



## Common Entrance 2024

(A series of detailed reports to provide feedback for Preparatory Schools)

# Subject reports

#### **ENGLISH**

#### Reading

The choice of poem for examination was entirely appropriate and offered a wide variety of imagery and craft techniques for analysis, while also allowing imaginative and interpretive engagement.

The structured questions were answered mostly precisely and accurately. Middle range answers tended to exhibit successful identification and explanation of relevant quotations with accurate reference to specific poetic devices. Better answers offered more detailed and nuanced understanding of the effects; they gave interesting reasons for the choice of poetic techniques. There are two basic areas for improvement. One: better integration of quotation and embedding quotation using accurate grammar and punctation. Two: strict adherence to the line range in the question; many candidates used quotations outside the given lines. A more sophisticated area to concentrate on – this was the question nearly all candidates struggled most with – is the poet's use of punctuation, form and structure. Only a few candidates answered in meaningful detail and referred to enjambment, caesura, stanzas etc.

The longer question was generally answered well, using a logical and structured approach. The problem many candidates found themselves dealing with was repetition of material previously used in the questions. Though not entirely their fault, by sticking too closely to each bullet point, not extending their ideas and using exactly the same devices discussed in the structured short answers, candidates were not able to develop a more interpretive and nuanced understanding of the poem which would warrant the highest marks.

### Introduction

Thank you for everything you've done to prepare boys for Common Entrance this year. It's an important exam that, at Radley, we continue to value. We are always very pleased to mark the papers ourselves and we do so because of the esteem in which we hold the work that you do.

We hope that the attached reports will help give boys specific and actionable advice for how they can improve in the future, as well as an overall analysis of their performance in 2024.

Mindful of the pressures facing Prep Schools in the current climate, we're keen that the comments of the examiners are useful. I am also keen to reflect on what we can do better. The dons at Radley are already sick of hearing me say that 'feedback is a gift' but I really mean it! Do contact us with suggestions for how we can improve.

Thank you for everything you've done to nurture such knowledgeable boys. They are a credit to you.

Best wishes
Jonathan Porter MA (Cantab.)

#### Writing

The strongest responses to Task 1 showed a mature sense of audience, making use of structural and linguistic features to emphasize clearly the magazine form. There were plenty of opportunities for humour and rhetorical devices here, which the best candidates deployed. Less successful answers tended towards the narrative recount and did little to disguise a direct and simple adherence to the bullet point prompts. Characterful pieces referred to rich, concrete details of the experience and presented the writer's opinion with flair.

Task 2 produced a wide range of narrative responses. The strongest of these were those planned carefully, which did not try to over-develop the storyline; given the time restrictions, the cleaner, more contained pieces were more successful. Candidates who indulged in long portions of dialogue tended to fall foul of punctuation errors and limited the impact of the story. In some cases, there was evidence of extremely well-manufactured tension and emotional impact. Many responses, however, were over the top in their use of imagery, layering multiple similes and metaphors until clarity was lost. Those stories which were judicious and selective in their use of description were more effective. A small number of responses felt somewhat rehearsed, with images and ideas 'crowbarred' in to fit the brief.

Much like Task 1, the more engaging efforts here relied on the article form for general tone and structure. A few too many candidates fell into writing historical essays, rather than attempting to engage their readership and express their views. Again, the more individual and characterful answers were highly rewarded.

Task 4 allowed candidates a purely descriptive task. Many students wrote rich and poetic prose here. The upper end of the responses was particularly well-organised, so as to offer a sense of beginning, middle and end. The issue of overly lavish imagery was apparent here, as in Task 2, though drawing on their own memories often limited this trait.

The general standard of written accuracy across this year's cohort was sound, and reflected a clear grasp of sentence construction, punctuation and paragraphing. A relatively small number of scripts suffered from consistent fusing or splicing of sentences. Almost all written responses were organised into paragraphs.

#### **MATHS**

#### **Mental Arithmetic Paper**

The paper consisted of 40 questions to be completed in 10 minutes, a CD is no longer used. The first 25 questions were mainly times table testing (8x6) or simple whole number computations (105-98, -6x-4) so candidates should have been able to score 25+, though time was tight. The remaining questions were slightly harder and required more calculations. However, as time was tight, they did need to recognise various mental strategies, example questions being 25 x 13 x 4, 36 x 25 and 97 x 26 + 6 x 13, where many were using long multiplication. Not recognising the 'quicker', mental calculations is something Prep Schools could work on more. Also, candidates being aware if an answer is sensible, 432+998 cannot be 530.

#### **Core Non-Calculator Paper**

This paper tested a variety of topics and contained mainly straightforward questions, although towards the end there were a couple of more interesting problems. Success on the last question on factorials did rather depend on having covered the topic before to calculate  $12! \div 10!$  without resorting to lots of long multiplication. Computation was good but no marks were gained in Q4 if candidates did not use the 'given fact'. Two weaker topics identified were multiplying by decimals and multiplying or dividing fractions by integers. Other advice, as with the mental arithmetic paper, is that pupils should be encouraged to estimate, as this would have eliminated some mistakes. The algebra, substitution and solving was largely done well, although the method/working did vary from balancing the equation to a few who used trial and error. Many were unsure when the answer was not a whole number, when the last step was 8n = 7.

#### **Core Calculator Paper**

Common errors were due to not following all the instructions in the questions, such as leaving answers in simplest form, one decimal place etc. This was particularly costly where a 4-mark 'form an equation' type question had two marks allocated to just the equation. There was some fairly simple calculator work in the beginning of the paper and some straightforward algebra. Decimals featured throughout. Generally, the candidates found anything geometric quite challenging (symmetry, Euclidean, 2D and 3D shapes). Some candidates seemed to find ratios and conversions tricky. Q18 was cumbersome. Q5b) and Q19 would have been difficult if not aware of the Fibonacci sequence and some linear sequences.

#### **Additional Paper**

This paper was more challenging and written for the more able mathematicians. It required a higher level of thinking, with questions requiring more than one topic and their application. Most candidates were able to answer the initial part of each question. There was no easy introduction to the paper, and Q1 was straight in with applying some simple algebra to solve an angle problem, followed by using angles in a regular polygon inscribed in a rectangle. The following questions on reverse percentages and volume/surface area of a cylinder tended to be low scoring, as was Q5. The application to problems and the clear detail and logic in answers tended to be what distinguished the high scores from those that did less well. The flexible mark scheme per question allowed for methods and approaches to be rewarded but did require the workings to be clear.

#### **PHYSICS**

The Physics section of the Level 2 Science Paper was sat by 90 entrants and generally well answered. The marks yielded a median score of 65%. A score of 75% or over was required for a candidate to be placed in the top 25%. A score of 58% or below placed a candidate in the bottom 25%.

Although there was some factual recall (mainly questions where candidates were asked to state a formula), a larger proportion of marks were awarded for Physics skills: being able to problem-solve, manipulate ideas, estimate, compute, convert. Perhaps this accounts for the decrease in marks by around 5% compared to last year (though our cohort is a small sample size). There were quite a few 'explain' or 'suggest why' questions this year, and these were by far the poorest answered parts of questions: many boys were flummoxed and again tried to fall back on simple catchphrases they had remembered from their lessons. We were, however, pleased to see some examples of boys thinking for themselves and showing insight in response to these questions, and not relying on remembered explanations. Those boys were rewarded.

The students with strong familiarity with the technical content of the ISEB Science Specification did well. Some able Physicists with less familiarity with the ISEB content may have found the paper frustrating. They shouldn't be put off!

#### **CHEMISTRY**

This year's paper was well written with some good chemistry which allowed boys to demonstrate a good understanding of the subject.

Q1 was about facts but also judgement: volume of a typical cup of tea and the number of chemical elements discovered. The question was whether boys were familiar with the periodic table.

Q2: Too many boys could not recall that nitrogen is the gas with the highest percentage of air (hydrogen was frequently offered) and none, bar one boy, correctly wrote the formula for molecular nitrogen. The impact of carbon dioxide on the environment was also not universally understood.

Q3: Many boys failed to correctly recall experimental set-ups such as filtration and distillation. It was pleasing to see that many boys were able to manipulate mathematical equations correctly.

Q4: Some boys struggled to explain the observations on drop-wise addition of alkali to UI. Word equations were not always given correctly.

Q5: It was apparent that most boys had a good idea why copper oxide did not react when heated but many missed out on the marks on the type of reactions that were covered in Q5.

Q6: While there was some good recall of the formula for propane, the states of matter question provided problems for many boys and so did combustion.

The final question was generally answered well, with many boys clearly knowing about the properties of metals. Again, they were able to solve the mathematical question correctly.

With an average of 54%, this paper seems to have provided perhaps more of a challenge than anticipated (although it was in line with last year's 56%). Pleasingly, the few questions requiring maths were generally answered well.

#### **BIOLOGY**

Q1 Most students scored well in this question with identifying key terminology. The most common mistakes included not being able to recall that glucose is a product of photosynthesis, and not knowing eagles are indeed vertebrates. Some students did not know scorpions are arthropods as they have an exoskeleton.

Q2a) Simple word-fill done well. Some misconceptions around the functions of the cell wall and cell membrane still present in some answers, as well as the correct function of organelles, particularly mitochondria vs chloroplasts.

Q2b) Many students struggled to identify that the image included several cells and, therefore, to label the cytoplasm correctly.

Q2c) Whilst most students knew the details of this test, the correct sequence was not often given. There was also confusion over the role of alcohol as the disinfectant and when to use it. Not all students mentioned a health and safety requirement which limited them to a maximum of two marks.

Q3 Most students scored well in this question with defining key terminology. However, some students were confused or lacked knowledge.

Q4 i), ii) and iii) The most common error was that students did not use the names of the food groups as presented in the question table. It was difficult to know if students were guessing or thinking of a food that contained protein, fat, starch or if they were working it out from their knowledge of the food tests.

Hardly any students linked the energy provided by carbohydrates to its use in the body, ie for movement and growth.

There were lots of very vague answers to this question with general comments given about lettuce being green and healthy. Answers needed to include vitamins and minerals to gain one mark. No students identified lettuce as a source of fibre and, therefore, its use to help move food through digestive systems.

Q5a) and Q5b) were poorly put together. Both required too similar an answer. The pupils generally answered the questions well.

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Q5c) was not answered very well. Very few pupils made the connection between stomata, subsequent access to CO2 and the effect that has on photosynthesis rates. Most pupils averaged two or three marks out of five.

Q6a) Weak answers in general, with some students writing about a lack of colourful flowers (in a black and white photo)...

Q6b)i) "Excrete" rather than digest ("Excretiate" given in one case).

Q6b)ii) Food tests - some students had no idea about using reagents correctly - "eat it to see if it is sweet".

Q6c)i) Bacteria/plants common errors.

Q6c)ii) Most students wrote about exposing yeast to oxygen - but yeast clearly stated as living on the surfaces of grapes. Few realised that crushing of grapes would release sugars for yeast to use in respiration.

Q7 Some very good answers, some too vague. Most were correct. Some got confused with how long babies will live, as opposed to just making it to adulthood. Most only put one reason and could have added more detail.

Q8 was not very well put together, with a number of students repeating answers. The final part required students to link trophic levels in an ecosystem and suggest how a small change is amplified, which they struggled with.

#### **FRENCH**

The results of the four components of the examination varied significantly. Many students performed well in the Listening section, with a large number achieving over 80%. The Speaking section also yielded positive results, with students generally well prepared for the task. The Reading section showed a broader range of results, and students lost marks in the final sections as they were unable to extract the precise piece of information needed.

The Writing section was the most challenging overall. In Section 1, the Translation element, many students struggled with verb conjugation, adjective agreement and plural nouns. In some cases, basic articles, possessives and conjugation were not mastered by students. The Directed Writing task yielded better results, although lower-performing scripts often failed to attempt tense variation, as required by the mark scheme, or did not use the prompts provided. Production of basic high-frequency verbs was also problematic in some scripts, with a considerable number of errors in regular verbs even in the present tense.

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#### **SPANISH**

Candidates demonstrated a commendable level of proficiency overall. Their comprehension and speaking skills were notably strong, reflecting a solid grasp of the language. Many exhibited good writing abilities, though issues with tenses and limited topic vocabulary were common. Improvement in these areas could enhance future performance. Overall, candidates showed a promising foundation in Spanish, highlighting their potential for continued academic growth in the language.

#### **HISTORY**

On the whole, the unseen evidence question was answered solidly, with most candidates getting over 10/20. However, the majority of candidates were limited to one mark for Q1 because they offered only one point from the source rather than two. On Q2, most candidates were able to see the differences between Source A and Source B. Few were able to identify any similarities so answers were chiefly in the Level 2 category. Q3 saw many generalised or supported answers, lacking judgement and with limited or no substantiation. This helped differentiate the stronger candidates who were able to give more focused answers.

In the essay section, pupils were generally able to tackle all three parts of the question. Sometimes, however, the candidates spent too long on the previous section and this cost them. On Part A, whilst some candidates lost marks due to only considering one aspect, most were held back by a lack of concrete detail linking back to the question. For Part B, candidates often did not receive full marks because they only considered one factor rather than two or three. Again, as with Part A, detail was sometimes lacking. For Part C - the long essay - the stronger candidates made sure that their structure enabled an exploration of different sides of the argument. Some answers failed to maintain an analytical approach and slipped into narration, thus losing sight of the question; this was a significant point of differentiation. Finally, sufficient concrete detail, appropriate to the question set, needed to be deployed in order to access the top marks.

#### **GEOGRAPHY**

The results reflect all the hard work done by Prep Schools to prepare their pupils for success at Radley. We enjoyed marking the papers and commend the boys and staff for their hard work.

Geography grades this year have been based only on the examination as not all schools have submitted fieldwork. The fieldwork projects we have received have been read with interest. Fieldwork remains an integral part of GCSE and A-level so familiarisation at Prep School level is helpful.

Section A: Marks for location knowledge varied significantly. The location of the Isle of Wight and Shetland Isles caused confusion.

Section B: There was some very impressive work on the Ordnance Survey. Students are advised to write a full sentence where possible. For example, Q8b) asked students to suggest two reasons why

a grid square may not be a suitable place for a new residential development. It is better for students to write 'land is liable to flooding as there is a large flood plain' rather than just 'flooding'.

Section C: This section was generally well answered but there was some confusion over stages in a river's long profile. Misinterpretation of photograph Q cost some students marks in Q2b).

Section D: Many students dropped marks on Q1e) where they were required to describe changes of a graph. To achieve full marks students needed to refer to percentage figures. It was very interesting to read about the range of actions that students are already taking to improve the environment in their locality.

As stated on the front of the paper, handwriting and presentation are important. Students are encouraged to write as neatly as possible. Students should also see the number of lines as a guide for how much to write - responses that are very brief are unlikely to score high marks.

#### THEOLOGY, PHILOSOPHY and RELIGION

This paper was taken by 35 candidates. Candidates often scored well on the describe section of each question. In some cases, though, it was clear the candidates did not know quite what the question was asking and this led to very low marks - Section 2 of Q3a) was a good example of this. Those who did best showed a precise and developed understanding of the topic. In the third section of each question, candidates tended to struggle to develop their answers with the clarity needed to demonstrate a considered opinion; this suggested too much time was dedicated to earlier parts of the question. Those who were able to develop a sound line of argument scored best, making skillful use of examples to support this. These candidates produced conclusions which were clearly grounded in the evidence and arguments used throughout the answer – they avoided appeals to personal opinion or summaries of the points already made. Many candidates failed to capitalise proper nouns (Jesus, Allah).

#### **LATIN**

This year we received 13 papers for Level 1, 35 papers for Level 2 (of which 20 candidates would probably have been better off sitting Level 1), and 11 papers for Level 3. We based the grades around the Level 2 percentages, allowing higher grades for Level 3 and capping Level 1 at a B, to reflect the greater accessibility of the paper.

As with last year, the cohort provided data suggesting that Latin provision continues to be 'pinched' at Prep Schools. There were a few pleasing exceptions, with one student scoring 87% on the Level 3 paper, but most candidates struggled with accuracy, especially in the unseen passage and grammar comprehension questions. The average marks were 54% (Level 1), 47% (Level 2), and 52% (Level 3). In the Level 1 and 2 papers, the two critical areas for improvement were vocabulary – for instance 'terreo' and 'terra' were confused on quite a number of occasions – and noun and verb endings. Regarding the latter, pupils need to be pushed to assimilate noun and verb endings and then to apply this knowledge more systematically to their translations. Many of the translations of the passages conveyed a sense of guesswork rather than the application of detailed knowledge.

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Somewhat incongruously, the English into Latin sentences of the final question were done with a reasonable level of accuracy. Level 3 candidates, for the most part, had a sounder understanding of the basics and applied their knowledge more accurately. The grammar questions of Q3 were the biggest obstacle for these candidates. This might be due to not recognising technical terms like "reflexive" or "indirect statement" rather than a lack of ability to translate. English into Latin allowed the most able to excel but showed up the weaker candidates' inconsistent knowledge of noun and verb endings.

We would be very satisfied if students came from Prep Schools only having learned their vocabulary, verb and noun endings thoroughly and having developed a strong sense of how Latin expresses meaning through inflection.

#### **GREEK**

We are always very pleased to see students sitting CE Greek. This year we received 9 papers, one of which was outstanding (91%). The average mark for the paper was 51%. While a decent amount of language material had clearly been covered, the candidates' knowledge was, for the most part, thin. This was no better indicated than in the transliteration questions, which were answered surprisingly poorly. Echoing comments made in the Latin report, we would prefer students to arrive at Radley having assimilated the fundamentals of the language – the letters, reading, basic vocabulary – rather than having covered lots of material in haste. We tried to award grades positively, recognising the challenge of the subject.

#### **CLASSICAL CIVILISATION**

It was pleasing to receive 9 Classical Civilisation papers this year. The standard was generally high, with candidates showing off their knowledge. The most common error was a lack of focus on answering the question. Another common mistake, particularly when candidates wrote on Odysseus, was to perceive him through a rather 'modern lens' – I am not sure how many times Odysseus has been described as 'compassionate', for example. That said, it was a pleasure to sense the obvious enthusiasm for the Classical World conveyed in these papers.