

1: Practical Biology | Nuffield Foundation

*i have some notes for biology practicals, i would like to share it here hope it helps! GRAPHS!
www.enganchecubano.com value which is varying is always on the y-axis while the constant value is on the x-axis.*

What follows are my attempts to help guide students to do the best they can in the advanced practical skills exam, Paper 3. However, the information below is no substitute for proper revision and the dedicated practise of actually carrying out a variety of biology experiments. Command words in a question Describe: Say what is going on, e. When describing data, always use units if appropriate e. Say why a trend or pattern is occurring. When explaining data, always link it to A level Biology. Even more rarely you might find one of the below command words in a question: How many answers should I give? How great is the risk? A better answer would identify a risk that was either medium or high, e. Deciding independent variable values Give five values at roughly even intervals e. Always use units if appropriate e. Recording numbers and drawing tables Do not go past one decimal place when recording the results from your experiment, usually whole numbers are fine. And always use units if appropriate e. Put the independent variable IV on the left and dependent DV on the right. Draw a line between the top row and the body of the table, e. Use the full name of the IV and DV e. Results Record results for at least five values of the IV. Results should show the pattern or trend theoretically expected of the practical. Record results for two trials and calculate a mean average. The mean average should be recorded to no more than one decimal place. Identifying sources of error Think carefully about your experiment, where might there have been an error? Ensure you state the error and the reason it occurred. Describe how an element of a practical can be investigated. State how these five values will be made, e. Constructing graphs You will normally use data that is given to you in the paper. Put the IV on the x axis, DV on the y axis. Look at the values and use a logical scale. However, a scale of 0. Each plot will be checked to see whether it is accurate to within half a small square of the graph paper. It is recommended you use an x mark to do this. There should be no labelling within the area of the graph. Bars can be touching. However, if you chose to leave gaps the gaps must be evenly spaced. The horizontal lines at the top must be perfectly straight, parallel to the x axis. No ruler straight lines for your diagram: No labels or writing within the drawing. Label only what is asked of in the question. Do not draw in anything that you do not see. Plan diagrams The diagram should be at least 60 mm wide at its greatest width. There should be no shading. Do not be tempted to draw them in! Use the correct section of the slide. This will be in the instructions of the questions, but make sure you actually draw what it wants you to! Draw exactly the number of cells stated in the question. Do not include half cells. Cells should not overlap but may be abutting e. Calculations Always show your working and the steps you take to come to your answer. Always show units, but do not mix units. When converting units, show the conversion. Try not to go beyond one decimal place, or the same level of precision as is given in the question. Give ratios to the lowest common denominator. Comparing observable differences using a table Organise the table as three columns; one for the differences and two for the samples. If asked for differences, do not give similarities!

2: The Best Biology AS and A Level Notes

The Best Biology AS and A Level Notes, Revision Guides, Tips and Websites compiled from all around the world at one place for your ease so you can prepare for your tests and examinations with the satisfaction that you have the best resources available to you.

These factors are called variables. Types of variables The factor that you change or select is called the independent variable. The factor that is affected and that you measure when you collect your results is the dependent variable. The table shows some examples. Table 1 If you are investigating the effect of one variable on another, then you need to be sure that there are no other variables that might be affecting the results. It is important to identify these and - if possible - keep them constant. These are sometimes called control variables. Making decisions about the independent variable You may have to make your own decisions about the range and interval of the independent variable. The independent variable is the temperature. First, decide on the range of temperatures you will use. The range is the spread between the highest and lowest value. This will be affected by: In this case, you will probably be using a water bath. If you are lucky, you may have a thermostatically controlled water bath, but in the exam you will probably have to use a beaker of water whose temperature you can control by adding ice or by heating it. Next, decide on the intervals that you will use. The interval is the distance between the values that you choose. For example, you might ideally like to use intervals of 50C, so that you set up water baths at 00C, 50C and so on, all the way up to C. But obviously that would not be sensible if you only have five water baths, or if you only have 1 hour to do the experiment. You are going to be looking for any pattern in the relationship between the independent variable temperature and the dependent variable rate of reaction. You will need at least 5 readings to see any pattern. There is really no point trying to draw a graph if there will be fewer than 5 points on it. So, if your range of temperatures is 00C to C, you could use intervals of C. This would give you 5 readings - 0,20,40, 60 and C. Producing different concentrations of a solution In investigation 2, investigating the effect of immersion in solutions of different sucrose concentration on the change in mass of potato strips, the independent variable is the concentration of a solution. You may be given a sucrose solution of a particular concentration, and then be asked to produce a suitable range of concentrations to carry out the experiment. The intervals you use could be either: This means that we can choose any value within the range we have decided to use. This is also true for investigation 2, where we can choose any value of concentration within the range we have decided to use. Sometimes, however, the independent variable is discontinuous. This means that there is only a limited number of possible values. For example, in investigation 3, testing the hypothesis: Tips During your course: For your own benefit, write down what the range is and what the intervals are, just to help you to think about them. Controlling the control variables In your experiment, it is important to try to make sure that the only variable that could be affecting the dependent variable is the independent variable that you are investigating. If you think there are any other variables that might affect it, then you must try to keep these constant. Look back at the Table 1 at the beginning of the post. In investigation 1, the important control variables would be the concentration and volume of the enzyme solution and the concentration and volume of the hydrogen peroxide solution. Changes in any of these would have a direct effect on the rate of reaction. In investigation 2, the important control variables would be the dimensions of the potato strips and the potato tuber from which they came. In biology, we often want to do experiments where it is not possible to control all the variables. For example, we might want to investigate the effect of body mass index on heart rate when at rest. There are all sorts of other variables that might affect resting heart rate, such as gender, age, fitness, when a person last ate and so on. In this case, we just have to do the best we can, for example, by limiting our survey to males between the ages of 20 and If we can collect results from a large random sample among this group of males, then we can hope that at least we will be able to see if there appearsto be a relationship between our independent and dependent variables. Get to know the standard ways of controlling variables such as temperature use water baths , pH use buffer solutions and other variables. When to measure the dependent variable In many experiments you will need to decide when, and how often, you should take a reading, observation or measurement of the dependent

variable. This would be important in investigation 2, where you would need to leave the potato strips in the sucrose solutions for long enough for equilibrium to be reached. This would be important in investigation 1, where you should begin measuring the volume of oxygen released each minute from time 0, which is the moment that the enzyme and its substrate are mixed. This would be important in investigation 4, where you would be measuring the rate of transpiration in a particular set of conditions. If you think it is, then decide when you will start taking readings, and how often you will take them. Remember that if you are going to use them to draw a graph, you will need at least 5 points to plot.

3: Required Practical Notes - Revision Notes in A Level and IB Biology

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SAT II Physics Our Process High achieving students from across the world get in touch and decide to dedicate hours of time in constructing the first set of draft notes for a subject We get in touch with other students and content specialists to validate the content and thoroughly check against the syllabus The team at ZNotes work with the students to bring the signature look and feel to the notes making sure they are beautiful yet concise Final checks are conducted and the notes are proofread before being added to the website Always striving for perfection! We keep a close eye on comments and record any typos or mistakes found, to correct and update immediately A huge community of learners on Slack study together, use the revision notes and help each other to make sure you do the very best on your exams. Join the community here Testimonials I owe a lot to ZNotes. Thankfully we discovered ZNotes before our exams, which helped us gain access to tons of material on our subjects organized in a clean and easy to read manner. We saved lots of time by using the notes from the website, which enabled us to study more efficiently. The notes are crisp and concise with all the important information filtered out for you to revise. This is the just perfect revision and I would like to appreciate the founder, Mr. Zubair, who has wholeheartedly dedicated his time to really sculpt this learning hub. And therefore course books were never a big help. Plus writing long notes was also a big struggle. ZNotes are highly reliable! Adeen Atif Thank you very much to the people who made such notes. May God increase your knowledge and keep showering His blessings on you guys. I have already spread word of this site to NYC classmates and on their behalf I would like to thank you again, so thank you very much and keep up the great work! What you have done for humanity is unheard of and you deserve a knighthood. Whenever I believe that humans have strayed too far from God, I think of the creator of ZNotes and my heart is at peace. Thank you for being a legend. Christine Asalam Alaikom brother. Thank you so much for sharing these notes with others. Anonymous yo yo yo guys One would truly and genuinely appreciate thine notes being thrust onto the infinite and tragic medium that is the internet! One would receive much better International General Certificate of Secondary Education Business Studies grades as a result and therefore have a brighter and more fulfilling future in the overwhelming world of humanity. Thank you eternally in advance! Your guidelines are also very helpful. Lots of prayers for you.

4: All Notes | A Level Notes

Home > A Level and IB > Biology > Required Practical Notes. Required Practical Notes. / 5. Best Chemistry A level exam board? » Biology help ».

5: aqa biology new specification practical experiment notes - The Student Room

As Biology With Stafford Practical Workbook Marking Schemes (3) (1) Mary Jones Cambridge International A AS-level Biology Revision Guide Philip Allan () Chemistry Unit 3 Edexcel (AS LEVEL) Notes.

6: A Level AQA Notes

A Level Edexcel Notes. A Level Biology revision notes made for the Edexcel exam boards. This covers all the topics and modules for all specifications including 8BN0, 9BN0, 8BI01, 9BI01, 8BI0, 9BI0.

7: Daniel Lim's Blogspot: Notes for Cambridge International AS and A Level Subjects

Biology Practical notes!! It was just that I found one of the predicted biology practical question being discussed at this same thread and it was not deleted so I.

A LEVEL BIOLOGY PRACTICAL NOTES pdf

8: #69 How to get high marks in Paper 3 - Variables | Biology Notes for A level

This post is specifically for the CIE Biology International A level qualification. What follows are my attempts to help guide students to do the best they can in the advanced practical skills exam, Paper 3.

9: OCR (A) Biology Module 1 Revision - Physics & Maths Tutor

Biology Practical BIOLOGY Notes Biology Practical Introduction As in any other science subject, practicals have an important role in Biology too. level. BIOLOGY.

Story of Marie-Antoinette. Manual physical therapy of the spine 2e Currency trading intermarket analysis Scully oral and maxillofacial medicine Samuel Beadle family Studies in the short story Big Eyes Small Mouth D20 System Role-Playing Game Definitions of development by scholars Airframe mechanic Procedures and standards for a multipurpose cadastre Italian-English correspondences in the juridical discourse of sports arbitration : an electronic glossary 100 Best Parliamentary Speeches, 1947-97 Mcd property tax form Writing ing and research Amadee Doucette son Crit Assess Jung V 3 (Critical assessments of leading psychologists) Improving Library and Information Services Through Self-Assessment Molecular magnetism Population of unincorporated places Canada Human anatomy and physiology mcgraw hill 4. The Chaebol Regime and the developmental coalition of domination The Pruning Manual European Pancreatic Club Epc, 21st Meeting, Glasgow, September 1989 (Digestion) Giving and taking offence Wandering in the Takla-makan The hand which graces by Gary A. Braunbeck Famous People in American History Antenatal diagnosis Claudia Chi and Rezan A. Kadir Question of artificial intelligence Paisley hospitals Math assessment fifth grade Create Electronic Presentations Powerpoint 2002 Defining diplomatic allegiances, 1964-70 Oggarane dabbi recipe book Introduction to agro climatology Living with migraines. Application development using c and net Management of land supply for housing in a hill town, Shimla Henry the Green Engine (6 (Railway series) Partnerships in the control of infectious diseases