

- 1 1. Verification of KVL and KCL.
- 2 2. Verification of Thevenin and Norton Theorems.
- 3 3. Verification of superposition Theorem.
- 4 4. Verification of Maximum power transfer and reciprocity theorems.
- 5 5. Frequency response of series and parallel resonance circuits.
- 6 6. Characteristics of PN and Zener diode
- 7 7. Characteristics of CE configuration
- 8 8. Characteristics of CB configuration
- 9 9. Characteristics of UJT and SCR
- 10 10. Characteristics of JFET and MOSFET
- 11 11. Characteristics of Diac and Triac.
- 12 12. Characteristics of Photodiode and Phototransistor.

VERIFICATION OF KCL & KVL (KIRCHHOFF'S LAWS)

2nd Sem Ec2155 Lab Manual

S Marginson



2nd Sem Ec2155 Lab Manual:

Ignite the flame of optimism with Get Inspired by is motivational masterpiece, **2nd Sem Ec2155 Lab Manual** . In a downloadable PDF format (*), this ebook is a beacon of encouragement. Download now and let the words propel you towards a brighter, more motivated tomorrow.

https://auld.rmjm.com/files/virtual-library/Download_PDFS/Novel%20Stars%20Submission%202%20Algebra%202%20Answers.pdf

Table of Contents 2nd Sem Ec2155 Lab Manual

1. Understanding the eBook 2nd Sem Ec2155 Lab Manual
 - The Rise of Digital Reading 2nd Sem Ec2155 Lab Manual
 - Advantages of eBooks Over Traditional Books
2. Identifying 2nd Sem Ec2155 Lab 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 2nd Sem Ec2155 Lab Manual
 - User-Friendly Interface
4. Exploring eBook Recommendations from 2nd Sem Ec2155 Lab Manual
 - Personalized Recommendations
 - 2nd Sem Ec2155 Lab Manual User Reviews and Ratings
 - 2nd Sem Ec2155 Lab Manual and Bestseller Lists
5. Accessing 2nd Sem Ec2155 Lab Manual Free and Paid eBooks
 - 2nd Sem Ec2155 Lab Manual Public Domain eBooks
 - 2nd Sem Ec2155 Lab Manual eBook Subscription Services
 - 2nd Sem Ec2155 Lab Manual Budget-Friendly Options

6. Navigating 2nd Sem Ec2155 Lab Manual eBook Formats
 - ePub, PDF, MOBI, and More
 - 2nd Sem Ec2155 Lab Manual Compatibility with Devices
 - 2nd Sem Ec2155 Lab Manual Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of 2nd Sem Ec2155 Lab Manual
 - Highlighting and Note-Taking 2nd Sem Ec2155 Lab Manual
 - Interactive Elements 2nd Sem Ec2155 Lab Manual
8. Staying Engaged with 2nd Sem Ec2155 Lab Manual
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers 2nd Sem Ec2155 Lab Manual
9. Balancing eBooks and Physical Books 2nd Sem Ec2155 Lab Manual
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection 2nd Sem Ec2155 Lab Manual
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine 2nd Sem Ec2155 Lab Manual
 - Setting Reading Goals 2nd Sem Ec2155 Lab Manual
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of 2nd Sem Ec2155 Lab Manual
 - Fact-Checking eBook Content of 2nd Sem Ec2155 Lab 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

2nd Sem Ec2155 Lab Manual Introduction

In today's digital age, the availability of 2nd Sem Ec2155 Lab Manual books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of 2nd Sem Ec2155 Lab Manual books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of 2nd Sem Ec2155 Lab Manual books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing 2nd Sem Ec2155 Lab Manual versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, 2nd Sem Ec2155 Lab Manual books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether you're a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing 2nd Sem Ec2155 Lab Manual books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for 2nd Sem Ec2155 Lab Manual books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public. Open Library hosts millions of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free access to course materials from

the Massachusetts Institute of Technology, and the Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, 2nd Sem Ec2155 Lab Manual books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of 2nd Sem Ec2155 Lab Manual books and manuals for download and embark on your journey of knowledge?

FAQs About 2nd Sem Ec2155 Lab 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. 2nd Sem Ec2155 Lab Manual is one of the best book in our library for free trial. We provide copy of 2nd Sem Ec2155 Lab Manual in digital format, so the resources that you find are reliable. There are also many Ebooks of related with 2nd Sem Ec2155 Lab Manual. Where to download 2nd Sem Ec2155 Lab Manual online for free? Are you looking for 2nd Sem Ec2155 Lab Manual PDF? This is definitely going to save you time and cash in something you should think about.

Find 2nd Sem Ec2155 Lab Manual :

novel stars submission 2 algebra 2 answers

1997 ford crown victoria workshop oem service repair manual

meth crystal crank speed ingredients or recipe

[boeing 777 maintenance manual](#)

[rainwater tank installation guide](#)

[link belt service manual](#)

4th grade summary frames

good food a comprehensive food and nutrition resource

[biology hl paper 2 tzn13](#)

[20kenworth w900l owners manual](#)

bosch alternator repair manual

[xtreme paper 97nov 2012 1](#)

[3545 zetor tractor service manual](#)

honey and salt second portion

stand tall molly lou melon

2nd Sem Ec2155 Lab Manual :

[9781508731610 poÃ sies vanier arthur rimbaud author](#) - Oct 29 2022

web poÃ sies vanier arthur rimbaud author find all books from rimbaud arthur at find more books com you can find used antique and new books compare results and immediately purchase your selection at the best price 9781508731610

paperback po eacute sies vanier de arthur rimbaud

les poa sies de virgile vol 2 avec des notes critiques et - Mar 02 2023

web les poa sies de virgile vol 2 avec des notes critiques et historiques les georgiques classic reprint virgil virgil kitabı satın al ingilizce ispanyolca almanca rusça arapça kitaplar

poÃ sies ebok francois villon ligaran 9782335014761 - Sep 27 2022

web feb 4 2015 poÃ sies e bok av francois villon ligaran e bok drm franska 2015 02 04 71 ladda ned spara som favorit läs i adobe drm kompatibel e boksläsare villon n a pas tant renouvelÃ la forme de la poÃ sie de son Ã poque que la faÃ on de traiter les thÃ mes poÃ tiques hÃ ritÃ s de la culture mÃ diÃ vale qu il

poã â sies by a rimbaud books abebooks - Aug 27 2022

web poÃ sies une saison en enfer illumination prÃ face de renÃ char Ã dition Ã tablie par louis forestier seconde Ã dition revue by arthur rimbaud and a great selection of related books art and collectibles available now at abebooks co uk

les poa sies d horace traduites en franaois vol 1 avec des - May 04 2023

web les poa sies d horace traduites en franaois vol 1 avec des remarques et des dissertations critiques classic reprint horace

horace kitabı satın al ingilizce ispanyolca almanca rusça arapça kitaplar

poÃ sies ebok alfred de musset ligaran 9782335121766 - Dec 31 2022

web dec 1 2015 poÃ sies e bok 1828 1833 contes d espagne et d italie poesies diverses spectacle dans un fauteuil namouna av alfred de musset ligaran e bok drm franska 2015 12 01 81 ladda ned spara som favorit lÃ s i adobe drm kompatibel e bokslÃsare

34 642 tl bařlangıç fiyatıyla porto alegre İstanbul arası uçak - Mar 22 2022

web skyscanner da porto alegre İstanbul arası ucuz uçak biletleri bulun ist poa arası uçuřunuzda en iyi fırsatlarla rezervasyon yapın

poa c sies 1859 1901 by legrand g goodreads - Feb 01 2023

web jun 12 2013 poa c sies book read reviews from world s largest community for readers poa c sies 1859 1901 ga c ry legrand avec une pra c face de m jules claret

poliergie ou malange de litta c rature et de poa sies classic - Jul 06 2023

web poliergie ou malange de litta c rature et de poa sies classic reprint emer de vattel kitabı satın al ingilizce ispanyolca almanca rusça arapça kitaplar poliergie ou malange de litta c rature et de poa sies classic reprint emer de vattel

recueil de poÃ sies franÃ oises des xve et xvie siÃ cles - Nov 29 2022

web recueil de poÃ sies franÃ oises des xve et xvie siÃ cles morales fr english deutsch franÃais espaÃol portuguÃs italiano romÃn nederlands latina dansk svenska norsk magyar bahasa indonesia tÃrkÃe suomi latvian

poÃ sies pour enfants poÃemes d amour et poÃesies - Jul 26 2022

web un rÃave d enfant catÃgorie de l oeuvre poÃ sies pour enfants un instant qui est un sentiment ce moment qui est un rÃave d enfant une princesse qui aime son prince d amour c est beau les rÃaves tout les jours

poesies completes poa c sies compla tes french rimbaud - Aug 07 2023

web arama yapmak istediđiniz kategoriye seřin

espoir ou espÃ rance poÃ sies claud pariset cultura - Jun 24 2022

web espoir ou espÃ rance poÃ sies par claud pariset aux Ãditions books on demand poÃesies et images mÃditation sur espoir les rimes sontriches et libres parfois en sonnets

recueil de poa c sies franaoises des xve et xvie siacles - Sep 08 2023

web recueil de poa c sies franaoises des xve et xvie siacles morales faca c tieuses histoiriques ra c unies et annota c es vol 7 classic reprint anatole de montaignon kitabı satın al ingilizce ispanyolca almanca rusça arapça kitaplar

les poa sies de virgile vol 4 avec des notes critiques et - Jun 05 2023

web les poa sies de virgile vol 4 avec des notes critiques et historiques les six derniers livres de l enea de classic reprint virgil

virgil kitabı satın al ingilizce ispanyolca almanca rusça arapça kitaplar

[poa c sies festons et astragales classic reprint](#) - Oct 09 2023

web poa c sies festons et astragales classic reprint louis bouilhet kitabı satın al ingilizce ispanyolca almanca rusça arapça kitaplar

[l origine des dieux du paganisme vol 2 et le sens des fables](#) - Apr 03 2023

web l origine des dieux du paganisme vol 2 et le sens des fables da c couvert par une explication suivie des poa sies d ha c siode classic reprint nicolas sylvestre bergier kitabı satın al ingilizce ispanyolca almanca rusça arapça kitaplar

[31 413 tl başlangıç fiyatıyla İstanbul porto alegre arası uçak](#) - Feb 18 2022

web skyscanner da İstanbul porto alegre arası ucuz uçak biletleri bulun poa ist arası uçuşunuzda en iyi fırsatlarla rezervasyon yapın

poÃ sies diverses poèmes d amour et poésies - May 24 2022

web catégorie de l oeuvre poÃ sies diverses on aimerait tous que l amour dure pour toujours ce n est pas une utopie il faut attendre le bon moment de la vie poÃ me d hiver catégorie de l oeuvre poÃ sies diverses un petit poÃ me pour les nuits d hiver

[20 558 tl başlangıç fiyatıyla İstanbul porto alegre arası uçak](#) - Apr 22 2022

web İstanbul porto alegre seyahat edilebilecek en ucuz ayı bul 26 714 tl ile başlayan fiyatlarla 23 028 tl ile başlayan fiyatlarla 24 249 tl ile başlayan fiyatlarla 27 158 tl ile başlayan fiyatlarla rotalarını karşılaştıran porto alegre merkezinden 7 km uzakta porto alegre merkezinden 92 km uzakta

physics for scientists and engineers 6th edition quizlet - Aug 14 2023

web find step by step solutions and answers to physics for scientists and engineers 9780716789642 as well as thousands of textbooks so you can move forward with

solutions manual modern physics 6th edition by tipler - Nov 05 2022

web student solutions manual to accompany tipler mosca s physics for scientists and engineers sixth edition student solutions manual for tipler mosca s physics sixth

[solutions manual for physics for scientists and engineers tipler](#) - Jan 27 2022

web proclaimed by paul tipler as the best reviewer i ever had mosca became co author beginning with the fifth edition of this book paul tipler s physics for scientists and

physics for scientists and engineers part 133 google books - Jan 07 2023

web download pdf physics for scientists and engineers 6th edition solutions tipler mosca 6nge7kv5zklv

tipler mosca physics for scientists and engineers with modern - Sep 22 2021

physics for scientists and engineers 6th edition solutions tipler - Oct 24 2021

physics for scientists and engineers 6th edition tipler bartleby - Jun 12 2023

web step by step video answers explanations by expert educators for all physics for scientists and engineers with modern physics 6th by paul tipler gene mosca only on

download pdf physics for scientists and engineers 6th edition - May 31 2022

web ralph llewellyn paul a tipler physics for scientists and engineers volume 1 physics for scientists and engineers volume 2 physics for scientists and engineers volume 3

physics for scientists and engineers 6th edition solutions tipler - Jul 01 2022

web student solutions manual for tipler and mosca s physics for scientists and david mills google books

solutions manual for tipler mosca physics for scientists - Feb 08 2023

web paul a tipler gene mosca macmillan 2007 science 1172 pages the sixth edition of physics for scientists and engineers offers a completely integrated text and media

physics scientists engineers 6e solution tipler paul pdf - Apr 10 2023

web our resource for physics for scientists and engineers volume 2 includes answers to chapter exercises as well as detailed information to walk you through the process step

physics for scientists and engineers volume 2 6th edition - Mar 09 2023

web solutions manual for tipler mosca physics for scientists and engineers 6 ed 15 177 2 022 21mb english pages 3425 instructor s solutions manuals for physics for

physics for scientists and engineers 6th edition by - Nov 24 2021

solutions for physics for scientists and engineers with modern - May 11 2023

web physics for scientists and engineers with modern physics 6th edition solution manual written by paul a tipler gene mosca cover the following topics 1 measurement and

physics for scientists and engineers student solutions manual - Aug 02 2022

web if you enjoy spending an hour to find physics for scientists and engineers 6th edition solutions tipler mosca pdf get physics for scientists and engineers 6th edition

physics for scientists and engineers 6th edition - Jul 13 2023

web tipler publisher mac higher isbn 9781429281843 view more textbook editions solutions for physics for scientists and engineers view samples chapter section

paul a tipler solutions chegg com - Mar 29 2022

web paul tipler and ralph llewellyn s modern physics 6th edition solution this book is best for teaching of physics in colleges and universities and recognized the growing role of

modern physics 6e solution paul tipler pdf mathscool - Dec 26 2021

student solutions manual for tipler and mosca s physics for - Apr 29 2022

web book details the sixth edition of physics for scientists and engineers offers a completely integrated text and media solution that will help students learn most effectively and will

solutions for modern physics 6th by paul a tipler ralph a - Oct 04 2022

web aug 10 2007 physics for scientists and engineers student solutions manual volume 3 of student solutions manual for tipler and mosca s physics for scientists and

physics for scientists and engineers 6th edition 6th - Feb 25 2022

web feb 3 2012 if you enjoy spending an hour to find physics for scientists and engineers 6th edition solutions tipler mosca pdf get physics for scientists and engineers 6th

download physics for scientists and engineers 6th edition - Dec 06 2022

web solutions for modern physics 6th paul a tipler ralph a llewellyn get access to all of the answers and step by step video explanations to this book and 5 000 more

student solutions manual for tipler and mosca s physics for - Sep 03 2022

web if you enjoy spending an hour to find physics for scientists and engineers 6th edition solutions tipler mosca pdf get physics for scientists and engineers 6th edition

ib chemistry sl 2024 past papers revision village - Sep 06 2023

web ib chemistry sl 2024 past papers in the past papers section you will find full worked solutions to the questions asked on previous ib chemistry sl standard level 2024 exams within each video an experienced ib teacher

diploma sample exam papers international baccalaureate - Nov 27 2022

web jul 4 2023 sample exam papers last updated 04 july 2023 the following are examples of actual past examination papers and a selection of specimen examination papers they are provided for information only

the complete ib chemistry syllabus sl and hl prepscholar - Jul 24 2022

web the complete ib chemistry syllabus sl and hl posted by dora seigel feb 2 2022 11 00 00 am international baccalaureate ib ib chemistry is tough if you are reading this syllabus i assume you are interested in potentially taking this course or you are currently enrolled in the course

[ib chemistry sl past papers updated 2023 nail ib](#) - Jan 30 2023

web ib chemistry sl past papers automated past papers for ib students who have opted for chemistry sl here s your secret weapon for acing your chemistry sl paper 1 11 chapters 29 topics 2016 questions 67 2 hrs worth of practice material chapter 1 stoichiometric relationships free 207 questions chapter 2 atomic structure

[where to find ib chemistry past papers free and official](#) - Feb 28 2023

web where to find paid tests and past papers the ibo store sells ib chemistry sl and hl past papers from may 2015 to november 2021 navigate to the diploma program page then search chemistry exam this is the only safe place to

[chemistry standard level paper 3 papacambridge](#) - Feb 16 2022

web a calculator is required for this paper a clean copy of the chemistry data booklet is required for this paper the maximum mark for this examination paper is 40 marks option uestions option a modern analytical chemistry 1 3 option b human biochemistry 4 8 option c chemistry in industry and technology 9 12

[ib chemistry past papers questions by topic save my exams](#) - May 22 2022

web sl ib chemistry revision notes our expert ib teachers examiners have written revision notes practice questions tips for your ib exams to help you get the best grades possible

[international baccalaureate ib chemistry sl past papers](#) - Aug 05 2023

web international baccalaureate ib chemistry subject comes under science group of ib diploma programme after 10th or secondary education here high school or ib students will get all the guidance notes and the past papers of ib chemistry that will help you to understand about the level of this test and to achieve high score in exam

ib sl hl chem smashingscience org - Jul 04 2023

web ib chemistry revision booklets for may 2021 exams using the latest exam papers broken down by topic about 1000 pages higher level paper 1 2019 to 2016 224 pages click here higher level paper 2 2019 to 2015 314 pages click here

[ib chemistry sl past paper](#) - Dec 29 2022

web ib chemistry sl past papers updated 2022 revision village 1 week ago krbto com web ib chemistry sl 2024 past papers in the previous papers section you want find full sized worked solutions to the questions asked on previous ib chemistry sl 2024 121 show detail preview view more

ibdp chemistry standard level sl question bank with - May 02 2023

web topic 1 stoichiometric relationships 1 1 introduction to the particulate nature of matter and chemical change 1 2 the mole concept 1 3 reacting masses and volumes topic 2 atomic structure 2 1 the nuclear atom 2 2 electron configuration topic 3 periodicity 3 1 periodic table 3 2 periodic trends topic 4 chemical bonding and structure

ib chemistry sl mcqs topic wise ib chemistry past papers - Jun 03 2023

web ib chemistry past paper solution ib chemistry paper 1 solution paper 1 step wise solution ib chemistry topic wise solution
 ib chemistry sl study pack sample question paper sample solution unit 1 stoichiometric relationships sl stoichiometric
 relationships mcq sl qb

chemistry sl online mcqs ib chemistry past papers worked - Apr 01 2023

web ib chemistry past paper solution ib chemistry sl online mcq s exam mode and prectice mode on screen solution topic
 wise mcq s solution

november 2013 ib exam papers xtremepapers - Aug 25 2022

web mar 19 2015 hello everyone i have been looking really hard for the november 2013 past papers but i couldn t find them
 can somebody please send me november 2013 papers for biology hl chemistry hl math sl economics sl english b hl and if you
 can also find arabic a sl i would really appreciate it

dp chemistry ibdp sl hl chemistry google sites - Oct 27 2022

web topic2 sl hl syllabus download useful files atomic theory ppt download atomic theory isotopes ppt download atomic
 structure ppt download materials topic 2 sl past papers

ib sl chemistry 2013 paper book yearbook ladieseuropeantour - Mar 20 2022

web ib sl chemistry 2013 paper the enigmatic realm of ib sl chemistry 2013 paper 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

dp ib chemistry sl 2016 save my exams - Apr 20 2022

web progress tracking model answers video solutions made by examiners questions model answers made by experienced
 teachers free chemistry revision notes on elements compounds mixtures designed by the teachers at save my exams for the
 ib

ib chemistry sl past papers last 10 years updated 2022 - Sep 25 2022

web practice ib chemistry sl past papers at iitianacademy detailed solution prepared by ib physics teachers and subject
 matter experts

dp chemistry sl paper 3 section a questions thinkib net - Jun 22 2022

web oct 3 2023 2014 dp chemistry last exam nov 2024 fast track to tests questions sl paper 3 section a questions section a
 on paper 3 is worth 15 marks and will contain a data response question and one or more short answer questions on

ib sl 10 eq 16w to 99s p2 section a b 433marks ib chemistry - Jan 18 2022

web sl paper 1 percentage of all marks awarded for each topic from w2012 to w2014 tz 0 1 2 red crosses and for p1 just in
 2016 s w and sp green 16 0 14 0 12 0 10 0 8 0 6 0 4 0 2 0 0 0 chem chem chem 1 chem 2 chem 3 chem 4 chem 5 chem 6

chem 7 chem 8 chem 9 p1 2016