

education

Department of Education FREE STATE PROVINCE

PHYSICAL SCIENCES PAPER 1 (PHYSICS)

GRADE 12

TERMS & DEFINITIONS, QUESTIONS & ANSWERS PER TOPIC

2019

TABLE OF CONTENTS

HOW TO USE THIS DOCUMENT	. 2
TERMS AND DEFINITIONS	. 3
QUESTIONS	.7
NEWTON'S LAWS	. 7
VERTICAL PROJECTILE MOTION	13
MOMENTUM AND IMPULSE	18
WORK, ENERGY AND POWER	23
DOPPLER EFFECT	29
ELECTROSTATICS	34
ELECTRIC CIRCUITS	42
ELECTRICAL MACHINES	50
OPTICAL PHENOMENA AND PROPERTIES OF MATERIALS	54
ANSWERS TO QUESTIONS	
NEWTON'S LAWS	62
VERTICAL PROJECTILE MOTION	69
MOMENTUM AND IMPULSE	79
WORK, ENERGY AND POWER	83
DOPPLER EFFECT	91
ELECTROSTATICS	95
ELECTRIC CIRCUITS1	04
ELECTRICAL MACHINES1	12
OPTICAL PHENOMENA AND PROPERTIES OF MATERIALS1	17
BIBLIOGRAPHY1	24

Physical Science Paper June 2013 Caps

CL Gary

Physical Science Paper June 2013 Caps:

Reviewing **Physical Science Paper June 2013 Caps**: Unlocking the Spellbinding Force of Linguistics

In a fast-paced world fueled by information and interconnectivity, the spellbinding force of linguistics has acquired newfound prominence. Its capacity to evoke emotions, stimulate contemplation, and stimulate metamorphosis is truly astonishing. Within the pages of "**Physical Science Paper June 2013 Caps**," an enthralling opus penned by a very acclaimed wordsmith, readers attempt an immersive expedition to unravel the intricate significance of language and its indelible imprint on our lives. Throughout this assessment, we shall delve into the book is central motifs, appraise its distinctive narrative style, and gauge its overarching influence on the minds of its readers.

https://crm.avenza.com/data/uploaded-files/Documents/pro%20tools%20native%20manual.pdf

Table of Contents Physical Science Paper June 2013 Caps

- 1. Understanding the eBook Physical Science Paper June 2013 Caps
 - The Rise of Digital Reading Physical Science Paper June 2013 Caps
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Physical Science Paper June 2013 Caps
 - Exploring Different Genres
 - o 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 Paper June 2013 Caps
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Physical Science Paper June 2013 Caps
 - Personalized Recommendations
 - Physical Science Paper June 2013 Caps User Reviews and Ratings
 - Physical Science Paper June 2013 Caps and Bestseller Lists

- 5. Accessing Physical Science Paper June 2013 Caps Free and Paid eBooks
 - Physical Science Paper June 2013 Caps Public Domain eBooks
 - Physical Science Paper June 2013 Caps eBook Subscription Services
 - Physical Science Paper June 2013 Caps Budget-Friendly Options
- 6. Navigating Physical Science Paper June 2013 Caps eBook Formats
 - o ePub, PDF, MOBI, and More
 - Physical Science Paper June 2013 Caps Compatibility with Devices
 - Physical Science Paper June 2013 Caps Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Physical Science Paper June 2013 Caps
 - Highlighting and Note-Taking Physical Science Paper June 2013 Caps
 - Interactive Elements Physical Science Paper June 2013 Caps
- 8. Staying Engaged with Physical Science Paper June 2013 Caps
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Physical Science Paper June 2013 Caps
- 9. Balancing eBooks and Physical Books Physical Science Paper June 2013 Caps
 - Benefits of a Digital Library
 - \circ Creating a Diverse Reading Collection Physical Science Paper June 2013 Caps
- 10. Overcoming Reading Challenges
 - o Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Physical Science Paper June 2013 Caps
 - Setting Reading Goals Physical Science Paper June 2013 Caps
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Physical Science Paper June 2013 Caps
 - Fact-Checking eBook Content of Physical Science Paper June 2013 Caps
 - 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 Paper June 2013 Caps Introduction

Free PDF Books and Manuals for Download: Unlocking Knowledge at Your Fingertips In todays fast-paced digital age, obtaining valuable knowledge has become easier than ever. Thanks to the internet, a vast array of books and manuals are now available for free download in PDF format. Whether you are a student, professional, or simply an avid reader, this treasure trove of downloadable resources offers a wealth of information, conveniently accessible anytime, anywhere. The advent of online libraries and platforms dedicated to sharing knowledge has revolutionized the way we consume information. No longer confined to physical libraries or bookstores, readers can now access an extensive collection of digital books and manuals with just a few clicks. These resources, available in PDF, Microsoft Word, and PowerPoint formats, cater to a wide range of interests, including literature, technology, science, history, and much more. One notable platform where you can explore and download free Physical Science Paper June 2013 Caps PDF books and manuals is the internets largest free library. Hosted online, this catalog compiles a vast assortment of documents, making it a veritable goldmine of knowledge. With its easy-to-use website interface and customizable PDF generator, this platform offers a user-friendly experience, allowing individuals to effortlessly navigate and access the information they seek. The availability of free PDF books and manuals on this platform demonstrates its commitment to democratizing education and empowering individuals with the tools needed to succeed in their chosen fields. It allows anyone, regardless of their background or financial limitations, to expand their horizons and gain insights from experts in various disciplines. One of the most significant advantages of downloading PDF books and manuals lies in their portability. Unlike physical copies, digital books can be stored and carried on a single device, such as a tablet or smartphone, saving valuable space and weight. This convenience makes it possible for readers to have their entire library at their fingertips, whether they are commuting, traveling, or simply enjoying a lazy afternoon at home. Additionally, digital files are easily searchable, enabling readers to locate specific information within seconds. With a few keystrokes, users can search for keywords, topics, or phrases, making research and finding relevant information a breeze. This efficiency saves time and effort, streamlining the learning process and allowing individuals to focus on extracting the information they need. Furthermore, the availability of free PDF books and manuals fosters a culture of continuous learning. By removing financial barriers, more people can access educational resources and pursue lifelong

learning, contributing to personal growth and professional development. This democratization of knowledge promotes intellectual curiosity and empowers individuals to become lifelong learners, promoting progress and innovation in various fields. It is worth noting that while accessing free Physical Science Paper June 2013 Caps PDF books and manuals is convenient and cost-effective, it is vital to respect copyright laws and intellectual property rights. Platforms offering free downloads often operate within legal boundaries, ensuring that the materials they provide are either in the public domain or authorized for distribution. By adhering to copyright laws, users can enjoy the benefits of free access to knowledge while supporting the authors and publishers who make these resources available. In conclusion, the availability of Physical Science Paper June 2013 Caps free PDF books and manuals for download has revolutionized the way we access and consume knowledge. With just a few clicks, individuals can explore a vast collection of resources across different disciplines, all free of charge. This accessibility empowers individuals to become lifelong learners, contributing to personal growth, professional development, and the advancement of society as a whole. So why not unlock a world of knowledge today? Start exploring the vast sea of free PDF books and manuals waiting to be discovered right at your fingertips.

FAQs About Physical Science Paper June 2013 Caps Books

- 1. Where can I buy Physical Science Paper June 2013 Caps books? Bookstores: Physical bookstores like Barnes & Noble, Waterstones, and independent local stores. Online Retailers: Amazon, Book Depository, and various online bookstores offer a wide range of books in physical and digital formats.
- 2. What are the different book formats available? Hardcover: Sturdy and durable, usually more expensive. Paperback: Cheaper, lighter, and more portable than hardcovers. E-books: Digital books available for e-readers like Kindle or software like Apple Books, Kindle, and Google Play Books.
- 3. How do I choose a Physical Science Paper June 2013 Caps book to read? Genres: Consider the genre you enjoy (fiction, non-fiction, mystery, sci-fi, etc.). Recommendations: Ask friends, join book clubs, or explore online reviews and recommendations. Author: If you like a particular author, you might enjoy more of their work.
- 4. How do I take care of Physical Science Paper June 2013 Caps books? Storage: Keep them away from direct sunlight and in a dry environment. Handling: Avoid folding pages, use bookmarks, and handle them with clean hands. Cleaning: Gently dust the covers and pages occasionally.
- 5. Can I borrow books without buying them? Public Libraries: Local libraries offer a wide range of books for borrowing. Book Swaps: Community book exchanges or online platforms where people exchange books.

- 6. How can I track my reading progress or manage my book collection? Book Tracking Apps: Goodreads, LibraryThing, and Book Catalogue are popular apps for tracking your reading progress and managing book collections. Spreadsheets: You can create your own spreadsheet to track books read, ratings, and other details.
- 7. What are Physical Science Paper June 2013 Caps audiobooks, and where can I find them? Audiobooks: Audio recordings of books, perfect for listening while commuting or multitasking. Platforms: Audible, LibriVox, and Google Play Books offer a wide selection of audiobooks.
- 8. How do I support authors or the book industry? Buy Books: Purchase books from authors or independent bookstores. Reviews: Leave reviews on platforms like Goodreads or Amazon. Promotion: Share your favorite books on social media or recommend them to friends.
- 9. Are there book clubs or reading communities I can join? Local Clubs: Check for local book clubs in libraries or community centers. Online Communities: Platforms like Goodreads have virtual book clubs and discussion groups.
- 10. Can I read Physical Science Paper June 2013 Caps books for free? Public Domain Books: Many classic books are available for free as theyre in the public domain. Free E-books: Some websites offer free e-books legally, like Project Gutenberg or Open Library.

Find Physical Science Paper June 2013 Caps:

pro tools native manual

prius techstream manual pro forma financial information compilation report

proform 950 instruction manual

pro laser iii manual proform crosswalk manual probability statistics and decision for civil engineers c allin cornell pro 6000 installation manual

professional training manual templates

probation assistant test guide priscilla shirer gideon viewer guide prodigal son bible lesson crafts pro remote manual private pilot manual jeppesen sanderson training products probation officer nassau county civil service exams

Physical Science Paper June 2013 Caps:

geben und nehmen warum egoisten nicht immer gewin - Jan 03 2022

web may 17 2023 geben und nehmen warum egoisten nicht immer gewin 1 12 downloaded from uniport edu ng on may 17 2023 by guest geben und nehmen

download solutions geben und nehmen warum egoisten nicht - Nov 01 2021

geben und nehmen warum egoisten nicht immer gewin pdf - Oct 12 2022

web egoismus ego'ısmus von lateinisch ego ich mit griechischem suffix ismus bedeutet eigennützigkeit der duden nennt unabhängig von der psychologischen perspektive

geben und nehmen warum egoisten nicht immer gewin - Apr 06 2022

web geben und nehmen warum egoisten nicht immer gewin 1 14 downloaded from uniport edu ng on march 29 2023 by guest geben und nehmen warum egoisten

geben und nehmen warum egoisten nicht immer gewin - Feb 04 2022

web jul 7 2023 geben und nehmen adam grant 2013 09 26 gute typen haben immer das nachsehen und die egoisten rumen ab dieses denkschema stimmt nicht mehr

egoismus wikipedia - Sep 11 2022

web jul 6 2023 geben und nehmen warum egoisten nicht immer gewin is available in our book collection an online access to it is set as public so you can download it instantly

free geben und nehmen warum egoisten nicht immer gewin - Dec 14 2022

web geben und nehmen warum egoisten nicht immer gewinnen und hilfsbereite menschen weiterkommen by adam grant 2016 06 13 aufwühlende geschichten aus der praxis

geben und nehmen warum egoisten nicht immer gewinnen und - Apr 18 2023

web das blaue buch von vaterland und freiheit die magie des lebens die religion der wahrheit geben und nehmen warum egoisten nicht immer gewin downloaded from

geben und nehmen warum egoisten nicht immer gewin pdf - Jul 09 2022

web geben und nehmen warum egoisten nicht immer gewinnen und hilfsbereite menschen weiterkommen von adam grant taschenbuch bei medimops de bestellen gebraucht

geben und nehmen warum egoisten nicht immer gewin copy - Aug 10 2022

web transformative change is actually awe inspiring enter the realm of geben und nehmen warum egoisten nicht immer gewin a mesmerizing literary masterpiece penned with

geben und nehmen warum egoisten nicht immer gewin - Jun 20 2023

web mehr möglich einfach nur mal zu lächeln oder jemandem die tageszeit zu sagen nach den wahlen in deutschland und besonders jetzt in den usa sollten wir langsam mal in

amazon de kundenrezensionen geben und nehmen warum - Jan 15 2023

web geben und nehmen warum egoisten nicht immer gewin egoisten leben glücklicher mar 28 2020 bescheidenheit ist eine zier doch weiter komm ich ohne ihr sicher ist

geben und nehmen warum egoisten nicht immer gewin - May 07 2022

web pronouncement geben und nehmen warum egoisten nicht immer gewin as capably as evaluation them wherever you are now geben und nehmen warum egoisten nicht

geben und nehmen von adam grant buch 978 3 426 30116 6 - Feb 16 2023

web finden sie hilfreiche kundenrezensionen und rezensionsbewertungen für geben und nehmen warum egoisten nicht immer gewinnen und hilfsbereite menschen

geben und nehmen warum egoisten nicht immer gewin copy - Mar 05 2022

web jul 27 2023 geben und nehmen warum egoisten nicht immer gewin appropriately simple egoismus lernen alexander arlandt 2015 04 13 egoistisch ein erfülltes

geben und nehmen warum egoisten nicht immer gewinnen und - Jun 08 2022

web aug 18 2023 geben und nehmen warum egoisten nicht immer gewin 2 12 downloaded from uniport edu ng on august 18 2023 by guest positive psychologie in

geben und nehmen warum egoisten nicht immer - Sep 23 2023

web jun 1 2016 trotz der minuspunkte ein wichtiges buch das hoffentlich mehr menschen dazu bewegen wird mehr zu geben als zu nehmen die arbeits und wirtschaftswelt

geben und nehmen warum egoisten nicht immer gewin copy - Dec 02 2021

web geben und nehmen warum egoisten nicht immer gewin next generation collaboration may 10 2021 die zusammenarbeit in gruppen und teams wird überall

geben und nehmen warum egoisten nicht immer gewin 2023 - May 19 2023

web jun 1 2016 gute typen haben immer das nachsehen und die egoisten räumen ab dieses denkschema stimmt nicht mehr denn gerade mit einer selbstlosen einstellung

geben und nehmen warum egoisten nicht immer gewinnen - Nov 13 2022

web jun 14 2023 geben und nehmen warum egoisten nicht immer gewin 2 10 downloaded from uniport edu ng on june 14 2023 by guest erfahren sie in diesem buch

geben und nehmen warum egoisten nicht immer gewin - Mar 17 2023

web gute typen haben immer das nachsehen und die egoisten räumen ab dieses denkschema stimmt nicht mehr denn gerade mit einer selbstlosen einstellung kommt

geben und nehmen warum egoisten nicht immer gewin 2022 - Jul 21 2023

web geben und nehmen warum egoisten nicht immer gewin 3 3 dieses buch in deinen händen dieses buch ist aus diesem wunsch geboren und durfte mittels inspiration und

geben und nehmen warum egoisten nicht immer gewinnen und - Aug 22 2023

web geben und nehmen warum egoisten nicht immer gewin downloaded from cdn writermag com by guest ashtyn cardenas fallschirmkinder

gender psychological perspectives linda brannon google - Jan 29 2023

web the text examines the behavioral biological and social context in which women and men express gendered behaviors the text s unique pedagogical program helps students

gender psychological perspectives apa psycnet - May 01 2023

web dec 19 2016 linda brannon routledge dec 19 2016 psychology 562 pages gender psychological perspectives synthesizes the latest research on gender to help

gender psychological perspectives seventh edition hardcover - Feb 15 2022

web gender psychological perspectives by brannon linda 1948 publication date 1996 topics sex differences psychology textbooks gender identity textbooks

gender psychological perspectives seventh edition google - Feb 27 2023

web gender psychological perspectives linda brannon allyn and bacon 1999 feminist psychology 528 pages this book examines the topic of gender the behaviours and

gender psychological perspectives linda brannon google - Dec 28 2022

web this bestselling text presents research about gender and helps students think critically about the differences between research findings and gender stereotypes it examines

gender psychological perspectives brannon linda 1948 - Nov 14 2021

gender psychological perspectives sixth edition - Jun 21 2022

web dec 20 2016 4 4 126 ratings see all formats and editions gender psychological perspectives synthesizes the latest research on gender to help students think critically

gender psychological perspectives linda brannon google - May 21 2022

web gender psychological perspectives seventh edition by brannon linda isbn 10 1138182354 isbn 13 9781138182356 routledge 2016 hardcover linda

gender psychological perspectives seventh edition brannon - Nov 26 2022

web noted for its synthetization of the latest research on gender to help students think critically about the differences between research findings and stereotypes gender

gender psychological perspectives seventh edition edition 7 - Apr 19 2022

web gender psychological perspectives seventh edition by brannon linda isbn 10 1138182346 isbn 13 9781138182349 routledge 2016 softcover linda brannon

gender psychological perspectives brannon linda 1948 - Sep 05 2023

web gender psychological perspectives by brannon linda 1948 publication date 1999 topics sex differences psychology gender identity sex characteristics gender

gender psychological perspectives seventh edition - Jul 23 2022

web dec 12 2016 gender psychological perspectives synthesizes the latest research on gender to help students think critically about the differences between research findings

gender routledgetextbooks com - Sep 24 2022

web dec 19 2016 gender psychological perspectives synthesizes the latest research on gender to help students think critically about the differences between research findings

gender psychological perspectives linda brannon google - Oct 26 2022

web jul 13 2006 gender psychological perspectives sixth edition linda brannon psychology press jul 22 2015 psychology 560 pages this bestselling text

gender psychological perspectives sixth edition linda - Mar 31 2023

web linda brannon routledge 2017 feminist psychology 539 pages gender psychological perspectives synthesizes the latest research on gender to help

gender psychological perspectives seventh edition hardcover - Mar 19 2022

web dec 19 2016 linda brannon taylor francis dec 19 2016 psychology 562 pages gender psychological perspectives synthesizes the latest research on gender to

gender psychological perspectives sixth edition google books - Aug 24 2022

web gender psychological perspectives linda brannon pearson allyn and bacon 2005 gender identity 558 pages 1 the study of gender headline the new gender

gender psychological perspectives seventh edition google - Dec 16 2021

gender psychological perspectives seventh edition - Aug 04 2023

web brannon l 2005 gender psychological perspectives 4th ed pearson education new zealand abstract gender psychological perspectives examines the research

gender psychological perspectives seventh edition softcover - Jan 17 2022

gender psychological perspectives seventh edition - Jun 02 2023

web aug 26 2015 abstract this bestselling text presents research about gender and helps students think critically about the differences between research findings and gender

gender psychological perspectives seventh edition linda - Oct 06 2023

web jan 12 2017 gender psychological perspectives synthesizes the latest research on gender to help students think critically about the differences between research findings

gender psychological perspectives 4th ed apa psycnet - Jul 03 2023

web gender psychological perspectives citation brannon l 1996 gender psychological perspectives allyn bacon abstract this book examines the topic of

exhibition art graphics and space design hardcover amazon ca - Apr 02 2022

web exhibition art graphics and space design shaoqiang wang 9788416504497 books amazon ca

exhibition design books dexigner - May 15 2023

web aug 16 2016 exhibition art graphics and space design features over sixty of the world's most creative exhibition designs including fascinating space design solutions and sophisticated graphic design ideas the examples range from extraordinarily large events such as a world's fair exposition to small one artist solo shows aug 9 2016

art exhibitions in istanbul during 2023 2024 ocula - Jun 04 2022

web pi artworks istanbul 21 september 25 november 2023 group exhibition 2019 zilberman istanbul 17 september 22 october 2023 mehmet ali uysal coule pi artworks istanbul see upcoming art exhibitions in istanbul during 2023 2024 exhibition design tag archdaily - Dec 10 2022

web sep 15 2023 discover the latest architecture news and projects on exhibition design at archdaily the world's largest architecture website stay up to date with articles and updates on the newest developments

the art of exhibition design getty news - Mar 13 2023

web the art of exhibition design getty news 2022 article sharing the process of how getty exhibitions are designed jessica harden getty s head of design takes us behind the scenes

exhibition art graphics and space design open library - Oct 08 2022

web dec 19 2022 240 subjects exhibitions commercial art art exhibitions graphic design typography catalogs history design showing 1 featured edition view all 1

exhibition art graphics space design abebooks - Jan 31 2022

web exhibition art graphics and space design by wang shaoqiang and a great selection of related books art and collectibles available now at abebooks co uk

free exhibition art graphics and space design - Nov 09 2022

web exhibition art graphics and space design the senses mar 20 2021 a powerful reminder to anyone who thinks design is primarily a visual pursuit the senses accompanies a major exhibition at the cooper hewitt smithsonian design museum that explores how space materials sound and light affect the mind and body

exhibition art graphics and space design pasta dura - Apr 14 2023

web this book meant for exhibition designers graphic designers curators and event organizers collects over sixty of the world s most creative exhibition designs including fascinating space design solutions and sophisticated graphic design ideas **exhibition art graphics and space design 9788416504497** - Aug 06 2022

web exhibition art graphics and space design shaoqiang wang published by promopress 2016 isbn 10 8416504490 isbn 13 9788416504497 used hardcover quantity 1 seller blue rock books marbella ma spain rating seller rating book description hardcover condition used good seller inventory 9788416504497

exhibition art graphics and space design goodreads - Jul 17 2023

web this book meant for exhibition designers graphic designers curators and event organizers collects over sixty of the world s most creative exhibition designs including fascinating space design solutions and sophisticated graphic design ideas exhibition art graphics and space design alibris - Feb 12 2023

web this book meant for exhibition designers graphic designers curators and event organizers collects over sixty of the world s most creative exhibition designs including fascinating space design solutions and sophisticated graphic design ideas exhibition art graphics and space design graphisme - Sep 07 2022

web this book meant for exhibition designers graphic designers curators and event organizers collects over sixty of the world s most creative exhibition designs including fascinating space design solutions and sophisticated graphic design ideas art exhibition wikipedia - May 03 2022

web types of exhibitions exhibition space being readied for a show at the arthur m sackler gallery there are different kinds of art exhibitions in particular there is a distinction between commercial and non commercial exhibitions a commercial exhibition or trade fair is often referred to as an art fair that shows the work of artists or art dealers where exhibition art graphics and space design on behance - Sep 19 2023

web may 24 2016 exhibition art graphics and space design collects almost 100 most creative exhibition design including fascinating space design and sophisticated graphic design it will surely serve as a significant guidebook for exhibition designers graphic designers curators and event organizers

studio arc designs postal museum s dressed to deliver exhibition - Mar 01 2022

web 19 hours ago by abbey bamford october 19 2023 1 21 pm edinburgh based design consultancy studio arc has developed the 3d and 2d design for the postal museum s new exhibition dressed to deliver which demonstrates the evolution of britain s postal uniform initial concepts for the exhibition were family focused and realised through a very exhibition art graphics and space design amazon com - Aug 18 2023

web aug 16 2016 this book meant for exhibition designers graphic designers curators and event organizers collects over sixty of the world's most creative exhibition designs including fascinating space design solutions and sophisticated graphic design ideas

exhibition design bridging the knowledge gap researchgate - Jul 05 2022

web feb 28 2010 pdf this article considers the changing role of exhibition design and its contribution to interpretation in the increasingly audience centred museum find read and cite all the

exhibition art graphics and space design hardcover - Jan 11 2023

web aug 16 2016 this book meant for exhibition designers graphic designers curators and event organizers collects over sixty of the world's most creative exhibition

architecture of exhibition spaces 23 art galleries around the world - Jun 16 2023

web may 15 2020 we have selected 23 art gallery projects around the world with different design solutions that lead to different ways of exhibiting check below terrassenhaus berlim brandlhuber emde