SCIENCE OF RESEARCH

Zhaohao Sun

Updated 080804, 090907, 050615, 080616, 090517, 18-210717, 02-040817, 25 08 17, 150917, 081117, 060618, 02 08 18, 060219

Abstract. Science of research is a set of principles and methods for scientific investigation into technology of research, engineering of research and management of research to improve research and research decision making. This article looks at the fundamentals of Science of research and presents a set of scientific principles and methods though answering the questions such as What is research? How can do research? How can manage research? How can automate a research? How can engineer a research? And etc. This article also explores technology of research, engineering of research, system of research and management of research as a part of science of research. The approaches in science of research will benefit all aspects of science, engineering, technology, system and management.

1 Introduction

Science of research (research science) is not new, because science and technology have been developed dramatically in the past few hundred years. Scientific inquiry underpins the science of research during that time. Research methodologies have become a discipline in order to train higher degree students in the past few decades. Many universities have offered Research methodology as a course or subject for undergraduate or postgraduate students.

Science of research has been drawn some attention in some research fields including Sport and Tourism (Harris, 2006), education (Carlson & Marshall, 2009), social psychology (Kassin, Fein, & Markus, 2011), families (Olson, 2011) and molecular and cellular cognition (MCC) (Silva & Bickle, 2009). For example, Silva (2007) proposes the principles underlying the discovery of cognitive and other biological mechanisms as a part of the science of research. He proposes a new general framework for science of research and applies it to the search for molecular mechanisms of cognitive functions (Silva & Bickle, 2009). However, research has not been considered as a science, that is, science of research has been not considered as a member of science realm, because en wikipedia.org has no items of either "Science of research" or "research science" (retrieved on 18 July 2017).

Science of research can be defined as a set of principles and methods for scientific investigation into technology of research, engineering of research and management of research to improve research and research decision making. It mainly addresses the following questions. What is research? How can do research? How can manage research? How can automate a research? How can engineer a research? And etc. The approaches in science of research will benefit all aspects of science, engineering, technology, system and management.

It should be noted that the author motivated science of research based on his predilection on research methodology for three decades. Just as that F Taylor developed science of management (scientific management) from 1908 to 1911 and it later underpins science of business. Science of research should become a member of science realm. What F Taylor dreamed in 1908 is similar to what the author has dreamed about science of research.

The author believes that this is a topic for a series of books or research papers, if we can build a school of business based on science of management, or science of business, why cannot we build a school of

Sample Science Research Paper

SA Dillow

Sample Science Research Paper:

Fuel your quest for knowledge with Learn from is thought-provoking masterpiece, Explore **Sample Science Research Paper**. This educational ebook, conveniently sized in PDF (Download in PDF: *), is a gateway to personal growth and intellectual stimulation. Immerse yourself in the enriching content curated to cater to every eager mind. Download now and embark on a learning journey that promises to expand your horizons.

https://crm.avenza.com/data/uploaded-files/HomePages/peugeot%20jetforce%2050cc%20service%20manual.pdf

Table of Contents Sample Science Research Paper

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

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

Sample Science Research Paper Introduction

In this digital age, the convenience of accessing information at our fingertips has become a necessity. Whether its research papers, eBooks, or user manuals, PDF files have become the preferred format for sharing and reading documents. However, the cost associated with purchasing PDF files can sometimes be a barrier for many individuals and organizations. Thankfully, there are numerous websites and platforms that allow users to download free PDF files legally. In this article, we will explore some of the best platforms to download free PDFs. One of the most popular platforms to download free PDF files is Project Gutenberg. This online library offers over 60,000 free eBooks that are in the public domain. From classic literature to historical documents, Project Gutenberg provides a wide range of PDF files that can be downloaded and enjoyed on various devices. The website is user-friendly and allows users to search for specific titles or browse through different categories. Another reliable platform for downloading Sample Science Research Paper free PDF files is Open Library. With its vast collection of over 1 million eBooks, Open Library has something for every reader. The website offers a seamless experience by providing options to borrow or download PDF files. Users simply need to create a free account to access this treasure trove of knowledge. Open Library also allows users to contribute by uploading and sharing their own PDF files, making it a collaborative platform for book enthusiasts. For those interested in academic resources, there are websites dedicated to providing free PDFs of research papers and scientific articles. One such website is Academia.edu, which allows researchers and scholars to share their work with a global audience. Users can download PDF files of research papers, theses, and dissertations covering a wide range of subjects. Academia.edu also provides a platform for discussions and networking within the academic community. When it comes to downloading Sample Science Research Paper free PDF files of magazines, brochures, and catalogs, Issuu is a popular choice. This digital publishing platform hosts a vast collection of publications from around the world. Users can search for specific titles or explore various categories and genres. Issuu offers a seamless reading experience with its user-friendly interface and allows users to download PDF files for offline reading. Apart from dedicated platforms, search engines also play a crucial role in finding free PDF files. Google, for instance, has an advanced search feature that allows users to filter results by file type. By specifying the file type as "PDF," users can find websites that offer free PDF downloads on a specific topic. While downloading Sample Science Research Paper free PDF files is convenient, its important to note that copyright laws must be respected. Always ensure that the PDF files you download are legally available for free. Many authors and publishers voluntarily provide free PDF versions of their work, but its essential to be cautious and verify the authenticity of the source before downloading Sample Science Research Paper. In conclusion, the internet offers numerous platforms and websites that allow users to download free PDF files legally. Whether its classic

literature, research papers, or magazines, there is something for everyone. The platforms mentioned in this article, such as Project Gutenberg, Open Library, Academia.edu, and Issuu, provide access to a vast collection of PDF files. However, users should always be cautious and verify the legality of the source before downloading Sample Science Research Paper any PDF files. With these platforms, the world of PDF downloads is just a click away.

FAQs About Sample Science Research Paper Books

- 1. Where can I buy Sample Science Research Paper 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 Sample Science Research Paper 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 Sample Science Research Paper 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 Sample Science Research Paper 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 Sample Science Research Paper 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 Sample Science Research Paper:

peugeot jetforce 50cc service manual

peugeot elyseo 125 manual peugeot xu series workshop manual pharmacist chemo training

philips avent manual breast pump target

philips 52pfl9703 q529 1a la service manual repair guide

philips aj3940 17 manual

phaeton repair manual

phenom 100 flight manual peugeot 407 petrol haynes manual

peugeot technical documentation for motor trade professionals

peyman hooshmandzadeh a people of horse english and persian edition

pgo ligero 50 scooter full service repair manual

peugeot 406 3 manual

pfaff 135 manual

Sample Science Research Paper:

what does ∏ aruku mean in japanese wordhippo - Feb 26 2022

web jul 19 2018 amazon com aruku bangkok aruku series ryokou guide book japanese edition ebook yuji shimokawa yuji shimokawa kindle store

aruku bangkok aruku series ryokou guide book japa pdf - Aug 03 2022

web mar 28 2023 aruku bangkok aruku series ryokou guide book japa 2 3 downloaded from uniport edu ng on march 28 2023 by guest review in the united arab emirates

aruku bangkok aruku series ryokou guide book japa - Sep 04 2022

web aruku bangkok 2015 2016 aruku series book read reviews from world s largest community for readers aruku series book read reviews from world s largest community for readers

yuko araki asianwiki - Jan 28 2022

web aruku bangkok aruku series ryokou guide book japa downloaded from ftp williamcurley co uk by guest reyna reilly antarctic earth science europa editions

amazon com customer reviews aruku bangkok aruku - Jun 13 2023

web aruku bangkok aruku series ryokou guide book japa pdf download pdf aruku bangkok aruku series ryokou guide book japa pdf books this is the book you are

aruku bangkok aruku series ryokou guide - Aug 15 2023

web b o o k aruku bangkok 2023 aruku series ryokou guide book japanese edition pdf ebook download

aruku bangkok aruku series ryokou guide book japanese - Jan 08 2023

web through a series of almost 30 loosely linked sections grouped into three parts we are thrust into a narrative alternating between visceral realism and fantastic satire

aruku bangkok aruku series ryokou guide japa géza csáth - Oct 05 2022

web mar 22 2023 aruku bangkok aruku series ryokou guide book japa 1 1 downloaded from uniport edu ng on march 22 2023 by guest aruku bangkok aruku series ryokou

aruku bangkok aruku series ryokou guide book japa pdf - Dec 07 2022

web right here we have countless ebook aruku bangkok aruku series ryokou guide japa and collections to check out we additionally pay for variant types and afterward type of

aruku bangkok aruku series ryokou guide book - Dec 27 2021

aruku bangkok aruku series ryokou - May 12 2023

web web aruku bangkok aruku series ryokou guide book japanese edition kindle edition by yuji shimokawa author editor format kindle edition 4 2 out of 5 stars 37 ratings see all 2

aruku bangkok 2015 2016 aruku series ryokou - Jul 02 2022

web jun 28 2023 we offer aruku bangkok aruku series ryokou guide book japa pdf and numerous book collections from fictions to scientific research in any way among them is

aruku bangkok aruku series ryokou guide book japa - Jun 01 2022

web may 8 2017 difference between ayumu sanpo and aruku aruku \square \square is a general term for to walk ayumu \square \square is a little old fashioned expression for to

aruku bangkok aruku series ryokou guide book japanese - Feb 09 2023

web sep 24 2022 series ryokou guide book japa but end up in malicious downloads rather than reading a good book with a cup of tea in the afternoon instead they juggled with

aruku bangkok aruku series ryokou guide book japa pdf copy - Apr 30 2022

web open verb yoroyoro aruku i m walking around shamble nearby translations open translate from japanese og what is the difference between ayumu sanpo and aruku - Mar 30 2022

web profile name yuko araki japanese [][] [][] birthdate december 15 1993 birthplace tokyo japan height 164cm blood type a instagram yuuuuukko

aruku bangkok aruku series ryokou guide book japa pdf - Nov 25 2021

aruku bangkok aruku series ryokou guide book japa pdf - Mar 10 2023

web aruku bangkok aruku series ryokou guide book japanese edition by yuji shimokawa if you want to hilarious books lots of novels tale jokes and more fictions collections are

aruku bangkok aruku series ryokou guide book japa pdf - Nov 06 2022

web statement aruku bangkok aruku series ryokou guide book japa that you are looking for it will unquestionably squander the time however below gone you visit this web

b o o k aruku bangkok 2023 aruku series ryokou - Jul 14 2023

web find helpful customer reviews and review ratings for aruku bangkok aruku series ryokou guide book japanese edition at amazon com read honest and

aruku bangkok aruku series ryokou guide book japa pdf - Apr 11 2023

web aug 28 2023 april 28th 2020 aruku bangkok 2015 2016 aruku series ryokou guide book japanese am742702 020 adobe acrobat reader dcdownload

wjec past papers - Oct 02 2023

for each of our qualifications there will be several past papers available from previous years there are also tiered papers available for certain subjects and the corresponding mark

wjec a level biology past papers a level biology - Mar 27 2023

wjec june 2018 wjec as level biology past papers 2400 biology as unit 2 biodiversity and physiology of body systems 2400u20

1 q a wjec june 2016 wjec a

wjec as biology past papers as biology past papers wjec - Nov 10 2021

wjec biology by2 past papers - Dec 24 2022

wjec a level biology a2 unit 4 variation inheritance and options past papers a level biology question paper 2 reference h420 02 download wjec a level biology biology

wjec wales unit 2 gcse biology past papers physics - Sep 20 2022

wjec gcse biology past take works and marking wiring 3400 the past papers are free to download for you to use as practice fork your exams keyboard arrow down go more

wjec biology 2002 10 pdf files past papers archive - Jun 17 2022

it is your utterly own time to put on reviewing habit accompanied by guides you could enjoy now is wjec biology by2 past papers below wjec biology by2 past papers downloaded from

gcse biology bookmark file wjec biology by2 past papers - Jul 19 2022

here are 9 results for wjec as biology past papers 1 wjec past paper mark schemes biology 2002 pdf wjec past paper mark schemes biology 2002 bing wjec past paper mark

wjec as biology past papers 9 pdf files past papers archive - May 17 2022

wjec cbac ltd evolutionary past lion panthera leo jaguar panthera onca leopard panthera pardus tiger panthera tigris snow leopard panthera uncia clouded leopard

gcse biology wjec - Jan 13 2022

download wjec as level biology past papers for as level biology free wjec as level biology past papers question paper and mark scheme pdfs

2016 wjec a level biology past papers 2023 wjec biology a - Dec 12 2021

biology past papers as a level the tutor academy - Jul 31 2023

gce 2012 summer english medium biology by 2 question paper gce 2012 summer english medium biology marking scheme gce 2013 summer

 $mppe\ mock\ papers\ past\ papers\ practice\ tests\ etextbooks\ -\ Aug\ 20\ 2022$

10 wjec biology by2 past papers pdf wjec biology by2 past papers goairporttaxi co looking for wjec biology by2 past papers you will be happy to learn that

as a level biology wjec - Apr 27 2023

wjec biology for as student book 978 1 908682 50 5 wjec biology for a2 student book 978 1 908682 51 2 wjec biology for as study and revision guide 978 1 908682 52 9

past papers wjec - Jan 25 2023

wjec biology by2 past papers menu home translate read online all the answer i shall ever get pdf photorefractive organic materials and applications springer series in materials

wjec gcse biology past papers revision science - Jun 29 2023

june 2016 wjec gcse biology past exam papers june 2016 science a biology 1 4461 01 foundation download paper june 2016 science a biology 1 4461 02 higher

as biology wjec by1 by2 by4 by5 the student room - Feb 23 2023

wjec markscheme gce ms biology jan08 e pdf january 2009 pdf june 2009 pdf january 2010 pdf june 2010 pdf january 2011 pdf june 2011 pdf jan 2012 pdf may 2012 pdf 10

wjec biology by2 past papers georgiacollegesurvey gcsu - Apr 15 2022

11 wjec cbac ltd gce biology by 2 mark scheme january 2013 question marking details marks available 1 a a species is a group of organisms that can

wjec unit 1 biology past papers physics maths tutor - May 29 2023

book your place now you can find all wjec biology unit 1 past papers and mark schemes below january 2009 ms unit 1 wjec biology a level january 2009 qp unit 1 wjec

wjec a level biology past papers revision science - Sep 01 2023

the wjec a level and as level biology past exam papers section of revision science 1400 and 2400 you can download the papers and marking schemes by clicking on the links

wjec gcse biology past papers exam revision - Nov 22 2022

you can find all wjec wales biology gcse 601 8233 7 unit 2 past papers and mark schemes below foundation june 2018 ms unit 2 f wjec biology gcse june 2018 qp

1072 01 s15 1072 01 biology by2 physics maths tutor - Mar 15 2022

build your own exam paper choosing from thousands of past paper questions online exam review oer is a free interactive teaching and learning tool which includes exam answers and

wjec a level biology past papers learnyay - Oct 22 2022

biology human hb2 hb2 gce summer 2013 question paper pdf documents 1 18mb biology human by2 hb2 by2 gce summer 2013 question paper ml pdf documents

january 2013 ms wjec biology physics maths tutor - Feb 11 2022

wjec a level biology by2 past papers june 2016 wjec a level biology question paper by2 reference 1072 01 view question paper view mark scheme wjec a level biology

migatronic mte 320 ac dc squarewave tig welder water cooled - Sep 04 2022

web may 8 2019 show more ac dc tig welding test with migatronic mte 320 ac dc squarewave tig welder water cooled machine mains supply 220 380 415 440 and 500v great machine for industrial tig

migatronic mte 220 ac dc squarewave tig welder westermans - May 12 2023

web for sale used migatronic mte 220 ac dc squarewave tig welder available today worldwide delivery

mte 220 migatronic a s - Dec 07 2022

web mte 220 udgået support vælg din produktvariation mte 150 mte 220 mte 320 mte 440 migatronic udvikler og producerer svejsemaskiner og svejseudstyr vi har gjort svejsning nemt i et halvt århundrede migatronic udvikler og producerer svejsemaskiner og svejseudstyr vi har gjort svejsning nemt i et halvt århundrede mte 220 migatronic com - Jul 14 2023

web mte 220 föråldrad mte 150 mte 220 mte 320 mte 440 migatronic utvecklar och producerar svetsmaskiner och svetsutrustning vi har gjort svetsning enkelt i ett halvt århundrade migatronic utvecklar och producerar svetsmaskiner och svetsutrustning

migatronic welding machines and equipment - Jun 13 2023

web nicaaomc mte 220 dc o ac mte440 fpb fsb fhb created date 3 10 2008 9 53 21 am

migatronic mte dialog welding system - Nov 06 2022

web page 1 introduction migatronic welding equipment has a good reputation and we know how important it is to live up to the standards we have set ourselves the welding machine you have purchased is the result of migatronic s years of experience in the field of welding machine manufacture

migatronic migatronic s migatronic - Feb 09 2023

web thank you for buying a migatronic machine instruction manual mte dialog version c 50174520 ec declaration of conformity migatronic as aggersundvej 33 9690 fjerritslev denmark hereby declare that our machines as stated below type mte as of week 50 1995 conform to directives 73 23 eec and

kaynak makinesi mobil migatronic mte 220 ikinci el - Mar 10 2023

web İkinci el kaynak makinesi mobil migatronic mte 220 50 yer de hemen teklif ver surplex com mte 220 migatronic schweißmaschinen gmbh - Apr 11 2023

web mte 220 obsolet support mte 150 mte 220 mte 320 mte 440 migatronic entwickelt produziert schweißmaschinen und verwandte produkte für die schweißbranche wir machen das schweißen seit einem halben jahrhundert einfach migatronic

entwickelt produziert schweißmaschinen und verwandte produkte für die schweißbranche migatronic mte 220 saldatrice usata the ultimate tooling - Jan 28 2022

web mu387 migatronic mte 220 saldatrice usata la saldatrice migatronic mte 220 usata si presenta in buone condizioni **migatronic mte 320 acdc werktuigen biz tr** - Oct 05 2022

web kullanılmış ekipman için size 3 ay garanti veriyoruz migatronic mte 320 acdc 7blx9n83ae 320 amper 380 volt acdc su soğutmalı 2 4 vuruş aşağı eğim akış için gaz keleb

migatronic mte220 ac dc mig welding forum - Jun 01 2022

web dec 4 2011 the manual on the migatronic site suggests 5 220a for both ac and dc service migatronic com media mte 50174020 pdf the sideways page didn t read any further but it s probably multi voltage single phase i e can feed it via 2 phases of a 3 phase supply to get a higher voltage and make it less greedy amperage wise

 $mte\ 220\ migatronic\ a\ s$ - Aug 15 2023

web mte 150 mte 220 mte 320 mte 440 migatronic is a manufacturer of arc welding machines and welding equipment we ve been making welding easy for half a century migatronic denmark aggersundvej 33 fjerritslev dk 9690

migatronic mte 220 tig versus modern electronic inverter tig - Aug 03 2022

web nov 9 2012 folks this is my dilemma i am new to tig i have the opportunity to buy a migatronic mte 220 complete with torch and foot pedal for roughly 500

migatronic omega 220 instruction manual pdf download - Feb 26 2022

web view and download migatronic omega 220 instruction manual online omega 220 welding system pdf manual download also for omega 300 omega 220 boost omega 300 boost omega 270 mini omega 400 omega 400 stb download migatronic220mte user manual pdf - Dec 27 2021

web search in the database download any manual 24 hours access to millions of manuals operating instructions user manual owner s manual installation manual workshop manual repair manual service manual illustrated parts list migatronic mte 220 used welding machine the ultimate - Jul 02 2022

web the used migatronic mte 220 welding machine is for sale on the ultimate tooling and it is in good condition contact us for more information

migatronic mte 320 ac dc squarewave tig youtube - Apr 30 2022

web jul 14 2014 migatronic mte 320 ac dc squarewave tig westermans international 3 98k subscribers subscribe 12k views 9 years ago full details of all tig welding machines in stock can be found on our welding equipment migatronic mte 220 truck1 id 6473586 - Mar 30 2022

web used welding equipment migatronic mte 220 location storvorde truck1 id 6473586 explore a variety of commercial

vehicle offers presented at truck1 mte 220 dialog manualzz - Jan 08 2023

web instruction manual mte dialog version c ec declaration of conformity migatronic a s aggersundvej 33 9690 fjerritslev denmark hereby declare that our machines as stated below type mte as of week 50 1995 conform to directives 73 23 eec and 89 336 eec european standards en60974 1 en50199 issued in fjerritslev on 11th