

Preface: In the 1800's, the famous French scientist Louis Pasteur became convinced that the tiny, microscopic bacteria that he was studying could cause diseases in animals and in humans.

Directions: First read the complete description of Pasteur's work (letters A. to G.). Then, for each lettered statement describing Pasteur's work, match the number of the step in the Scientific Method that the statement is an example of. After you are done, you will have listed the steps in the Scientific Method in their proper order.

<u>Description of Pasteur's work</u>	<u>Step in the Scientific Method</u>
A. One of the things which puzzled Pasteur about bacteria was the question of where they came from. _____	1. Which of these statements was Pasteur's <u>conclusion</u> ?
B. He tried to answer this question by guessing that bacteria are all around us in the air. _____	2. Which of these statements was Pasteur's <u>problem</u> ?
C. To see if his guess was correct, Pasteur took a flask with clear soup in it, and heated it until he was sure there were no more living bacteria in it. Then he sealed the opening of this flask shut. _____	3. Which of these statements describes his <u>control</u> ?
D. He did the same thing with another flask with soup in it, but this time he left the flask open to the air so that he could have a comparison with the first flask which he had sealed. _____	4. Which of these statements describes the <u>application</u> of Pasteur's work?
E. After about a week, Pasteur saw the following: The flask which had been heated and sealed had soup which was still clear, with no bacteria in it. The flask which had been heated and left open now had soup which was cloudy, and had many bacteria in it. _____	5. Which of these statements describes the <u>observations</u> he made?
F. After repeating his work many times, Pasteur became convinced that the answer to his original question of where do bacteria come from, was that bacteria do come from the air around us. _____	6. Which of these statements describes his <u>experiment</u> ?
G. Today, as a result of the work of Louis Pasteur and other scientists, the air in operating rooms is always filtered to remove bacteria which might cause an infection in a patient. _____	7. Which one of these statements describes Pasteur's <u>hypothesis</u> ?