INTRODUCTION TO SURGERY



Introduction To Surgery

Luigi Manfredi

Introduction To Surgery:

Introduction to Surgery for Students Rebecca A. Fisher, Kamran Ahmed, Prokar Dasgupta, 2017-08-03 Introduction to surgery aims to provide a one stop guide to the basics of surgery for surgical rotations as well as providing information for aspiring surgeons on how to explore a surgical career and build your CV for surgical applications It aims to be the go to companion for any student shadowing in theatres and a thorough guide for students wishing to spend more time in a specific specialty conduct research and plan careers Introduction to Surgery for Students is an edited collection of 31 chapters from a group of 80 medical students junior doctors and consultant surgeons Each chapter has been written by a team made up of at least one student and one senior and has then been edited and reviewed by a medical student with a special interest in the topic This near peer style of writing allows our content to cater to a student's needs at the right level whilst having the expert input of surgeons who are leaders in their field Introduction to Surgery David H. Levien, 1993 Now in its second edition this presents information on topics including wound management tubes and drains the acute surgical abdomen intestinal obstruction gastric surgery surgery of the colon hernia vascular surgery and a brand new chapter on the breast It also An Introduction to Surgery Ronald Gordon Elmslie, John Lucbrook, 1972 includes case histories An Introduction to Surgery Rutherford Morison, 2012-08 Unlike some other reproductions of classic texts 1 We have not used OCR Optical Character Recognition as this leads to bad quality books with introduced typos 2 In books where there are images such as portraits maps sketches etc. We have endeavoured to keep the quality of these images so they represent accurately the original artefact Although occasionally there may be certain imperfections with these old texts we feel they deserve to be made available for future generations to enjoy Surgery Umut Sarpel, 2014-09-19 Surgery An Introductory Guide is an all in one reference that provides the vital information needed to get the best learning experience out of an operation and presents it in a convenient efficient and portable format Each section brings together the key points from several different fields including anatomy pathophysiology radiology surgical technique and clinical guidelines The operations covered represent the breadth of general surgery including hernia repair cholecystectomy breast surgery general bowel surgery and vascular surgery Each chapter provides informative text bulleted lists and common OR questions combined with classic radiology images diagrams and a color illustration of the operative anatomy This method of using key words high yield diagrams and illustrations enhances the ability to quickly absorb and retain the relevant information The volume is also organized by operation rather than by pathological topic which lends itself to quick review before each case Written by Dr Sarpel a surgeon and former co clerkship director who has been honored with multiple teaching awards Surgery An Introductory Guide is of great value to medical students and junior residents rotating on general surgery **Bulletin of** Washington University Washington University (Saint Louis, Mo.). School of Medicine, 1927 The First Lines of the Practice of Surgery Designed as an Introduction for Students and a Concise Book of Reference for Practitioners Samuel

Cooper (Surgeon.),1820 An Introduction to the history of medicine Fielding Hudson Garrison,1914 Medical College Catalogue ... with Announcements for Western Reserve University,1927 General Surgery: Introduction; General Principles Frederick Willard Preston,1971 British Medical Journal ,1898 The First Lines of the Practice of Surgery Samuel Cooper,1819 The Massachusetts register ,1988 The New England Journal of Medicine ,1897

Endorobotics Luigi Manfredi, 2022-01-04 The book comprises three parts The first part provides the state of the art of robots for endoscopy endorobots including devices already available in the market and those that are still at the R it includes the use of polymers for soft robotics comparing their advantages and limitations with those of their more rigid counterparts The third part includes the project management of a multidisciplinary team the health cost of current technology and how a cost effective device can have a substantial impact on the market It also includes information on data governance ethical and legal frameworks and all steps needed to make this new technology available Focuses on a new design paradigm for endorobots applications Provides a unique collection of engineering medical and management contributions for endorobotics design Describes endorobotics starting from available devices in both clinical use and academia **Edinburgh Medical** Journal ,1900 <u>Introduction to the Operating Room</u> Amalia Cochran, 2016-12-22 A unique survival manual for clinicians new to the operating room This one of a kind resource answers all the questions that newbie clinicians nurses and allied health workers have about the Operating Room but are afraid to ask It is a complete and candid explanation of the sights sounds technologies personalities and culture that readers will experience when they enter that complex stress inducing world Introduction to the Operating Room delivers the practical real world guidance newcomers need to ensure patient safety and their own career success The book is logically divided into two sections Part 1 discusses the people of the Operating Room and includes companion video interviews that clarify roles and expectations This section also delves into the politics and culture of the Operating Room Part 2 is devoted to the equipment of the Operating Room The first book to combine a description of OR people culture rules with discussion of equipment technology Includes a valuable glossary of Operating Speak that translates the language of the Operating Room to everyday language A great resource to help readers impress the attendings and staff of the Operating Room **Brain Metastases** Jeffrey Raizer, Lauren E. Abrey, 2007-10-03 Brain metastases are the most dreaded complication of systemic cancer affecting some 170 000 people a year a far greater incidence than primary brain tumors This book presents current information on the presentation and management of patients with brain metastases providing available data giving guidelines that can be applied in day to day practice updated information for neurosurgeons radiation oncologists medical oncologists and neuron oncologists and as an overview for Medical research and education ,1913 Medical Research and Education Richard Mills physicians in training Pearce, 1913

Recognizing the mannerism ways to get this ebook **Introduction To Surgery** is additionally useful. You have remained in right site to start getting this info. get the Introduction To Surgery join that we offer here and check out the link.

You could buy lead Introduction To Surgery or acquire it as soon as feasible. You could quickly download this Introduction To Surgery after getting deal. So, like you require the books swiftly, you can straight get it. Its as a result categorically simple and consequently fats, isnt it? You have to favor to in this ventilate

 $\frac{https://webhost.bhasd.org/data/browse/fetch.php/George\%20Eliot\%20Middlemarch\%20Silas\%20Marner\%20Amos\%20Barton.pdf$

Table of Contents Introduction To Surgery

- 1. Understanding the eBook Introduction To Surgery
 - The Rise of Digital Reading Introduction To Surgery
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Introduction To Surgery
 - 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 Introduction To Surgery
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Introduction To Surgery
 - Personalized Recommendations
 - Introduction To Surgery User Reviews and Ratings
 - Introduction To Surgery and Bestseller Lists
- 5. Accessing Introduction To Surgery Free and Paid eBooks

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

Introduction To Surgery Introduction

Introduction To Surgery Offers over 60,000 free eBooks, including many classics that are in the public domain. Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works. Introduction To Surgery Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Introduction To Surgery: This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications. Internet Archive for Introduction To Surgery: Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Introduction To Surgery Offers a diverse range of free eBooks across various genres. Introduction To Surgery Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Introduction To Surgery Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Introduction To Surgery, especially related to Introduction To Surgery, might be challenging as theyre often artistic creations rather than practical blueprints. However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to Introduction To Surgery, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Introduction To Surgery books or magazines might include. Look for these in online stores or libraries. Remember that while Introduction To Surgery, sharing copyrighted material without permission is not legal. Always ensure youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading. Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow Introduction To Surgery eBooks for free, including popular titles. Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books. Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the Introduction To Surgery full book, it can give you a taste of the authors writing style. Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a wide range of Introduction To Surgery eBooks, including some popular titles.

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

Find Introduction To Surgery:

george eliot middlemarch silas marner amos barton

german business correspondence course macmillan multilingual business series georgia civil war sites germany and the germans georg herold gekrummte poesie shifted verses german compact dictionary german 20mm flak in world war ii 19391945 germany calling germanenglish dictionary of agriculture forestry and horticulture german quickly grammar for reading german rev german navy in world war two an illustrated guide to the kriegsmarine 1920-1945 georgia okeeffe in west german family

george moore and the autogenous self; the autobiography and fiction george gissing a critical biography

Introduction To Surgery:

images of organization gareth morgan google books - Dec 31 2022

web may 9 2006 about the author 2006 gareth morgan is well known for his creative contributions to management he is the author of seven books including images of organization creative organization theory imaginization and riding the

images of organization morgan gareth 9780761906322 - Aug 27 2022

web images of organization has already established itself as a classic that has influenced management thinking throughout the world this revised edition takes gareth morgan s achievement one step further providing the kind of organizational radar system needed to negotiate the demands of the twenty first century

images of organization the executive edition gareth morgan - May 04 2023

web jun 6 1998 images of organization the executive edition gareth morgan berrett koehler publishers jun 6 1998 business economics 349 pages this pioneering work is based on a simple premise

images of organization gareth morgan free download - Sep 08 2023

web images of organization gareth morgan free download borrow and streaming internet archive

images of organizations by gareth morgan sage publications - Feb 18 2022

web images of organizations by gareth morgan sage publications beverly hills california u s a 1986 421 pp j s counelis first published december 1987

images of organization gareth morgan google books - Apr 03 2023

web apr 15 2006 images of organization gareth morgan sage publications apr 15 2006 business economics 520 pages since its first publication over twenty years ago images of organization has become a

images of organization researchgate - Jun 24 2022

web jan 1 2006 morgan ibid p representative participation in a large scale health it project article full text available dec 2022 Øivind klungseth zahlsen dag svanæs yngve dahl user involvement is widely

images of organization 2nd ed apa psycnet - Nov 29 2022

web citation morgan g 1997 images of organization 2nd ed sage publications inc abstract this book explores and develops the art of reading and understanding organizational life

images of organization sage publications ltd - Mar 02 2023

web images of organization challenges and reshapes how we think about organization and management in the most

fundamental way the new updated edition makes this monumental work available to a new generation of students and images of organization wikipedia - Aug 07 2023

web images of organization is a bestseller book by gareth morgan professor of organizational behavior and industrial relations at the schulich school of business at york university in toronto which attempts to unveil organization via a number of metaphors it was first published in 1986

images of organization sage publications inc - Oct 09 2023

web gareth morgan provides a rich and comprehensive resource for exploring the complexity of modern organizations internationally translating leading edge theory into leading edge practice this new updated edition preserves morgan s renowned creative images and metaphors while refreshing the references and tables the addition of a preface pdf morgan images of organizations 1986 academia pdf academia pd

web morgan images of organizations 1986 seçkin kıranoğlu see full pdf download pdf see full pdf

reflections on images of organization and its implications for - Jul 26 2022

web jan 6 2012 reflections on images of organization and its implications for organization and environment gareth morgan view all authors and affiliations volume 24 issue 4 doi org 10 1177 1086026611434274 contents images of organization by gareth morgan open library - May 24 2022

web mar 8 2023 created by an anonymous user imported from scriblio marc record images of organization by gareth morgan 1997 sage publications edition in english 2nd ed

pdf morgan s images of organizations analysis researchgate - Jul 06 2023

web this research paper focuses on the analysis of the morgan s images of organizations morgan s eight metaphors of the images of organizations were discussed where their limitations the

41 images of organization gareth morgan talking about - Apr 22 2022

web apr 3 2018 whyte w h 2013 the organization man university of pennsylvania press metaphor morgan in this episode we discuss and debate gareth morgan s images of organization and the many metaphors in use to describe organization behavior pdf images of organization semantic scholar - Jun 05 2023

web within organization studies morgan s seminal book images of organization has laid the groundwork for an entire research tradition of studying organizational phenomena through metaphorical lenses expand

re imagining images of organization a conversation with gareth morgan - $Oct\ 29\ 2022$

web jun 24 2015 in this article we review the metaphors presented by morgan in images of organization and highlight how they simultaneously act as relatively static reflections i e they provide a history of images of organization gareth morgan google books - Feb 01 2023

web apr 15 2006 gareth morgan provides a rich and comprehensive resource for exploring the complexity of modern organizations internationally translating leading edge theory into leading edge practice this new updated edition preserves morgan s renowned creative images and metaphors while refreshing the references and tables images of organization by gareth jstor - Sep 27 2022

web about organizations by exploring several alter native metaphors third it illustrates how this method of analysis can be used for diagnosing organizational problems and for the manage ment and design of organizations the first metaphor that morgan explores is the pervasive image of organizations as machines

lessons from a lifetime of writing a novelist loo pdf - May 03 2022

may 29 2023 lessons of a lifetime dan wilczynski 2013 09 you and yours can be successful the idea for writing this book came to me as i was flying across the united states as part of

lessons from a lifetime of writing a novelist looks at his craft - Mar 13 2023

nov 28 2003 buy lessons from a lifetime of writing a novelist looks at his craft new by morrell david isbn 9781582972701 from amazon s book store everyday low prices and

lessons from a lifetime of writing a novelist looks at - Sep 19 2023

jan 1 2002 in keeping with his reflective nature and his instinctive desire to educate morrell has penned a useful and entertaining combination memoir and self help book called lessons from a lifetime of writing a novelist looks at his craft in its pages morrell taps

lessons from a lifetime of writing a novelist loo priscilla - Jul 05 2022

develop every writer s work lessons from a lifetime of writing david morrell 2003 best selling novelist david morrell provides insights and advice learned during thirty years of

lessons from a lifetime of writing a novelist looks at his craft - Nov 09 2022

by david morrell writer s digest books march 2002 hardcover 243 pages isbn 1582971439 new york times bestselling author david morrell certainly knows how to craft a novel which

lessons from a lifetime of writing a novelist looks at his craft - Jan 11 2023

mar chevron right featured nonfiction reviews the upcycled self a memoir on the art of becoming who we are in this literate encouraging how to the bestselling author of first

lessons from a lifetime of writing a novelist looks at his craft - Aug 18 2023

jan 1 2003 in keeping with his reflective nature and his instinctive desire to educate morrell has penned a useful and entertaining combination memoir and self help book called lessons

annette bening knows a thing or two about difficult women - Dec 30 2021

19 hours ago as the star of the spy thriller the equalizer now approaching its fourth season on cbs she became one of the first black female leads on an hourlong network drama a 5 foot

lessons from a lifetime of writing a novelist loo uniport edu - Sep 26 2021

may 23 2023 lessons from a lifetime of writing a novelist loo 1 14 downloaded from uniport edu ng on may 23 2023 by guest lessons from a lifetime of writing a novelist

lessons from a lifetime of writing a novelist looks at his - Oct 28 2021

lessons from a lifetime of writing a novelist looks at his craft on amazon com free shipping on qualifying offers lessons from a lifetime of writing a novelist looks at his craft

lessons from a lifetime of writing a novelist loo pdf - Jun 04 2022

jun 26 2023 gotten by just checking out a books lessons from a lifetime of writing a novelist loo along with it is not directly done you could resign yourself to even more around this life a

lessons from a lifetime of writing a novelist loo reynolds - Nov 28 2021

lessons from a lifetime of writing a novelist loo when people should go to the ebook stores search inauguration by shop shelf by shelf it is in fact problematic this is why we offer the

lessons from a lifetime of writing a novelist looks at his craft - May 15 2023

if you re in the middle of writing a novel stuck on a block or considering starting a novel you ll find lessons from a lifetime of writing readable inspirational and practical

lessons from a lifetime of writing a novelist looks at - Jul 17 2023

jan 1 2002 lessons from a lifetime of writing is morrell in conversational tone teaching us how to keep a reader turning pages no matter what your genre he has chapters on theme

lessons from a lifetime of writing a novelist loo 2022 - Aug 06 2022

lessons learned mrs dalloway the game for a lifetime lessons for a lifetime journey of a lifetime game face the game of a lifetime a lifetime of lessons from my hands to

lessons from a lifetime of writing by david morrell open library - Dec 10 2022

jan 14 2023 lessons from a lifetime of writing a novelist looks at his craft by david morrell 0 ratings 1 want to read 0 currently reading 0 have read

lessons from a lifetime of writing a novelist looks at his - Jun 16 2023

abebooks com lessons from a lifetime of writing a novelist looks at his craft 9781582971438 by morrell david and a great selection of similar new used and collectible

lessons from a lifetime of writing a novelist loo pdf - Sep 07 2022

mar 12 2023 on line message lessons from a lifetime of writing a novelist loo as skillfully as evaluation them wherever you are now lessons for a lifetime hudson lin 2020 07 01 a

the successful novelist a lifetime of lessons about writing - Oct 08 2022

jan 1 2008 david morrell is a canadian novelist from kitchener ontario who has been living in the united states for a number of years he is best known for his debut 1972 novel first blood

lessons from a lifetime of writing a novelist looks at his - Feb 12 2023

best selling novelist david morrell provides insights and advice learned during thirty years of writing and selling novels insider secrets that are sure to help writers achieve the next level

lessons from a lifetime of writing a novelist looks at his craft - Apr 14 2023

mar 28 2002 buy lessons from a lifetime of writing a novelist looks at his craft first edition by morrell david isbn 9781582971438 from amazon s book store everyday low

lessons from a lifetime of writing a novelist loo copy - Apr 02 2022

jul 5 2023 as this lessons from a lifetime of writing a novelist loo but end up in harmful downloads rather than enjoying a good ebook behind a mug of coffee in the afternoon

13 life lessons you ll learn writing 31 stories in 31 days - Mar 01 2022

aug 21 2019 writing 31 stories in 31 days is harder than you think that is if you do it wrong ie if you wait ten minutes before the clock strikes midnight and expect plot inspiration to

quora a place to share knowledge and better understand the - Jan 31 2022

we would like to show you a description here but the site won t allow us

free online stories for kids short stories for kids in english - Sep 03 2022

web 1 time by daniel rolph version 1 2 int museum history of entertainment exhibition day crowds of children and parents mill around a large high ceilinged

english story telling for kids how a kid can win a storytelling - Nov 24 2021

storytelling script archives kids club english - Jun 12 2023

web this is a series of animated short stories to help children learn english with their parents each story has a downloadable transcript and an activities pack to help children explore

short moral stories for kids in english for storytelling - Oct 04 2022

web story planets is a world of short stories for children with the objective of sharing fun and moral at the same time we have large collection of stories covering moral fun aesop 1

tell it again teachingenglish - Jan 07 2023

web our entire collection of moral stories for kids bedtime stories fairy tales folktales legends myths and more have been kid tested kid approved we guarantee

simplified storytelling video for esl efl kids club english - Nov 05 2022

web apr 25 2019 1 the midas touch moral don t be greedy be content with what you have this english story for kids is about king midas in ancient greece there resided a very

34 english short stories with big ideas for thoughtful - Dec 26 2021

bbc learning english stories for children - Apr 10 2023

web storytelling is widely accepted as one of the most natural and effective ways of introducing children to continuous and coherent spoken discourse cameron 2001 from my own

the art of storytelling mensa for kids - Aug 02 2022

web reading and storytelling are fundamental for creating healthy brains and cultivating curiosity in kids parents can assist fix their children's experience of self and belonging

best short stories for kids with morals kidsgen com - Jul 01 2022

web dec 21 2019 1 prepare kids for their role in society moral stories help kids understand what s right and what s wrong they impart a belief system which will help the child cope

22 short moral stories for kids in english firstcry parenting - Jan 27 2022

short stories learnenglish kids - Jul 13 2023

web stick man simplified storytelling script free the stick man simplified storytelling script makes telling the stick man story to eff or esl children more accessible and

storvtelling teachingenglish british council - Feb 08 2023

web dec 17 2020 simplified storytelling of elmer by david mckee especially for efl and esl learners video and free script included a great resource for teaching english

 $10\;contoh\;teks\;story\;telling\;cerita\;pendek\;dalam\;bahasa\;\text{-}\;Sep\;22\;2021$

storytelling for kids how to make storytelling more interesting for - Feb 25 2022

storytelling script for primary school pdf nature - May 11 2023

web easy version advanced version add character detail and set up the story once there was a little green lizard who really really wanted to be a rockstar he had the long flowing english stories for kids short story collection youtube - Oct 24 2021

10 enlightening short moral stories for kids getlitt - May 31 2022

web jan 17 2022 storytelling is an art of speech where kids narrate a written script with props and actions well this form has been quite famous and here are some tips for kids

1 minute tales story planets - Apr 29 2022

web sep 14 2016 here we are presenting english stories for kids short story collection 15 english short stories for children by kids hut new

storytelling script pdf - Mar 29 2022

web jun 17 2019 the ants rise on the leaves and reach the edges safely after a few days ants see hunters pointing arrows at pigeons that are flying freely he wanted to save the dove

printable story telling scripts for competition krooscott - Aug 14 2023

web florence nightingale george and the dragon goldilocks and the three bears hamlet i couldn t believe my eyes i m too ill isaac newton jack and the beanstalk little red

learning english through stories cambridge english - Dec 06 2022

web learn about world storytelling day and create your own event find terrific activities and lesson plans on storytelling join the kids storytelling club read these books about

short story examples for kids super easy storytelling - Mar 09 2023

web learning english through stories karen saxby is the author of the storyfun series published by cambridge university press she also co wrote the fun for series and is