

Analysis of aspirin lab report conclusion

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What is the conclusion of the aspirin synthesis lab report? Conclusion: A total of 2.169 grams of pure aspirin was synthesized out of a possible yield of 2.52 grams. Thus, there was 86.07% product yield. Acetylation of salicylic acid makes aspirin less acidic and therefore less damaging to the digestive system of the human body.

What is the purpose of the aspirin synthesis lab? In this experiment you will synthesize aspirin (acetylsalicylic acid, $C_9H_8O_4$), purify it, and determine the percent yield. The purity of the product will be confirmed by qualitative analysis and by measuring its melting point range.

What is the end point of aspirin assay? Dissolve ASA sample in 5 ml ethanol 95% and then add 25 ml of 0.5 N NaOH, the container of the mixture was stoppered and allowed to stand for $\frac{1}{2}$ hour to complete the hydrolysis of ASA. 1-2 drops of bromophenol blue (bpb) indicator was added and the solution was titrated with 0.5 N HCl. The endpoint is pink to colorless.

What conclusions can you draw about your aspirin based on the $FeCl_3$ test answer in terms of both the structure of aspirin and the purity of your product? Answer and Explanation: The structure of aspirin is shown below. Aspirin does not contain a phenolic group (rather a carboxylic acid $-COOH$) so if the sample is pure it should not result in a color change. Therefore, when the $FeCl_3$ is added, the color will remain yellow (which is the color of the iron solution).

What is the summary of aspirin? Aspirin is a type of nonsteroidal anti-inflammatory drug (NSAID) that can treat mild to moderate pain, inflammation or arthritis. It also lowers your risk of heart attack, stroke or blood clot. Children and teenagers shouldn't use this medication to treat their symptoms unless directed by their

healthcare provider.

What is the discussion of the synthesis of aspirin? Aspirin is prepared by chemical synthesis from salicylic acid, through acetylation with acetic anhydride. The molecular weight of aspirin is 180.16g/mol. It is odourless, colourless to white crystals or crystalline powder.

How to analyze aspirin?

What are the observations of aspirin? It appears as a crystalline powder which is colourless to white. Generally, it has no smell but when in moist air it acquires a smell of acetic acid. It has a flashpoint of 482° F. It is most widely used in medication to treat pain, inflammation, and fever.

What was the purpose of performing titration analysis on the product synthesized in aspirin? Titration of your sample with sodium hydroxide will allow you to determine the total amount of acid present in the sample. If you use this value you are assuming that the only acid present is acetyl salicylic acid (aspirin).

How to measure the effectiveness of aspirin? Because the mechanism of aspirin's antiplatelet effect is blockade of TXA2 generation (Figure 1), measurement of TXB2, the stable metabolite of TXA2, is the most optimal and direct way to measure the platelet inhibitory effect of aspirin. Two methods are available: serum TXB2 and urinary 11-dehydro TXB2.

What is the principle of assay of aspirin? Aspirin is a weak acid that also undergoes slow hydrolysis; i.e., each aspirin molecule reacts with two hydroxide ions. To overcome this problem, a known excess amount of base is added to the sample solution and an HCl titration is carried out to determine the amount of unreacted base.

What is the melting point of aspirin analysis? The melting point of the pure crystals was 133-134 degrees Celsius. The melting point of the crude crystals was 122-123 degrees Celsius. Our procedure stated that the melting point of pure aspirin is 138-140 degrees Celsius.

What is the purpose of aspirin experiment? Your two primary objectives in this experiment will be to synthesize and analyze aspirin. There is more than one way to

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synthesize aspirin; in this experiment, you will react acetic anhydride with salicylic acid in the presence of phosphoric acid (which acts as a catalyst).

How do you prepare aspirin in a lab report? To prepare aspirin, salicylic acid is reacted with an excess of acetic anhydride. A small amount of a strong acid is used as a catalyst which speeds up the reaction. In this experiment, sulfuric acid will be used as the catalyst. The excess acetic anhydride will be quenched (reacted) with the addition of water.

What is the chemical reaction of aspirin? *The chemical equation corresponding to the synthesis reaction is: $C_7H_6O_3 + (CH_3CO)_2O \rightarrow C_9H_8O_4 + CH_3COOH$. Please use this balanced equation and the weight of salicylic acid used to calculate the theoretical yield. 1.

What is the purpose of aspirin and what are the expected effects? Aspirin is used to reduce fever and relieve mild to moderate pain from conditions such as muscle aches, toothaches, common cold, and headaches. It may also be used to reduce pain and swelling in conditions such as arthritis.

What is the aim and objective of aspirin? Aspirin is the generic name for acetylsalicylic acid. Aspirin is administered orally for pain relief, the secondary prevention of CVD and for other purposes. Aspirin is classified in the British National Formulary as a 'non-steroidal anti-inflammatory drug', as an 'antiplatelet drug' and as a 'non-opioid analgesic'.

What are the teaching points of aspirin? Take aspirin exactly as directed. Do not take more or less of it or take it more often than directed by the package label or prescribed by your doctor. Swallow the extended-release tablets whole with a full glass of water. Do not break, crush, or chew them.

What is the conclusion of the aspirin synthesis lab? Conclusion/ Discussion: The main objective of this experiment was successful in determining the aspirin by synthesizing the reagents using the crystallization and vacuum filtration in obtaining pure crystal. Through the TLC, melting point range and $FeCl_3$ test the main product (pure aspirin) was obtained.

What is the overview of aspirin? People can buy aspirin over the counter without a prescription. Everyday uses include relieving headache, reducing swelling, and reducing a fever. Taken daily, aspirin can lower the risk of cardiovascular events, such as a heart attack or stroke, in people with a high risk.

What factors affect the synthesis of aspirin? The yield and purity of the aspirin depended on the rate of the reaction. The three factors affecting the rate of reaction in this exploration were the temperature, the concentration of the reactants, and the concentration of the catalyst.

What is the synthesis and analysis of aspirin? SYNTHESIS OF ASPIRIN (acetylsalicylic acid) Place 2.0 g (0.015 mole) of salicylic acid in a 125-mL Erlenmeyer flask. Add 5 mL (0.05 mole) of acetic anhydride, followed by 5 drops of conc. H_2SO_4 (use a dropper, H_2SO_4 is highly corrosive) and swirl the flask gently until the salicylic acid dissolves.

What is the evaluation of effectiveness of aspirin? Results Aspirin reduced all-cause mortality by 18%. In addition, aspirin use reduced the number of strokes by 20%, myocardial infarctions by 30%, and other "vascular events" by 30%. Alternately, patients who took aspirin were 2.5 times more likely than those in the placebo group to have gastrointestinal tract bleeding.

How is aspirin tested in laboratory? Because today's aspirin is mass produced in tablet form, Spectrophotometers are a reliable and economical way to keep the purity of Aspirin consistent throughout the manufacturing process. The purity and amount of acetylsalicylic acid in aspirin can be measured using a Visual Spectrophotometer.

What is the conclusion of the enzyme lab report? The final conclusion of such a laboratory experiment should be that enzyme catalysed reactions occur faster than the same reactions without an enzyme (this is the control).

What is the conclusion of the esterification lab report? Conclusion. -The hypothesis made was correct; this experiment proved that esters can indeed be created by combining carboxylic acids and alcohols. ... Another source of error was that the ratio of carboxylic acid and alcohol might have slightly varied from each

sample due to inaccurate measuring.

What are the errors in the aspirin synthesis experiment? The possible sources of error in the experiment were: (1) the collected crude aspirin was not dried and immediately subjected to another recrystallization; (2) the Erlenmeyer flask used was not clean, and; (3) the solution did not heat in a steam bath for 15 minutes.

What is the purpose of the recrystallization of aspirin lab? Consequently, a purification procedure must be carried out to separate the aspirin from such impurities as unused starting materials and the acetic acid by-product. Recrystallization is an extremely useful technique for purifying crystalline solids. The impure product is dissolved in a minimum volume of hot solvent.

What is a conclusion statement for a lab report? When writing a conclusion you should: briefly restate the purpose of the experiment (i.e. the question it was seeking to answer) identify the main findings (i.e. the answer to the research question) note the main limitations that are relevant to the interpretation of the results.

How do you summarize results in a lab report?

What is the difference between summary and conclusion in a lab report? A summary is a condensed version of previous facts while a conclusion is a deduction or inference based on those facts. This portion of a document does not introduce new facts or arguments, it simply reviews and lists facts and arguments previously presented and then draws conclusions based on those facts.

What is the conclusion of peroxide value determination? Conclusion. Determining the Peroxide Value is crucial for maintaining the quality and safety of oils and fats. The CDR FoodLab® method offers an advanced, accurate, and user-friendly alternative to traditional methods, representing a significant advancement in food quality testing.

What is the conclusion of the viscosity experiment lab report? Expert-Verified Answer The experiment shows that the slower the time, the higher the viscosity is for a liquid and the faster the time, the lower the viscosity is for a liquid.

What is the hypothesis of the esterification experiment? HYPOTHESIS: Fragrant esters are formed when carboxylic acids and alcohols react in the presence

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of a strong-acid catalyst.

What is the conclusion of the synthesis of aspirin lab report? Conclusion/ Discussion: The main objective of this experiment was successful in determining the aspirin by synthesizing the reagents using the crystallization and vacuum filtration in obtaining pure crystal. Through the TLC, melting point range and FeCl_3 test the main product (pure aspirin) was obtained.

What is the synthesis and analysis of aspirin? To prepare aspirin, salicylic acid is reacted with an excess of acetic anhydride. A small amount of a strong acid is used as a catalyst which speeds up the reaction. In this experiment, sulfuric acid will be used as the catalyst. The excess acetic anhydride will be quenched (reacted) with the addition of water.

What is the purpose of aspirin experiment? Your two primary objectives in this experiment will be to synthesize and analyze aspirin. There is more than one way to synthesize aspirin; in this experiment, you will react acetic anhydride with salicylic acid in the presence of phosphoric acid (which acts as a catalyst).

What are the sources of error in the synthesis of aspirin lab? Possible errors in the Synthesis of Aspirin experiment can arise from inaccurate measurements, procedural mistakes, and environmental factors. These discrepancies can affect the reaction and the final product's yield and purity.

Why does aspirin precipitate out of solution? Acetylsalicylic acid has both anti-inflammatory and antipyretic effects. Aspirin is only slightly soluble in water, so if we add it to the reaction mixture, the product would rather clump together than be in the water phase. Acetylsalicylic acid is a synthetic organic derived from salicylic acid.

What is the purpose of the titration of aspirin? This will allow you to assess its purity. Assuming the aspirin is not contaminated with other acids, the titration allows you to quantitatively determine the purity of your aspirin.

The Art of Moana: Captivating Visuals Inspired by the Pacific

Introduction: "Moana," Disney's 2016 animated masterpiece, is renowned for its stunning visuals that immerse viewers in the vibrant world of the Pacific Islands. The film's artistry has garnered critical acclaim and inspired countless fans.

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Q: What are the key influences behind the art of "Moana"? A: The art team for "Moana" drew inspiration from extensive research and voyages to the Pacific Islands. They studied Polynesian culture, traditions, and natural landscapes, translating these into the film's characters, settings, and color palettes.

Q: How does the animation capture the expressive nature of Polynesian storytelling? A: The animators used a technique called "stretched and squash" to create a fluid, organic style. This allowed the characters to express a wide range of emotions and gestures, adding depth and realism to their performances.

Q: What role does water play in the film's visual language? A: Water is a central element in Polynesian mythology and culture. In "Moana," it becomes a living entity, embodying the spirit of the ocean and guiding the characters on their journey. The animators used innovative techniques to render the ocean's movements and interactions with the environment.

Q: How does the color palette enhance the film's emotional impact? A: The vibrant colors of Polynesia are reflected in the film's stunning color palette. Rich blues and greens evoke the ocean, while earthy tones and glowing reds add depth and warmth. The colors work together to convey the emotional journey of the characters.

Conclusion: The art of "Moana" is a testament to the power of visual storytelling. Through detailed research, innovative animation, and evocative color palettes, the filmmakers have created a cinematic experience that transports viewers to the enchanted world of the Pacific Islands, leaving a lasting impression on the hearts and minds of audiences worldwide.

What are the essential questions for the Watsons Go to Birmingham? Essential Questions for The Watsons Go to Birmingham - 1963 How does bullying and violence affect children? What does the Wool Pooh symbolize in The Watsons Go to Birmingham? How do people act in times of chaos? Who are the The Watsons Go to Birmingham characters, and what challenges do they face?

What is the message in The Watsons Go to Birmingham? Also, Joetta is almost involved in the 1963 Birmingham Church Bombing. The Watsons Go to Birmingham-

1963 has two main ideas; kindness and growing up. The themes of the book are coming of age, family, friendship, race relations, civil rights, and mortality.

What is the biggest lesson in *The Watsons Go to Birmingham*? The Watsons Go To Birmingham By Christopher Paul Curtis: Theme Analysis. It has been said, Family is not an important thing, It is everything. This is seen in the historical fiction novel, *The Watsons Go To Birmingham*, 1963, by Christopher Paul Curtis when Kenny learns about the importance of appreciating his family.

What is the author's purpose for writing *The Watsons Go to Birmingham*? He was inspired when Dudley Randall's poem, "Ballad of Birmingham" brought back childhood memories of the bombing of the Sixteenth Street Baptist Church, and suddenly found the "more" he was seeking for his story. Curtis spent time in the children's area of the public library, and kept writing.

What does *The Watsons Go to Birmingham* symbolize? The author uses symbolism to convey the message that maturity comes with time because with impactful events and people, you have to adapt. Curtis uses Joetta Watson as a symbol throughout the book to represent innocence, but one may also think she represents the glue of the family.

Why was the book *The Watsons Go to Birmingham* banned? *The Watsons Go To Birmingham--1963* middle schools (2002) because a parent was offended by some language. The book is a 1996 Newbery Honor winner and the same year was named a Coretta Scott King Honor Book. Source: Newsletter on Intellectual Freedom, July 2002, pp. 154-55.

What are the big ideas of *The Watsons Go to Birmingham*? Family, Friendship, and Support *The Watsons Go to Birmingham—1963* underlines the importance of having other people to turn to for emotional support. Because he doesn't have many friends at school, Kenny knows how nice it would be to have supportive people in his life.

What is the point of *The Watsons Go to Birmingham*? *The Watsons Go to Birmingham – 1963* communicates the realities of racial injustice to both adult and youth audiences. It has received many prestigious awards and honors for its themes of familial love and historical racism.

What is the main conflict in *The Watsons Go to Birmingham*? Answer and Explanation: The main conflict of Curtis' *The Watsons Go to Birmingham* - 1963 is presented to be Byron's devilish and trouble-making nature. However, this is quickly resolved and the novel instead focuses on the racial tensions in 1963 Birmingham, Alabama.

Is *The Watsons Go to Birmingham* based on a true story? Is *The Watsons Go to Birmingham* - 1963 a true story? No, *The Watsons Go to Birmingham* is not a non-fiction book. The novel is, however, realistic historical fiction and so it depicts some real-life events (such as the horrific 16th Street Baptist Church bombing in 1963).

What is an inspirational quote from *The Watsons Go to Birmingham*? I learned how someone could come to you when you were feeling real, real bad and could take all of your problems away and make you feel better. I learned that the person who saved you, your personal saver, was sent by God to protect you and to help you out.

What did Kenny see at the church? Kenny sees several gravely injured and dead people in the church, and pulls on a shiny black shoe, like the one that Joetta had been wearing. He cannot see anything else because the body is under concrete. He pulls on the shoe, which was attached to a frilly white sock, like the one Joey had been wearing.

What is the author's message in *The Watsons Go to Birmingham*? The book is a coming-of-age, moral reckoning story of a young family traveling in the South who confronts racial hatred and protest yet lifts up history, heroes and safe havens – topics Jason Reynolds also encourages youth today to discover through literature.

What lesson did Kenny learn in *The Watsons go to Birmingham*? In chapter 13 of the novel *The Watsons Go to Birmingham* 1963, Kenny Watson learns why it is important to listen to adults.

What point of view is used in *The Watsons Go to Birmingham*? Share that many of the stories in this novel are humorous, but there are very serious and sad moments as well. Say, This novel is written in first-person point of view, from the perspective of ten-year-old Kenny Watson.

What is the life lesson of *The Watsons Go to Birmingham*? "The Watsons Go to Birmingham—1963" by Christopher Paul Curtis conveys a message of resilience and perseverance through the line "Sometimes you have to keep on steppin." It emphasizes the importance of moving forward in the face of adversity, particularly during the Civil Rights Movement.

What does a butter mean in *The Watsons Go to Birmingham*? In Chapter 7 of *The Watsons Go to Birmingham 1963*, that's what Byron Watson decides to do. He gets a 'conk,' which is a slang term for a hairstyle in which his hair has been straightened. The Watsons also refer to his hairstyle as a 'process,' a 'do', and a 'butter.

What was the main event in *The Watsons Go to Birmingham*? Curtis' novel unfolds at a critical juncture in the Civil Rights Movement and culminates with the 16th Street Baptist Church bombing. It is a family story set in Flint and Birmingham—and on the interstate between.

What age is appropriate for *The Watsons Go to Birmingham*? This book has adult language, sexual innuendos, and violence (bullying, name calling, etc). Definitely a PG 13 rating.

Why is *Charlotte's Web* banned? Some school districts aimed to ban the book from schools because they believed the book has unsuitable topics for children to read about. One major complaints was that the story portrayed talking animals that can communicate and act just like humans.

What curse words are used in *The Watsons Go to Birmingham*? Profanity & Violence God's name is taken in vain several times. Other profanity includes a—, h— and d—n. Byron flips dirty fingers at Kenny and curses under his breath with an s, although the word isn't spelled out. Name-calling occurs frequently.

What is the main problem in *The Watsons Go to Birmingham*? Summary: The major conflicts in "The Watsons Go to Birmingham – 1963" include the internal family struggles, such as Byron's rebellious behavior and Kenny's feelings of inadequacy, as well as external societal issues like racism and the bombing of the 16th Street Baptist Church.

What is the point of the Watsons Go to Birmingham? The Watsons Go to Birmingham – 1963 communicates the realities of racial injustice to both adult and youth audiences. It has received many prestigious awards and honors for its themes of familial love and historical racism.

What are important quotes from The Watsons Go to Birmingham? There's one good thing about getting in trouble: It seems like you do it in steps. It seems like you don't just end up in trouble but that you kind of ease yourself into it.

What was the main event in The Watsons Go to Birmingham? Curtis' novel unfolds at a critical juncture in the Civil Rights Movement and culminates with the 16th Street Baptist Church bombing. It is a family story set in Flint and Birmingham—and on the interstate between.

Why are Junie B books banned? Barbara Park's Junie B. Jones series was challenged because of its poor grammar, punctuation and often disrespectful attitude. However, it is wonderfully told from the point of view of a kindergartner trying to figure out the world, often going about it the hard way.

Why is Junie B. Jones a bad book? One aspect of Junie B. that many parents do find objectionable concerns the character's use of poor grammar; for example, Junie B. will say she "holded it" or something was her "favoritest." A 20th Anniversary edition of the first Junie B.

What number is Junie B first grader Boo and I mean it? And I Mean It is the 24th Junie B. Jones book.

Do Junie B. Jones books need to be read in order? While it is not necessary to read Junie B. Jones books in order, it is recommended, as the readers do follow a chronological order.

What is the most banned book in school? This is the list of the most banned books in the first part of the 2022-2023 school year, according to the PEN America Index of School Book Bans. Gender Queer: A Memoir remained at the top of the list, as it was in the 2021-2022 school year, joined this time by Flamer.

Which book are banned in the US? Current bans and challenges center largely on books that explore sex, sexual orientation and gender identity, often in teenagers or young adults. Topping many lists of banned and challenged books from 2020 and beyond is Maia Kobabe's "Gender Queer," which explores gender identity from a personal memoir perspective.

Is Junie B. Jones rude? The spunky kindergartener (first grader in more recent volumes) is prone to troublemaking, often calls people names and isn't averse to talking back to her teachers. And though she is the narrator of the stories, she struggles with grammar.

What is Junie B. Jones's full name? Juniper Beatrice Jones (or Junie B for short) is the titular protagonist of the series. She is the oldest child and only daughter of Susan Jones (née Miller) and Robert Jones. She has a brother named Ollie who is five years younger than her.

Can boys read Junie B. Jones? Junie B. Jones is a character that all kids can relate to — and laugh with — as she shares her daily adventures at school and home. Pranav raves, "It is awesome. Everyone should read this book."

What grade is Junie Kim in? Oh frames her account of the Korean War by discussing the struggles of her narrator, Junie Kim, as she begins seventh grade in current-day America. Oh's intended audience will certainly identify with many of Junie's problems: bullies, friend group drama, and strict parents who deny her a cell phone.

Can 1st graders read Junie B. Jones? According to the website, Kids Book Series , The Junie B. Jones books are intended for kids between ages 5 and 9.

How old is Junie B. Jones in first grade? Jones is a children's book series written by Barbara Park and illustrated by Denise Brunkus. Published by Random House from 1992 to 2013, the story centers on "almost six-year-old" Junie B. Jones and her adventures in kindergarten and first grade.

What is the problem in Junie B. Jones? The spunky kindergartener (first grader in more recent volumes) is prone to troublemaking, often calls people names and isn't averse to talking back to her teachers. And though she is the narrator of the stories,

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Why was Charlotte's Web banned? Some school districts aimed to ban the book from schools because they believed the book has unsuitable topics for children to read about. One major complaint was that the story portrayed talking animals that can communicate and act just like humans.

Does Junie B. Jones say bad words? Teaching kids to use insulting language I was very disappointed in Junie's frequent rude and inappropriate language. She uses the phrase "big fat mouth" and "stupid" often and never once does an adult reprimand her or tell her that it's rude and mean to refer to other people in that way.

What age is appropriate for Junie B. Jones books? The sweet and funny almost 6-year-old Junie is not very happy about starting kindergarten and concerned with taking the school bus for the first time. Junie B. Jones books are perfect for the reading level of 6 to 8-year-olds who can also identify with Junie's school experiences.

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