## Excerpt of "A Study in Scarlet" by Sir Arthur Conan Doyle Chapter 1: Mr. Sherlock Holmes

This was a lofty chamber, lined and littered with countless bottles. Broad, low tables were scattered about, which bristled with retorts, test-tubes, and little Bunsen lamps, with their blue flickering flames. There was only one student in the room, who was bending over a distant table absorbed in his work. At the sound of our steps he glanced round and sprang to his feet with a cry of pleasure. "I've found it! I've found it," he shouted to my companion, running towards us with a test-tube in his hand. "I have found a reagent which is precipitated by hemoglobin, and by nothing else." Had he discovered a gold mine, greater delight could not have shone upon his features.

"Dr. Watson, Mr. Sherlock Holmes," said Stamford, introducing us.

"How are you?" he said cordially, gripping my hand with a strength for which I should hardly have given him credit. "You have been in Afghanistan, I perceive."

"How on earth did you know that?" I asked in astonishment.

"Never mind," said he, chuckling to himself. "The question now is about hemoglobin. No doubt you see the significance of this discovery of mine?"

"It is interesting, chemically, no doubt," I answered, "but practically——"

"Why, man, it is the most practical medico-legal discovery for years. Don't you see that it gives us an infallible test for blood stains. Come over here now!" He seized me by the coat-sleeve in his eagerness, and drew me over to the table at which he had been working. "Let us have some fresh blood," he said, digging a long bodkin into his finger, and drawing off the resulting drop of blood in a chemical pipette. "Now, I add this small quantity of blood to a litre of water. You perceive that the resulting mixture has the appearance of pure water. The proportion of blood cannot be more than one in a million. I have no doubt, however, that we shall be able to obtain the characteristic reaction." As he spoke, he threw into the vessel a few white crystals, and then added some drops of a transparent fluid. In an instant the contents assumed a dull mahogany colour, and a brownish dust was precipitated to the bottom of the glass jar.

"Ha! ha!" he cried, clapping his hands, and looking as delighted as a child with a new toy. "What do you think of that?"

"It seems to be a very delicate test," I remarked.

"Beautiful! beautiful! The old Guiacum test was very clumsy and uncertain. So is the microscopic examination for blood corpuscles. The latter is valueless if the stains are a few hours old. Now, this appears to act as well whether the blood is old or new. Had this test been invented, there are hundreds of men now walking the earth who would long ago have paid the penalty of their crimes."

"Indeed!" I murmured.

"Criminal cases are continually hinging upon that one point. A man is suspected of a crime months perhaps after it has been committed. His linen or clothes are examined, and brownish stains discovered upon them. Are they blood stains, or mud stains, or rust stains, or fruit stains, or what are they? That is a question which has puzzled many an expert, and why? Because there was no reliable test. Now we have the Sherlock Holmes' test, and there will no longer be any difficulty."

## A Study in Scarlet - A Chemistry Reading

What QUESTION/ PROBLEM is Holmes trying to solve? Use your colored pencil to put a box around your  Evidence
2. What is Holmes HYPOTHESIS? <u>Underline your evidence with your colored pencil</u>
3. Describe and number the steps in Holmes's EXPERIMENT. Highlight your Evidence

A Study in Scarlet - A Chemistry Reading
4. <b>RESULTS</b> : Does Holmes observe a chemical or physical change during his experiment? How do you know? Describe the physical or chemical changes observed and circle your
Evidence
5. <b>CONCLUSION:</b> Why does Holmes think this process is so important <b>(necessary)</b> Underline your evidence.

## A Study in Scarlet - A Chemistry Reading

6. Using a different color highlighter, highlight all the words that you **don't** know. Write all unknown words in the table below, then use context clues to determine what you think the meaning is and write a synonym in the "My Synonym" column of the table. When that is done, use a dictionary or device to compare your guess to the actual definition of the word. If you are correct, circle your synonym. If you are incorrect, cross out your synonym and write in a more accurate synonym.

Unknown Word	My Synonym	Actual Synonym