

4. Why did Pasteur boil the mixture of sugar and yeast at the beginning of the experiment? (5)

Pasteur boil the mixture of sugar and yeast together to allow oxygen but not airborne organisms to enter the flasks.

5. What is the purpose of setting up a controlled experiment? (10)

The purpose of setting up a controlled experiment was to see the difference between the two controlled group and experimental group.

6. Describe the components of Pasteur's Control Group. (5)

The components of Pasteur's Control Group was to experiment with the flask swan-neck broken off.

7. Describe the components of Pasteur's Experimental Group. (5)

The components of Pasteur's Experimental Group was to experiment with the flask swan-neck attached.

8. What was the variable in the experimental design and what was its purpose? (10)

The variable in the experimental design was boiling of the sugar and yeast, and its purpose was to keep airborne organisms out.

9. What is an Independent variable (web search)? Identify specifically the independent variable(s) in Pasteur's experiment. (10)

A independent variable is the variable that changes or controlled in a scientific experiment. The independent variable in Pasteur's experiment is the design of the flasks.

10. What is a dependent variable (web search)? Identify specifically the dependent variable(s) in Pasteur's experiment. (10)

A dependent variable is what you measure in an experiment and what is affect during the experiment. The dependent variable is the growth of microorganisms.

11. Did the experiment support Pasteur's initial idea? Explain. (10)

The experiment did support Pasteur's initial idea, which was to provide that spontaneous generation could not occur.

12. At the end of the 2 days, where did the organisms come from in the control group? (10)

They enter when the flask swan-neck was broken off.

13. What was Pasteur's conclusion? (10)

Pasteur's conclusion proved that it was not oxygen in the air that cause the growth in the flasks but that the growth resulted from living things, which entered the flask when the swan neck was broken off.