

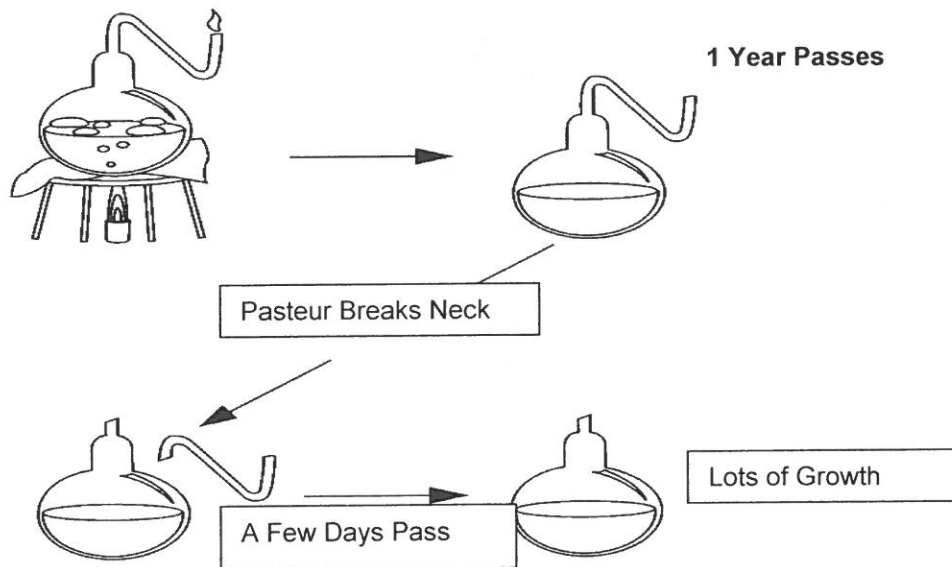
Name KEY

Spontaneous Generation vs Biogenesis

1. The idea that life can arise from nonliving matter is called..... spontaneous generation
2. Why do scientists assume that experimental results can be reproduced? if one scientist gets the results, all scientists should be able to reproduce the same results.

Pasteur's Test of Spontaneous Generation

The theory of spontaneous generation stated that life could arise from nonliving matter. Louis Pasteur did an experiment that disproved this theory. He put boiled broth in a flask that allowed air but not microorganisms to reach the broth. A year later, he broke the neck of the flask.



Use the diagram to answer the questions.

3. Would the results of this experiment have changed if Pasteur had let the unbroken flask sit for three years instead of one? Why or why not?

No, the "S" tube traps bacteria so the time length doesn't matter as long as the curved neck is attached.

4. Explain evidence Pasteur used to design and change his experiment to disprove spontaneous generation.

"S" tube let air in (mistake Redi & Spallanzani made) while keeping bacteria trapped in the bends.

5. The idea that life arises from living matter is called.... biogenesis.