

Guide to MRCPCH Written Examinations

Contents

Foundation of Practice and Theory and Science (Old part 1a and 1b).....	3
General Advice.....	3
Structure.....	4
Questions.....	5
Reference Books.....	6
Online and question books.....	7
Applied Knowledge in Practice (Old part 2 written)	8
General advice	8
The Exam.....	8
Question types	10
General Textbooks	10
Question Books.....	10
Websites.....	11
What to do if you fail.....	12

This guide to MRCPCH is designed to provide you with advice about how to approach preparation for MRCPCH written examinations, and how to approach the exam questions themselves.

This guide has been adapted from one provided for Wessex deanery trainees by Dr Claire Head, Dr Rebecca Moon, Dr Rosada Sacranie and Dr Sebastian Grey. This document is not intended to be for wider distribution than South London Paediatric Trainees. We thank the original author for allowing us to amend the guide and make it applicable for South London trainees.

In 2013 the Part 1A, 1B and Part 2 written examinations have undergone minor changes with new supporting syllabi. You can now take the exams in any order; however most people prefer to start with Part 1a and 1b.

- Part 1A has become the **Foundation of Practice** examination. Its format and content is unchanged and a syllabus is available to support candidates sitting this examination.
- Part 1B has become the **Theory and Science** examination. The emphasis of the examination is to test the basic scientific, physiological and pharmacological principles upon which clinical practice is based. The format of the examination is unchanged.
- From May 2013 the Part 2 examination will become the **Applied Knowledge in Practice (clinical decisions and management)** examination. The syllabus is unchanged but streamlined. The format of the examination has not changed.

Part 1 : Foundation of Practice and Theory and Science

General Advice

Firstly, unfortunately the exam is not about being a good or safe paediatrician. Hopefully you are but this alone will not pass the exam. The exam is a game with its own rules and peculiarities. Although having a good knowledge of paediatrics and revising using a textbook can be helpful, Part 1 is all about being able to correctly identify the answer the examiners want (which unfortunately may not be exactly what you have observed in clinical practice).

Do as many questions as possible, and then read around that particular subject. Don't just sit down and read a textbook from cover to cover. Passing the exam is based on pattern recognition; the same areas come up again and again. This needs to be learnt by repeatedly doing questions and backing it up with a solid grounding in each subject from book work. Use a variety of books and website so you don't get bored of always looking at the same thing. If you have sat the exam multiple times and not passed try a different approach – some people just don't get on with question banks. It is worth working your way through as many question books as possible and doing some really in depth reading on tricky subjects other candidates struggle with. The exams are marked in such a way that extra weighting is sometimes applied to questions which are viewed as being “good discriminators” – i.e. that consistently high scoring candidates get right. Therefore focusing on the trickier subjects (eg metabolic medicine/immunology/renal) and making sure you really understand these should give you a foot up in the exam.

consequence the cornerstone to passing the exam is having done lots of similar (and occasionally identical) questions before. Make sure that you cover certain topics well, such as:

- Things that are going to kill that you can't not know about (e.g. meningococcal meningitis/sepsis, coarctation of the aorta and other duct-dependent cardiac defects, non-accidental injury)
- Common syndromes – Down's syndrome, Turner's syndrome.
- Development and growth
- Immunisations – schedule, who to/who not to. Note that immunisation schedules have changed recently so unless you have the most up to date textbook do not use information in textbooks- look at DOH website for up to date schedule. (Google search: "green book", or use the following link: <https://www.gov.uk/government/publications/immunisation-schedule-the-green-book-chapter-11>)
- Failure to thrive/faltering growth
- Focus on your weak areas e.g. basic science and stats - sorry! While boring areas to revise for they are easy marks to gain as the questions tend to be easier than those for other areas.

Exam technique, revision technique and knowing your own strengths and weaknesses related to revision and written exams are just as important as knowing the subject well.

Think of how you have revised for past exams and what worked well for you. Also beware which subjects you find interesting and are naturally good at and which you find less interesting. It is more important to cover all areas of the curriculum quite well than know some areas very well and others not at all. People often have a tendency to focus on areas they find interesting or good at – this approach may not be helpful for passing the exam. A revision timetable may be useful for some people in this respect, but whether or not you use one make sure you allot time reasonably equally to all areas of the curriculum.

Use the resources available to you. The RCPCH has information on their website about all of the parts of the exam, some of which has been included in this guide. The syllabus on the website can provide a useful guide to the topics you should be covering. They also have practice papers and answers found at: <http://www.rcpch.ac.uk/training-examinations-professional-development/assessment-and-examinations/written-examinations/wr-2>

Structure

2 papers, **Foundation of Practice** (old 1a) and **Theory and Science** (old 1b). You may apply to sit just Foundation of Practice or both parts. Each paper is 2 ½ hours in length.

Foundation of Practice is also sat by GPs doing the DCH so will include questions that have a more general practice slant, e.g. prescribing contraceptive pill for teenagers, presentations that may not reach hospital paediatrics, but will be seen in general practice and community paediatrics.

physiology, side effects and actions of common drug and more complex problem solving questions.

The papers are divided up into the following question types:

- 12 Extended matching questions (EMQ) worth 9 marks each (3 per item)
- 15 Multiple true-false questions worth 5 marks each (1 per item)
- 48 Best of five questions worth 4 marks each

Questions

Examples

Student BMJ has a good article on examine technique when answering MCQ's. The article can be found at: <http://careers.bmj.com/careers/advice/bmj.330.7503.s228.xml>

Multiple choice questions

The examiners are aiming with these questions to “test whether a candidate has true knowledge of a fact or thinks that something similar (but wrong) sounds vaguely familiar.”

These are not negatively marked so you should aim to put down an answer even if you are not sure.

They carry the least marks as a total of the three question types - do not spend too long on the answers.

There are certain “rules” when answering these questions. This does not replace revision and knowing the subject well, but may help you to avoid common tricks and answer questions where you are not sure of the answer.

- Read the question carefully, don't miss out key words. This cannot be emphasised enough. If you are answering a question and you miss out the word “except” in the phrase “all of the statements are correct except” you will put down the wrong answer.
- Trust your instinct - your initial answer is likely to be correct.
- However do leave time to check your answers at the end and that you haven't read the question wrong the first time.
- They usually test subjects where there is little ambiguity - a definite yes/no answer.
- However, as a rule answers with always or never are usually false as rarely in medicine does something always happen or never happen.
- Beware double negatives, not uncommon and not infrequently both mean often.
- Beware the meaning of words used in questions, for example typically means usually.
- Answers containing numbers can be tricky. Those containing very precise figures for example 50% are unlikely to be true. Ask yourself what the number means in the

context of the question. For example if the question states 75% of infants walk by their first birthday, ask yourself do the majority of infants walk by their first birthday?

- In questions where one of the answers is “all of the above” if you know that at least 2 of the stem answers are correct then it is likely that they are all correct, and all of the above is the correct answer.

Extended matching questions

Similar to best of 5 questions. A statement is given, and then the candidate then has to pick the answer from the attached list. Is a good way of using laboratory tests in a question. As in best of 5 questions should only cover one aspect of a topic such as:

- Choose the most likely diagnosis from the following.
- Choose the best treatment for each of these children.
- Choose the organism which matches most closely each of the following case scenarios.

Best of Five

Carry the most marks of the total in part 1 written.

These questions are designed to test judgment and experience. They start with a statement, and are followed by 5 answers. Some of the answers will be correct, but only one will be the most appropriate answer to the statement. This makes them the most difficult question to answer as it can be hard to pick the right option of the 5 possible ones offered. Should only cover one aspect of a topic, so possible questions may be:

- "What is the most likely diagnosis?"
- "Which investigation is most likely to lead to a diagnosis?"
- "What is the best next step?"
- "What is the best advice to give to parents?"
- "What is the most likely pathogenesis of this condition?"
- "What is the most common cause of this?"

As the best of 5 carry the most marks and are more difficult to answer, you should make sure that you complete as many of this question type as possible.

Reference Books

Get one or two good textbooks that work for you, but no more.

- **Lissauer and Claydon, Illustrated Guide to Paediatrics**
Some may find oversimplified, but provides a good starting point. Lots of pictures and includes lots of summary boxes and tables, which are really helpful.
- **Beattie, Essential Revision notes in Paediatrics for MRCPCH**
Very good reference textbook. Not the easiest to read. If you're struggling with how to pass the exam – one approach is to read this, making notes as you go, then condense your notes again and again and again – eventually you'll have a good grasp of all the content in the textbook – significantly increases your chance of

- **Easterbrook, Basic Medical Science for MRCP part 1**
Best book for basic science - particularly good respiratory and cardiology chapters.
- **Sheldon, From Birth to Five Years**
Best book for early child development, which you will need to know, particularly for part 1 and clinical.
- **Levene, MRCPCH Mastercourse**
MRCPCH Mastercourse is endorsed by the RCPCH. It does not cover the complete content of the exam. You will either love or hate the format, with a mixture of standard text and case histories. Bright and colourful, but actually contains no more information than some of the standard undergraduate textbooks and at £200 it certainly is not the cheapest book around. Does come with a CD of various examinations and pictures and access to a website. However the website is not very user friendly and has limited content, although pictures are useful for part 2. Definitely one to try before you buy!

Online and question books

- Pastest offer a number of different books, all of which are good. Pastestonline.co.uk also has a website of over 1500 exam questions which is good valuable for money and easy to use.
- www.onexamination.com has a bank of over 3000 questions. These are much easier than the ones in the exam so aim for an average mark of over 70% (pass mark is around 60-63% in the exam).
- Practice papers on RCPCH website – it would be stupid not to do these!

Applied Knowledge in Practice (old Part 2 Written)

General advice

- More clinically based, therefore more enjoyable (it's all relative) to revise for.
- The questions are more predictable.
- Focus on weak areas - metabolic, stats, renal, growth and endocrine questions are all popular areas that are very boring to revise for but crop up disproportionately in the exam!
- Do as many questions as possible, and then read around the area.
- Revision diagrams/flow charts – particularly for things like metabolic medicine, immunology and heart murmurs can be a really useful way of approaching difficult areas.

The Exam

2 papers each 2 ½ hours in length. The exam contains a mixture of:

Grey Cases

- Long case histories, often lasting several paragraphs with or without blood gases/blood test results. It's important to highlight key points as you read through and re-read the case several times or you will forget what it says.
- These include common topics and very uncommon. You will almost certainly come across a few things in the answers that you have never heard of!
- Eliminate answers that you know it definitely is not and you will probably be left with 2 or 3 answers, the task is then to pick out the key information that separates the conditions – think about this when revising, look at conditions which present similarly and how they differ. If, after extensive revision, you haven't heard of one of the answers – don't pick it – it's most probably been put in to confuse you!
- Questions will include:
 - Diagnosis
 - Most appropriate investigation
 - Management

Data interpretation

- Blood results – often with case histories as above
- Blood gases – as above

- Have to be obvious e.g. complete heart block, WPW, SVT, sinus tachycardia.
- Good paper to look at is Paediatric Electrocardiograph BMJ 2002; 234:1382-5
- Spirometry
- EEG – (*Gaon, Paediatric exams, A survival guide* gives an excellent description of EEGs)
 - Hypsarrythmia
 - 3 Hz spike and wave
 - Encephalitis
 - Temporal lobe epilepsy
- Audiograms
 - Sensorineural versus conductive hearing loss
- Cardiac catheter data – draw it out as a diagram
- Statistics/Critical appraisal/Study design
 - Interpretation of p values, confidence intervals
 - Odds ratios
 - Most appropriate study design to answer questions

Pictures

- The images must be obvious enough to be able to be photocopied multiple times and shrunk.
- Tend to be more common diagnoses than appear in the grey case questions.
- Important to know rashes and common dysmorphic syndromes
- Get two good question books, one, which focuses on rashes, etc, and one, which focuses on radiology.
- Good questions to do when you are too tired to focus on anything else
- Google image all syndromes, rashes as you read about them
- Don't forget radiology: CXR, AXR, head CTs and abdominal CTs, renal imaging (DMSA, MAG3)
 - Pneumonia
 - Inhaled FB
 - Diaphragmatic hernia
 - Abdominal tumours
- Neonatal radiology lends itself well to the exam. Make sure that you have gone through:
 - Line and tube placement
 - UVC and UAC
 - Central lines
 - ET tube
 - CXR
 - Barotrauma: pneumothorax. pneumomediastinum. pneumopericardium

- Cystic lesions in the chest: diaphragmatic hernia, Cystic Adenomatoid Malformation (CAM), congenital lobar emphysema
- Diffuse infiltrates: Hyaline membrane disease, Transient tachypnea of the newborn, Neonatal pneumonia, Meconium aspiration syndrome
- Tracheal-oesophageal fistula, oesophageal atresia
- AXR - Meconium ileus, necrotizing enterocolitis, perforation, atresias.
- HUSS - would have to be obvious, i.e. grade 4 intra cranial bleed or cystic changes.

Question types

- Best of 5 - as in part 1, pick the most correct option from the 5 possible answers.
- Extended matching - a list of options is given at the beginning of each question. In response to each statement you must choose the most appropriate answer from the list given.
- N from many - you are required to choose a number of options from a longer list, such as treatment options.

General Textbooks

- **Beattie, Essential Revision notes in Paediatrics for MRCPCH**
Very good reference textbook. Not the most exciting read but going into the exam feeling confident that you know the majority of this textbook will seriously increase your chances of passing. If it's not in the textbook, it's pretty unlikely to be in the exam.
- **Paul Gaon, Paediatric Exams, A Survival Guide**
Amazing textbook – lots of candidates feel this all you really need to pass the exam. Well laid out, focuses on knowledge to get you through the exam, not for everyday ward problems. There's no one we know who hasn't found this textbook helpful. Includes lots of examples of data interpretation such as cardiac catheter data, lung function and audiograms. No pictures though.
- **Stephen Stobel, The Great Ormond Street Colour Handbook of Paediatrics and Child Health**
Good photographic material in this book, containing more information on slightly more unusual diagnoses than found in other textbooks.

Question Books

Make sure you buy or borrow a question book that focuses on:

- Data interpretation
- Radiological imaging
- Picture book- syndromes, rashes etc.
- Grey cases (See below number 3)

The Past test revision books are generally very good. Pass Paediatrics and Churchill Livingstone also does a good range of question books.

Below are a list of some examples:

- **Nick Barnes and Julian Forton, Questions for the MRCPCH Part 2 Written Examinations.**
Focuses on grey case questions, which are not seen in part one so most people have not had much practice at this style of question. The questions are very difficult, and include a brilliant question on renal and another on metabolic problems. The metabolic question includes an excellent table at the end of the explanation which if learnt will enable you to answer most metabolic questions.
- **Kate Crease, MRCPCH Part 2 Questions and answers for the new format exam**
Good range of question styles and topics covered in this easy to use book. No pen and paper required, as answers are provided on the back of the question, so can be used absolutely anywhere. Questions seem easier than the actual exam and grey cases are not as detailed or lengthy as found in the real thing!
- **J Robertson, 250 Questions for the MRCPCH Part 2**
Separate chapters on each of the data interpretation elements that you may find in the exam. Good for practice once you have an idea of how to start interpreting but explanations are not as detailed as in other books. Good to use in conjunction with the Gaon book.
- **Christopher Schelvan, Paediatric radiology for MRCPCH and FRCR**
Excellent for radiology revision. Well laid out, good quality pictures and explanation explanation/key points.
- **Nagi Barakat, Get Through MRCPCH Part 2: 125 Questions on Clinical Photographs**
Focusing on photographic questions. Contains good quality photographs, but content can be more obscure than in the actual exam.
- **Nagi Barakat, Get Through MRCPCH Part 2: Data Interpretation Questions**
More challenging data interpretation questions than found in other revision books, similar difficulty to the exam although not the same format.
- **Fiona Finlay, Data interpretation questions in paediatrics**
Challenging but useful data interpretation questions, also similar difficulty to the exam though not in the same format

Websites

- www.onexamination.com – rather limited question bank, which are generally not the standard or format of the part 2 examination.
- www.pastestonline.co.uk – a greater number of questions than other online question banks but very few have photographs or data to interpret except for blood results. Cases are significantly shorter than those seen in the exam. Good for knowledge consolidation.
- Exam papers on RCPCH website

What to do if you fail

There are people who find they are good at passing exams and then there are the rest of us who struggle with them. By now you will probably know which type you are. The section below is for those of you that struggle or are struggling with exams. I make no mistakes for being repetitive as some of the points below are worth repeating.

Firstly you are not alone. Secondly do not despair, the exams are designed to be tough. The pass mark for both exams varies, but is usually between 62-65%. The exams are not a representation of your ability to be a good doctor – in fact, some of the best clinicians fail these exams repeatedly but fly through MRCPCH clinical first time. They are a hurdle and **you will get through them**, I promise, no matter how awful it feels when you fail.

After the exam you will get a breakdown from the college showing you how you did overall, and in each subject area. You will also get a median and mean mark to compare your breakdown to. Try to identify the areas using your breakdown that you struggled with and formulate an action plan to tackle them next time. It may also help to talk it through with someone at work or someone who has struggled with the exam.

The main reasons that usually cause candidates to fail are:

- **Not revising for long enough.**
Everyone is different, but we would recommend setting aside 8 weeks revision for the first 2 parts. You will need to plan to revise for longer than in the past as finding the time between working shifts is much harder than revising at medical school. If at all possible try to take some time off the week before the exam to consolidate and focus wholly on the exam. You should also take a stretch of time off 1 month before to get on top of your study and not leave it all too late.
- **Not enough focus**
A few lucky people can get by and pass while still having a social life and enjoying their time off work. They are in the minority. Most people cannot have a social life whilst doing these exams.

Not planning ahead.

- Speak to your educational supervisor/college tutor and let them know you are intending to sit part of the MRCPCH during your placement and that you would like to take study leave in order to prepare for this. If a tutor is aware several trainees are sitting the exam – then prospective cover and leave can be arranged in advance.
- Try and take as much study leave as possible in the weeks prior to the exam. If you can't – use annual leave – we know it sucks but the freedom from exams once you've passed will be worth your while.
- If you're having problems getting leave talk to your college tutor, and if that fails your Training Programme Director.
- On your days/weekends off for at least 6 weeks break down each day into 3 chunks – morning, afternoon and evening. Spend 2 out of 3 revising – then do something fun in the third. Planning “fun” things helps keep your sanity, and reduces stress levels.
- There are apps like “stayfocusd” you can download to block facebook/twitter etc for controlled periods of time – really useful if you tend to get distracted checking out a schoolfriend's neighbour's sister's holiday photos. Google “website blocker + study aid” or follow this link to download “stayfocusd”

<https://chrome.google.com/webstore/detail/stayfocusd/laankejkbhbdhmipfmgcngdelahfjoi>

- Plan a “study session” with colleagues after work – sometimes going through questions with others can help, it also breaks up the isolation of revising on your own.
- **Poor revision technique.**
This is more relevant to the written exams. It is impossible to revise and retain all the subject areas that you could be tested on. Some people recommend doing as many questions as possible and then reading around that area as the same subjects come up again and again. If you’ve tried this approach and it hasn’t worked – then we found the best approach was to systematically work your way through the syllabus, using a textbook alongside - Beattie’s “Essential Revision Notes in Paediatrics” is particularly useful in this regard. Find easy ways to retain boring subjects such as drawing out flow diagrams.
If you want useful tips on revising – speak to an ST4+ colleagues who have recently completed the exams; we’ve all been through this exam – and are more than willing to help and support you.
- **Poor exam technique.**
If you think that this may be the case try and sit down with someone and go through some questions with them, discussing the answers as you go.
Common causes for failure are “overthinking”. The examiner is **not** trying to catch you out – honestly. Try not to be too suspicious when answering questions. For example – if you’re reading a question where one of the answer options nearly fits but not quite – pick this rather than an answer you’ve never heard of. If you’ve revised well, it’s likely that you’ll have covered all the diseases which are the correct answers in the exam - don’t panic and pick a disease which has 7 reported cases in the world ever -trust me - it’s very frustrating when you come out of the exam and discover this on Wikipedia afterwards.
Similarly – don’t panic and change answers at the last minute unless you are 100% sure – it’s likely that your first instinct was correct.
- **Not enough confidence**
You need to KNOW you can pass these exams. You are not stupid, you are a good doctor - you wouldn’t have got this far otherwise. Saying ‘I think I’m going to fail’ can be self fulfilling and not useful to your confidence. You have to go into this exam with the knowledge that you can do this.
- **Having the wrong attitude**
If you find yourself saying ‘if I fail then it’s OK - I can sit it next time’ then you are more likely to fail. In this case your attitude to studying and sitting the exam is wrong. You need to be studying to pass.
- **Personal Issues**
Try looking at the reasons you might be failing. If you are planning a wedding, having a baby, breaking up with a boyfriend or girlfriend, moving house or fighting illness it is worth considering putting off the exam until you can focus on it. It is OK to take a break from sitting the exams to sort out your life and your attitude to the exam.

An appeals process does exist, if you feel that you have grounds. The details are available on the college website.

There are many resources available at deanery level if you are struggling with the exams. If you are worried about failing you are more likely to pass if you ask for help earlier. Most candidates struggle with at least one of the three parts of the exam, so don’t feel you are

alone. Talk to your clinical supervisor, college tutor or someone on your team if you feel you would like some help.

If you like to discuss the matter with someone from South Thames LETB please contact Dr Atefa Hossain (South Thames Paediatric TPD) atefa.hossain@stgeorges.nhs.uk

GOOD LUCK!



This guide was compiled by Dr Emma Sherwood and was based on an original document written by Dr Claire Head, Dr Rebecca Moon, Dr Rosada Sacranie and Dr Sebastian Grey. Many thanks to Dr Atefa Hossain for her help in reviewing the guide. Contact Emma Sherwood (emmash32@gmail.com) with any suggestions or corrections. Opinions expressed are those of the authors and not London School of Paediatrics.