

Practical Electrical Equipment And Installations In Hazardous Areas Practical Professional Books From Elsevier

There is a large gap between what you learn in college and the practical knowhow demanded in the working environment, running and maintaining electrical equipment and control circuits. Practical Troubleshooting of Electrical Equipment and Control Circuits focuses on the hands-on knowledge and rules-of-thumb that will help engineers and employers by increasing knowledge and skills, leading to improved equipment productivity and reduced maintenance costs. Practical Troubleshooting of Electrical Equipment and Control Circuits will help engineers and technicians to identify, prevent and fix common electrical equipment and control circuits. The emphasis is on practical issues that go beyond typical electrical principles, providing a tool-kit of skills in solving electrical problems, ranging from control circuits to motors and variable speed drives. The examples in the book are designed to be applicable to any facility. Discover the practical knowhow and rules-of-thumb they don't teach you in the classroom Diagnose electrical problems 'right first time' Reduce downtime

The objective of this book is to outline the best practice in designing, installing, commissioning and troubleshooting industrial data communications systems. In any given plant, factory or installation there are a myriad of different industrial communications standards used and the key to successful implementation is the degree to which the entire system integrates and works together. With so many different standards on the market today, the debate is not about what is the best - be it Foundation Fieldbus, Profibus, Devicenet or Industrial Ethernet but rather about selecting the most appropriate technologies and standards for a given application and

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then ensuring that best practice is followed in designing, installing and commissioning the data communications links to ensure they run fault-free. The industrial data communications systems in your plant underpin your entire operation. It is critical that you apply best practice in designing, installing and fixing any problems that may occur. This book distills all the tips and tricks with the benefit of many years of experience and gives the best proven practices to follow. The main steps in using today's communications technologies involve selecting the correct technology and standards for your plant based on your requirements; doing the design of the overall system; installing the cabling and then commissioning the system. Fiber Optic cabling is generally accepted as the best approach for physical communications but there are obviously areas where you will be forced to use copper wiring and, indeed, wireless communications. This book outlines the critical rules followed in installing the data communications physical transport media and then ensuring that the installation will be trouble-free for years to come. The important point to make is that with today ' s wide range of protocols available, you only need to know how to select, install and maintain them in the most cost-effective manner for your plant or factory - knowledge of the minute details of the protocols is not necessary. An engineer's guide to communications systems using fiber optic cabling, copper cabling and wireless technology Covers: selection of technology and standards - system design - installation of equipment and cabling - commissioning and maintenance Crammed with practical techniques and know how - written by engineers for engineers

Handbook of Electrical Installation Practice covers all key aspects of industrial, commercial and domestic installations and draws on the expertise of a wide range of industrial experts. Chapters are devoted to topics such as wiring cables, mains and submains cables and distribution in buildings, as well as power supplies, transformers, switchgear, and electricity on construction sites. Standards and codes of practice, as well as safety, are also included. Since the

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Third Edition was published, there have been many developments in technology and standards. The revolution in electronic microtechnology has made it possible to introduce more complex technologies in protective equipment and control systems, and these have been addressed in the new edition. Developments in lighting design continue, and extra-low voltage luminaries for display and feature illumination are now dealt with, as is the important subject of security lighting. All chapters have been amended to take account of revisions to British and other standards, following the trend to harmonised European and international standards, and they also take account of the latest edition of the Wiring Regulations. This new edition will provide an invaluable reference for consulting engineers, electrical contractors and factory plant engineers.

Handbook of Electrical Installation Practice

Practical Industrial Data Communications

Electrical Installations in Hazardous Locations

Electrical Installation Designs

Electrical Installation

Covers all your testing and inspection needs to help you pass your exams on City & Guilds 2391 and EAL 600/4338/6 and 600/4340/4 and Part P courses. Entirely up to date with the 18th Edition IET Wiring Regulations Step-by-step descriptions and photographs of the tests show exactly how to carry them out Completion of inspection and test certification and periodic reporting Fault finding techniques Testing 3 phase and single phase motors Supporting video footage of the tests contained in this book are available on the companion website This book covers everything you need to learn about inspection and testing, with clear reference to the latest updates to the legal requirements and wiring regulations. It answers all of your questions on the basics of inspection and testing, using clear and easy to remember language, along with sample questions and scenarios as they will be encountered in the exams. Christopher Kitcher tells you what tests are needed and describes them in a step-by-step manner with the help of colour photographs and the

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accompanying website. All of the theory required for passing the inspecting and testing element of all electrical installation qualifications along with the AM2, City & Guilds 2391 certificate and the EAL 600/4338/6 and 600/4340/4 qualifications is contained within this easy-to-follow guide – along with some top tips to help you pass the exam itself. With a strong focus on the practical element of inspection and testing for NVQs or apprenticeships, this is also an ideal reference tool for experienced electricians and those working in allied industries on domestic and industrial installations. www.routledge.com/cw/kitcher provides a large bank of helpful video demonstrations, multiple choice questions to test your learning, and further supporting materials.

Water transport engineering, Ships, Vessels, Electrical equipment, Electronic equipment and components, Installation, Design, Maintenance, Electric generators, Electric power distribution, Safety measures, Electrical safety, Electric shocks, Fire safety, Inspection, Electrical testing, Electrical installations

Full coverage of testing and inspection methods, helping you to pass City & Guilds, EAL, AM2 and other related assessments

Entirely up to date with the Third Amendment of the 17th Edition IET Wiring Regulations amendments Step-by-step descriptions,

photos and online videos of the tests show exactly how to carry them out Covers City & Guilds 2394, 2395, 2396, EAL 600/4338/6 and 600/4340/4, and Part P assessments This book covers

everything students need to learn about inspection and testing in order to pass their exams, containing clear reference to the latest legal requirements. All of the theory required in order to pass the City & Guilds 2394, 2395 and 2396 certificates, EAL 600/4338/6 and 600/4340/4 is explained in clear, easy to remember language along with sample questions and scenarios as encountered in the exams. It will also help prepare students on Part P Competent

Person courses, City & Guilds Level 3 courses, NVQs and apprenticeship programmes for their practical inspection and testing exam. With its focus on the practical side of inspection and testing

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rather than just the requirements of the regulations, this book is ideal for students, experienced electricians and those working in allied industries on domestic and industrial installations.

European Practice. France. IV

A Handbook of Practical Information on Electric Light, Power and Wireless Installations, in Accordance with the National Electrical Code

Safeguarding Electrical Equipment Used in Gassy Mines

Electrical Installation Calculations: Basic

Electrician's Wiring Manual

Caters for marine engineer candidates for Department of Transport Certification as Marine Engineer Class One and Class Two. It covers the various items of ships' electrical equipment and explains operating principles. David McGeorge is a former lecturer in Marine Engineering at the College of Maritime Studies, Warsash, Southampton. He is the author of General Engineering Knowledge.

The Third Edition of this best-selling text continues to familiarize electricians with the intricate details of performing electrical installations in hazardous locations.

Intended to serve as a general reference on the classes, groups, and divisions of hazardous locations, the text provides users with a comprehensive introduction to what hazardous locations are and are not, before progressing to more complex topics such as the requirements for equipment protection systems, protection against ignition from

static electricity and lightning, and NEC® compliance. Completely updated, Electrical Installations in Hazardous Locations, Third Edition now includes information on the availability of new technology, as well as the latest national and international codes and standards.

This book covers all the basics of inspection and testing and clearly explains all the legal requirements. It not only tells you what tests are needed but also describes all of them step-by-step with the help of colour photos. Sample forms show how to verify recorded test results and how to certify and fill in the required documentation. The book is also packed with handy advice on how to avoid and solve common problems encountered on the job. With its focus on the practical side of the actual inspection and testing rather than just the requirements of the regulations, this book is ideal for students, experienced electricians and those working in allied industries, such as plumbers and heating specialists, kitchen and bathroom fitters, alarm installers and others, whether they are working on domestic or industrial installations. All the theory required for passing the City & Guilds Level 3 Certificate in Inspection, Testing and Certification of Electrical Installations (2391-01) is covered.

The book also includes sample questions and scenarios as encountered in the exams. Questions encourage readers to research answers in the On-Site Guide, as required in the exams for Part P Competent Person courses from EAL, NICEIC, NAPIT, BPEC and others. Model answers are provided for all questions. The book will also help prepare students on City & Guilds 2330 Level 3 courses, NVQs and apprenticeship programmes for their practical inspection and testing exams. Chris Kitcher is an Electrical Installation lecturer at Central Sussex College and has 45 years of experience in the electrical industry. Practical Power Distribution for Industry Practical Guide to Inspection, Testing and Certification of Electrical Installations, 4th ed Code of practice for the installation and maintenance of electrical equipment used in explosive atmospheres Practical Troubleshooting of Electrical Equipment and Control Circuits A Field Guide

NO description available

This valuable new volume is a must-have for any engineer. Covering almost all electrical equipment, such as generators, motors, transformers, cables, batteries, meters, relays, fuses, lamps, lightning arresters, circuit breakers, and so much more, it covers not only the basic

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theory, but also mathematical equations, selection guidelines, installation, commissioning, operation and maintenance, and many other practical applications. Equally as importantly, also covered here are all the applicable international standards, such as IEC and IEEE. This book is written in a simple language for easy understanding by field engineers. The rating plate of all the equipment is described in detail. The relevant details of the equipment have been taken from the reputed manufacturers brochures and their operation manuals. This book serves as a guide for researchers to know the gaps in existing technologies and gives direction for future research. Academics can refer to this book to understand the field requirements and to prepare their curriculum accordingly. This groundbreaking new volume presents these topics and trends, bridging the research gap, and sensible wide-scale implementation of efficient and effective operations. Whether for the veteran engineer or the student, this is a must-have for any library.

Intended for use on courses that train students to at least approved electrician status, this book covers the requirements of a number of electrical installation syllabuses and courses. It covers the theoretical knowledge and the practical aspects of electrician's work. The book explains: about working in outdoor conditions, at heights and in awkward and confined spaces; how to diagnose faults on/in electrical installations, machines and appliances, and to carry out repairs; and how to read wiring diagrams, layouts of equipment and specifications from architect's and

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builder's plans, and to transfer the information to the actual building.

Code of Practice for Installation of Electrical and Electronic Equipment in Ships

Residential, Farm, and Industrial

Principles and Practices

Code of Practice for the Installation and Maintenance of Electrical Equipment Used in Explosive Atmospheres

A Practical Guide to the of the Wiring Regulations

Before starting work in hazardous locations, make sure your entire crew is prepared with a basic understanding of fire and explosion safety in these specialized sites. NFPA's guide provides practical advice on key issues such as...Hazardous vx. classified locations, special considerations for grounding and bonding, protection against ignition from static electricity and lightning. Follow the right precautions in every environment, from aircraft hangars to zirconium processing plants! This guide also includes lists of relevant codes and standards, books and technical articles.

Designed to provide a step-by-step guide to successful application of the electrical installation calculations required in day-to-day electrical engineering practice, the Electrical Installation Calculations series has proved an invaluable reference for over forty years, for

both apprentices and professional electrical installation engineers alike. Now in its eighth edition, Volume 1 has been fully updated in line with the 17th Edition IEE Wiring Regulations (BS 7671:2008) and references the material covered to the Wiring Regs throughout. The content meets the requirements of the 2330 Level 2 Certificate in Electrotechnical Technology from City & Guilds. Essential calculations which may not necessarily feature as part of the requirements of the syllabus are retained for reference by professional electrical installation engineers based in industry, or for those students wishing to progress to higher levels of study. The book's structure and new design make finding the required calculation easy. Key terms are explained in a glossary section and worked examples and exercises are included throughout the text to maximise accessibility of the material for the reader. A complete question and answer section is included at the back of the book to enable readers to check their understanding of the calculations presented. Also available: Electrical Installation Calculations Volume 2, 7th edn, by Watkins & Kitcher - the calculations required for advanced electrical installation work and Level 3 study and

Read Book Practical Electrical Equipment And Installations In Hazardous Areas Practical Professional Books From Elsevier apprenticeships.

This introductory guide to electrical installation work provides all the key concepts and practical know-how you need to pass your course, minus the difficult maths and complicated theory. Written in a clear, readable style and with a highly visual layout, this book will quickly provide you with the all-important knowledge you need to understand electrical installation work. End of chapter revision questions will help you to check your progress, and online animations and video demonstrations will help you get to grips with relevant theory and practice. Designed to match the 17th edition of the IEE Wiring Regulations and the new City & Guilds 2357 Diploma in Electrotechnical Technology, this book covers everything you need to get started on your path towards a career in electrical installation or related trades. Also available: Basic Electrical Installation Work 6th edition Trevor Linsley ISBN: 9780080966281 45-1983 IEEE Recommended Practice for Electrical Installations on Shipboard Introduction to Electrical Installation Work Electrical Installation Guide Code of Practice for Maintenance of Electrical Equipment of Electrical Installations Marine Electrical Equipment and Practice

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This text is written for students of City and Guilds 2360 part I. It allows the student working alone to test their understanding of 10 key topics, such as associated core science and installations of earthing equipment. A preliminary section of each topic summarizes key facts and figures. Each topic has three multiple choice assessments of increasing difficulty, with answers provided as well as useful hints, references that indicate common errors and tips on MCQ technique.

This is the second of three essential reference volumes for those concerned with the installation and servicing of domestic and industrial equipment. This handy volume explains the basic principles underlying the practical and theoretical aspects of installing and servicing gas appliances and associated equipment. Covering both Natural Gas and Liquefied Petroleum Gas, the many illustrations and worked examples included throughout the text will help the reader to understand the principles under discussion. Volume 2 of the Gas Service Technology Series will enable the reader to put into practice the safe installation and servicing procedures described in the companion volumes: Basic Science and Practice of Gas Service (Volume 1), and Industrial and Commercial Gas Installation Practice (Volume 3). Combining a comprehensive reference with practical application in real-world engineering contexts, Volume 2 provides an essential handbook for all aspects of fundamental gas servicing technology, ideal for both students new to the field as well as professionals and non-operational professionals (e.g. specifiers, managers, supervisors) as an ongoing source of reference.

Full text engineering e-book

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Practical Guide to Inspection, Testing and Certification of Electrical Installations

Practical Electrical Equipment and Installation in Hazardous Areas

Tolley's Domestic Gas Installation Practice

Practical Electrical Equipment and Installations in Hazardous Areas

Modern Wiring Practice

*The book provides technical know-how not covered by most universities and colleges in a subject that is central to the roles of many electrical engineers in industry, focusing on switchgear, power cables, power factor correction, and network studies. * Learn how to install and maintain electrical power equipment in industrial settings * Select and specify the right power system at the right price * Provides the practical essentials for reliable operation of industrial electrical networks - covering switchgear, cabling and power correction factors*

The Health and Safety at Work Act, together with current and impending EU Directives, obliges those responsible for hazardous areas, those who work in such areas and those who supply equipment for use in such areas to demonstrate that they have taken all necessary and reasonable steps to prevent fires and explosions. This book addresses these issues, seeks to explain the ever increasing complexity of standards and codes pertaining to this field and describes their method of application and the application of other procedures to assist those involved. The only book which provides comprehensive cover of this vital area Written by a leading Internationally recognised UK authority in this field Brian Scaddan's Electrical Installation Work explains in detail how and why electrical installations are designed, installed and tested. You will be guided in a logical, topic by topic progression through all the areas required to complete

the City and Guilds 2357 Diploma in Electrotechnical Technology. Rather than following the order of the syllabus, this approach will make it easy to quickly find and learn all you need to know about individual topics and will make it an invaluable resource after you've completed your course. With a wealth of colour pictures, clear layout, and numerous diagrams and figures providing visual illustration, mastering difficult concepts will be a breeze. This new edition is closely mapped to the new City and Guilds 2357 Diploma and includes a mapping grid to its learning outcomes. It is also fully aligned to the 17th Edition Wiring Regulations. Electrical Installation Work is an indispensable resource for electrical trainees of all ability levels, both during their training and once qualified. Brian Scaddan, I Eng, MIET, is a consultant for and an Honorary Member of City and Guilds. He has over 35 years' experience in Further Education and training. He is Director of Brian Scaddan Associates Ltd, an approved City and Guilds and NICEIC training centre offering courses on all aspects of Electrical Installation Contracting including the City and Guilds 2382, 2391, 2392, 2377 series and NICEIC DISQ courses. He is also a leading author of books on electrical installation.

Practical Guide to Inspection, Testing and Certification of Electrical Installations, 5th ed

Practical Guide to Inspection, Testing and Certification of Electrical Installations, 5th Ed

Electrical Equipment

Best Practice Techniques

Electrical Installations and Regulations focuses on the regulations that apply to electrical installations and the reasons for them. Topics covered range from

electrical science to alternating and direct current supplies, as well as equipment for providing protection against excess current. Cables, wiring systems, and final subcircuits are also considered, along with earthing, discharge lighting, and testing and inspection. Comprised of 12 chapters, this book begins with an overview of electrical installation work, traits of a good electrician, and the regulations governing installations. The reader is then introduced to electrical science, with emphasis on the theory of electricity; the difference between direct current and alternating current; and the mains equipment that provide protection against excess current such as fuses and circuit breakers. Subsequent chapters focus on various types of cables; wiring systems and the regulations governing them; earthing and protection of the earthing system; and machine installation, protection, and control. Secondary batteries and systems with extra-low voltage are also described. This monograph will be of interest to electricians, electrical engineers, and students of electrical engineering

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A practical and highly popular guide for electrical contractors of small installations, now fully revised in accordance with the latest wiring regulations The book is a clearly written practical guide on how to design and complete a range of electrical installation projects in a competitive manner, while ensuring full compliance with the new Wiring Regulations (updated late 2008). The updated regulations introduced changes in terminology, such as 'basic' and 'fault protection', and also changed the regulation numbers. This new edition reflects these changes. It discusses new sections covering domestic, commercial, industrial and agricultural projects, including material on marinas, caravan sites, and small scale floodlighting. This book provides guidance on certification and test methods, with full attention given to electrical safety requirements. Other brand new sections cover protective measures, additional protection by means of RCDs, the new cable guidelines for thin wall partitions and Part P of the Building Regulations.

Provides simple, practical guidance on how to design electrical installation projects, including worked examples and case studies Covers new cable guidelines and Part P of the Building Regulations (Electrical Installations) in line with 17th edition of the Wiring Regulations BS 7671:2008 New chapters on protective measures and additional protection by means of RCDs (residual current devices) Features new wiring projects such as marinas, caravan sites and small scale floodlighting and street lighting Fully illustrated, including illustrations new to the fourth edition

This book is designed for artisans and high school students who wish to take up an interest in Electrical Installation and Maintenance. This textbook covers the entire curriculum of Electrical Installation & Maintenance at the senior secondary/ high school level. Apart from the theoretical aspects, it highlights the practical steps in electrical installation and maintenance. This book will help the student to know the workshop safety and regulations, identify and know the uses of electrical installation tools, materials and accessories, master workshop

practices, know the dynamics of protective design and maintenance, and also know the fundamentals of entrepreneurship in electrical installation.

Practical Power System Protection According to IEC International Standards Electrical Installation & Maintenance for High School

Practical Electrical Wiring Electrical Installations and Regulations

Designed to increase understanding on a practical and theoretical basis, this invaluable resource provides engineers, plant operators, electricians and technicians with a thorough grounding in the principles and practicalities behind power system protection. Coverage of the fundamental knowledge needed to specify, use and maintain power protection systems is included, helping readers to increase plant efficiency, performance and safety. Consideration is also given to the practical techniques and engineering challenges encountered on a day-to-day basis, making this an essential resource for all.

This book provides the reader with an understanding of the hazards involved in using electrical equipment in Potentially

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Explosive Atmospheres. It is based on the newly adopted international IEC79 Series of Standards that are now harmonizing and replacing older national Standards. Explosion-proof installations can be expensive to design, install and operate. The strategies and techniques described in this book can significantly reduce costs whilst maintaining plant safety. The book explains the associated terminology and its correct use - from Area Classification through to the selection of explosion-protected electrical apparatus, describing how protection is achieved and maintained in line with these international requirements. The IEC standards require that engineering staff and their management are trained effectively and safely in Hazardous Areas, and this book is designed to help fulfill that need. A basic understanding of instrumentation and electrical theory would be of benefit to the reader, but no previous knowledge of hazardous area installation is required. * An engineer's guide to the hazards and best practice for using electrical equipment in Potentially Explosive Atmospheres. * Fully in line with the newly adopted international standards, the IEC79 series. * Clear explanations of terminology and background information

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make this the most accessible book on this subject.

Covers all your testing and inspection needs to help you pass your exams on City & Guilds 2391 and EAL 600/4338/6 and 600/4340/4 and Part P courses. Entirely up to date with the 18th Edition IET Wiring Regulations Step-by-step descriptions and photographs of the tests show exactly how to carry them out Completion of inspection and test certification and periodic reporting Fault finding techniques Testing 3 phase and single phase motors Supporting video footage of the tests contained in this book are available on the companion website This book covers everything you need to learn about inspection and testing, with clear reference to the latest updates to the legal requirements and wiring regulations. It answers all of your questions on the basics of inspection and testing, using clear and easy to remember language, along with sample questions and scenarios as they will be encountered in the exams. Christopher Kitcher tells you what tests are needed and describes them in a step-by-step manner with the help of colour photographs and the accompanying website. All of the theory required for passing the inspecting and testing element of all electrical

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installation qualifications along with the AM2, City & Guilds 2391 certificate and the EAL 600/4338/6 and 600/4340/4 qualifications is contained within this easy-to-follow guide - along with some top tips to help you pass the exam itself. With a strong focus on the practical element of inspection and testing for NVQs or apprenticeships, this is also an ideal reference tool for experienced electricians and those working in allied industries on domestic and industrial installations.

www.routledge.com/cw/kitcher provides a large bank of helpful video demonstrations, multiple choice questions to test your learning, and further supporting materials.

Practical Electrical Installation, Repair, and Rewiring

Code of Practice For, the Prevention of Explosive and Electrical Hazards in Hospitals Part II : the Installation, Wiring, and Use of Electrical Equipment in Anaesthetizing and Similar Locations

Electrical Installation Work

Electrical Equipment of Buildings

Electrical Installations in Hazardous Areas

Practical Electrical Equipment and Installations in Hazardous Areas Elsevier

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Continuously in print since 1952, *Modern Wiring Practice* has now been fully revised to provide an up-to-date source of reference to building services design and installation in the 21st century. This compact and practical guide addresses wiring systems design and electrical installation together in one volume, creating a comprehensive overview of the whole process for contractors and architects, as well as electricians and other installation engineers. Best practice is incorporated throughout, combining theory and practice with clear and accessible explanation, all within the framework of the Wiring Regulations. Introducing the fundamentals of design and installation with a minimum of mathematics, this book is also relevant reading for all students of electrical installation courses, such as the 2330 Certificate in Electrotechnical Technology, and NVQs from City & Guilds (including 2356, 2391 and 2382 awards), as well as trainees in industry undertaking Apprenticeships and Advanced Apprenticeships. This new edition incorporates the latest thinking on sustainability and the environment and is fully up-to-date with the 17th Edition of the IEE Wiring Regulations. Illustrations have been completely updated to show current best practice and are now in full colour. Reviews of a previous edition: 'This book has long been a favourite of mine. Its regular updating by the issue of new editions ensures it is always completely up to date with the requirements of electrical installation. It is a book that I would thoroughly recommend to any person with an involvement in our industry for it is without doubt one of the very best available, written in a clear and readily understandable manner.' *Electrical Contractor* 'Refreshingly practical. This book will prove useful to anyone involved in the design and installation of electrical systems: from the apprentice to the architect.' *Electrical Review*
Theory and Practice