ 102$ provides chiller operating data and control from a

unit controls york millennium control center introduction - Nov 06 2022

web york foreign 58 unit controls york millennium manage center the york microcomputer power center is a micro processor based control system engineered to provide the entire control for the liquid chiller

york millennium control center hos bv - Jul 14 2023

web contact us york millennium control center waterchiller 1x york millennium control center waterchiller partnr 800820 specifications downloads 0615 800820 millenium recip chiller control eng pdf request offer name country phone e mail remarks optional

york ycal0080sc installation operation maintenance manualslib - Mar 30 2022

web page 58 section 2 unit controls unit controls york millennium control center introduction the york microcomputer control center is a micro processor based control system designed to provide the entire control for the liquid chiller the control logic em bedded in the microprocessor based control system will

york millennium yk operating maintenance manualslib - Aug 03 2022

web summary of contents for york millennium yk page 1 millennium centrifugal liquid chillers operating maintenance model yk style d r 134a cooling only with microcomputer control center part 371 01200 010 371 01200 011 371 01200 015 for electro mechanical starter solid

rotational kinematics problems the physics hypertextbook - May 15 2023

kinetic energy potential energy conservation of energy power simple machines dynamics ii momentum impulse and

momentum conservation of momentum momentum and energy momentum in two dimensions rotational motion rotational kinematics rotational inertia rotational dynamics rotational statics angular momentum rotational energy

10 2 kinematics of rotational motion physics libretexts - Jan 11 2023

feb 20 2022 problem solving strategy for rotational kinematics examine the situation to determine that rotational kinematics rotational motion is involved rotation must be involved but without the need to consider forces or masses that affect the motion

system of particles and rotational motion khan academy - May 03 2022

unit 4 differentiation for physics prerequisite unit 5 integration for physics prerequisite unit 6 motion in a straight line unit 7 vectors prerequisite unit 8 motion in a plane unit 9 laws of motion unit 10 work energy and power unit 11 system of particles and rotational motion unit 12 gravitation

rotational kinematics physics problems basic introduction youtube - Apr 02 2022

oct 27 2017 the organic chemistry tutor 6 68m subscribers 399k views 5 years ago new physics video playlist this physics video tutorial provides a basic introduction into rotational kinematics it explains

10 8 work and power for rotational motion openstax - Sep 07 2022

calculate the torque for each force calculate the work done during the body s rotation by every torque apply the work energy theorem by equating the net work done on the body to the change in rotational kinetic energy let s look at two examples and use the work energy theorem to analyze rotational motion

rotational kinematics numerical problems and solutions - Mar 01 2022

jan 6 2021 last updated on april 12th 2021 at 09 27 am this post is all about rotational kinematics numerical problems and solutions we will use the following four rotational kinematic equations presented together with their translational counterparts to solve the numerical problems

rotational kinetics problems 1 sparknotes - Jun 04 2022

problem most planets orbit the sun in elliptical orbits do these planets exhibit rotational motion rotational motion has two requirements all particles must move about a fixed axis and move in a circular path since the path of most planets is not circular they do not exhibit rotational motion problem

physics 1120 rotational kinematics solutions - Oct 08 2022

physics 1120 rotational kinematics solutions 1 initially a ball has an angular velocity of 5 0 rad s counterclockwise some time later after rotating through a total angle of 5 5 radians the ball has an angular velocity of 1 5 rad s clockwise the calculator pad rotational kinematics problem sets - Nov 09 2022

use rotational kinematic equations to solve problems involving objects undergoing angular accelerations includes 4 multi part

problems problem set rk8 using the big 4 eqns and linear relationships combine an understanding of linear and angular quantities with the use of rotational kinematic equations to analyze complex rotation scenarios

10 2 kinematics of rotational motion openstax - Jul 17 2023

rotational kinematics just like linear kinematics is descriptive and does not represent laws of nature with kinematics we can describe many things to great precision but kinematics does not consider causes for example a large angular acceleration describes a very rapid change in angular velocity without any consideration of its cause

equation overview for rotational kinematics problems - Feb 12 2023

we have 8 ready to use problem sets on the topic of rotational kinematics these problem sets focus on the analysis of situations involving a rigid object rotating in either a clockwise or counterclockwise direction about a given point the object s rotation speed may be increasing decreasing or remaining constant

rotational kinematics practice khan academy - Sep 19 2023

problem a merry go round has an initial angular velocity of $10\ 2$ rpm at the end of the ride the brakes are applied giving it a constant angular deceleration of $0\ 032$ rad s 2 as the ride slows to a stop

6 3 rotational motion physics openstax - Aug 18 2023

rotational kinematics in the section on uniform circular motion we discussed motion in a circle at constant speed and therefore constant angular velocity however there are times when angular velocity is not constant rotational motion can speed up

kinematics of rotational motion physics lumen learning - Jul 05 2022

evaluate problem solving strategies for rotational kinematics just by using our intuition we can begin to see how rotational quantities like θ ω and α are related to one another for example if a motorcycle wheel has a large angular acceleration for a fairly long time it ends up spinning rapidly and rotates through many revolutions

5 1 rotational kinematics physics libretexts - Jan 31 2022

may 21 2023 directions of rotational kinematics vectors rigid body rotation whenever we talk about rotation there is something that is generally implied we are not talking about a point mass or a collection of independently moving point masses

rotational kinematic formulas video khan academy - Dec 10 2022

the are only true if the angular acceleration is constant but if it is constant these are a convenient way to relate all these rotational motion variables and you can solve a ton a problems using these rotational kinematic formulas

rotational motion kinematic equations example problems - Aug 06 2022

rotational motion kinematic equations example problems skip to main content physics start typing then use the up and down

arrows to select an option from the list kinematic equations example problems step by step science 116 1 01 37 rotational motion an explanation angular displacement velocity and acceleration step by step

ch 1 problems exercises college physics openstax - Apr 14 2023

introduction to rotational motion and angular momentum $10\ 1$ angular acceleration $10\ 2$ kinematics of rotational motion $10\ 3$ dynamics of rotational motion rotational inertia $10\ 4$ rotational kinetic energy work and energy revisited $10\ 5$ angular momentum and its conservation $10\ 6$ collisions of extended bodies in two dimensions

98 problem solving physics libretexts - Jun 16 2023

problem solving strategy for rotational kinematics when solving problems on rotational kinematics examine the situation to determine that rotational kinematics rotational motion is involved rotation must be involved but without the need to using rotational kinematic formulas practice khan academy - Mar 13 2023

problem a fan initially rotates clockwise at 9 0 rad s but has a counterclockwise angular acceleration of 3 0 rad s 2 and reaches a counterclockwise angular speed of 27 rad s how much time did this change in the angular velocity take

c4 mei comprehension mark scheme june 2013 pdf pdf - Oct 10 2022

web c4 mei comprehension mark scheme june 2013 pdf introduction c4 mei comprehension mark scheme june 2013 pdf pdf biomechatronics harmonizing

c4 mei comprehension mark scheme june 2013 pdf download - Jul 19 2023

web c4 mei comprehension mark scheme june 2013 pdf pages 3 16 c4 mei comprehension mark scheme june 2013 pdf upload arnold v paterson 3 16

ocr mei june 2013 c4 mark scheme full pdf forms iibr edu - May 05 2022

web june 2013 c4 mark scheme a literary masterpiece penned by way of a renowned author readers set about a transformative journey unlocking the secrets and untapped potential

c4 mei comprehension mark scheme june 2013 full pdf - Aug 08 2022

web 2 c4 mei comprehension mark scheme june 2013 2022 11 30 book elucidates the changes in reflow soldering processes its impact on defect mechanisms and

downloadable free pdfs mei june 2013 c4 comprehension - Jun 18 2023

web chapters detailed solutions along with marking scheme has been provided for each paper the book also provides the latest question paper design as prescribed by the

c4 mei mark scheme june 2013 download only cie - May 17 2023

web c4 mei mark scheme june 2013 c4 mei mark scheme june 2013 5 downloaded from cie advances asme org on 2018 12 12 by guest of results to meet system level goals this

choose the right picture for primary 4 english composition - Jan 01 2022

web the first step to doing this is to choose the right picture or pictures to write the composition when choosing a picture to write a composition pupils often select the one which they

a level mathematics mei c4 wikibooks - Jan 13 2023

web a level mathematics mei c4 from wikibooks open books for an open world a level mathematics mei jump to navigation jump to search this section covers the entire

c4 mei comprehension 2018 unofficial mark scheme - Sep 09 2022

web c4 mei comprehension 2018 unofficial mark scheme yoyoch4ng 9 9fm0 02 5th june 2023 exam chat unofficial mark scheme for edexcel maths paper 1 higher

c4 mei comprehension mark scheme june 2013 copy pivotid uvu - Apr 04 2022

web c4 mei comprehension mark scheme june 2013 logic induction and sets thomas forster 2003 07 21 this is an introduction to logic and the axiomatization of set theory

mark scheme for june 2013 physics maths tutor - Sep 21 2023

web ocr 2013 annotations subject specific marking instructions for gce mathematics mei pure strand annotations should be used whenever appropriate during your marking

c4 mei comprehension mark scheme june 2013 2022 - Mar 03 2022

web c4 mei comprehension mark scheme june 2013 3 3 this book provides an overview of beach management tools including carrying capacity beach nourishment environmental

c4 mei comprehension mark scheme june 2013 2022 - Jul 07 2022

web c4 mei comprehension mark scheme june 2013 1 c4 mei comprehension mark scheme june 2013 c4 mei comprehension mark scheme wednesday 18 june 2014

mei ocr june 13 c4 mark scheme orientation sutd edu - Aug 20 2023

web ocr mei c4 16th of june 2015 the student room a2 exam papers m34 maths c3 ocr mei papers pmt physics pmt maths tutor mark scheme for june 2013 ocr pmt mark

c4 mei comprehension mark scheme june 2013 copy - Jun 06 2022

web c4 mei comprehension mark scheme june 2013 material virtue jun 11 2020 an examination of both excavated and transmitted texts that link ethics and natural

c4 mei comprehension mark scheme june 2013 pdf cie - Dec 12 2022

web grass system to investigate c4 photosynthesis cell wall biosynthesis responses to drought herbicide and other environmental stressors genome dynamics developmental

c4 june 2013 mark scheme mei copy cie advances asme - Nov 30 2021

web c4 june 2013 mark scheme mei c4 june 2013 mark scheme mei 2 downloaded from cie advances asme org on 2022 01 26 by guest and academics with a single volume

pdf mei june 2013 c4 mark scheme cyberlab sutd edu sg - Feb 14 2023

web mei june 2013 c4 mark scheme mendel 2015 nov 01 2020 this book is a collection of selected accepted papers of mendel conference that has been held in brno czech

mark scheme results june 2013 maths genie - Apr 16 2023

web mark scheme results june 2013 gce core mathematics 4 6666 01 edexcel and btec qualifications edexcel and btec qualifications come from pearson the world's leading

mei june 2013 c4 comprehension mark s cyberlab sutd edu sg - Nov 11 2022

web mei june 2013 c4 comprehension mark s application and theory of petri nets and concurrency jul 11 2021 this book constitutes the proceedings of the 38th international

thursday 13 june 2013 morning physics maths tutor - Oct 22 2023

web thursday 13 june 2013 morning a2 gce mathematics mei 4754 01b applications of advanced mathematics c4 paper b comprehension question paper

c4 mei comprehension mark scheme june 2013 - Feb 02 2022

web oct 1 2023 c4 mei comprehension mark scheme june 2013 friday 18 january 2013 afternoon mei c4 mei june 2013 unofficial mark scheme free ebook pdf c4 mei

c4 mei comprehension mark scheme june 2013 - Mar 15 2023

web c4 mei comprehension mark scheme june 2013 carbon pricing jan 09 2023 in 2012 australia took the major step of introducing a carbon price involving the creation of a