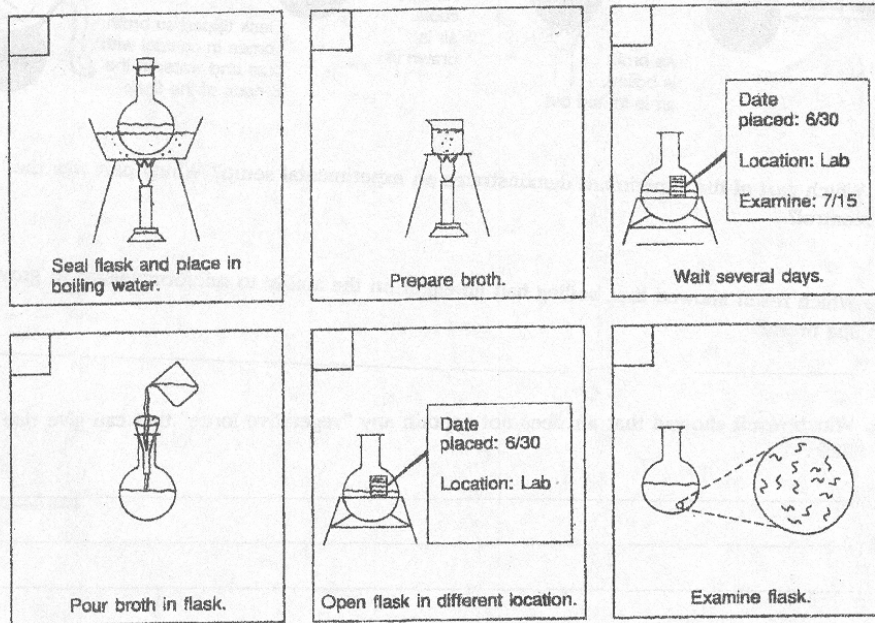


Pasteur's Experiments

Louis Pasteur was able to use the scientific method to disprove the theory of spontaneous generation. In this activity you will relate the concepts that form the basis of the scientific method to Pasteur's experiment.

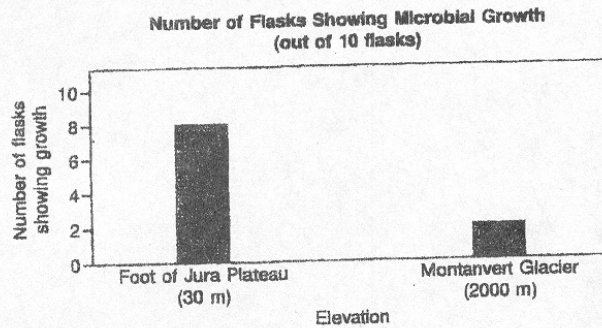
1. What was Pasteur's hypothesis in his first set of experiments?
-
2. Shown below are illustrations of the steps that Pasteur followed in this experiment. Number the illustrations from 1 to 6 to show the correct order of the procedures that he used.

Figure 1



The graph below shows the results of one of Pasteur's experiments.

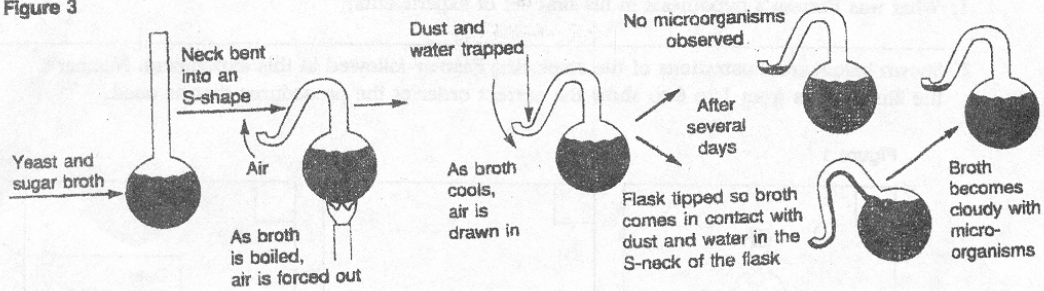
Figure 2



3. Assume that there are fewer dust particles at high altitudes than there are at low altitudes. Did Pasteur's results support his hypothesis? Explain your answer.

The following diagram shows the steps of another of Pasteur's experiments. Read it carefully to answer the questions that follow.

Figure 3



4. Which part of the experiment demonstrates an experimental setup? Which part was the control?

5. Which result showed that boiling had no effect on the ability to microorganisms to grow in the broth?

6. Which result showed that air does not contain any "vegetative force" that can give rise to life?