The Experiment

Read the article and answer the questions.

In a laboratory, a scientist is adding small amounts of a liquid to a container and measuring the temperature exactly. They are trying to maintain a steady temperature. The liquid contains a tiny organism. It is a bacterium. The scientist is counting the human cells in the liquid. They are trying to determine the subjects ratio. The ratio of the bacterium to human cells is 10:1.



They are measuring the length and width of the cells. They are trying to determine how much the cells have grown. They are adding a little bit more liquid to the container. The scientist is very careful not to disturb the cells.

The scientist is now adding a different liquid to the container. They are trying to determine the effects of the new liquid on the cells. They think the cells might grow at a different rate. The scientist is again taking measurements of the cells.





They really want to know how the new liquid is affecting the cells. Suddenly, the scientist understands. The cells are growing at a different rate. They are growing much faster. "Oh my gosh!" the scientist thought, "they are growing too fast."

- 1. What is the name of the tiny organism in the liquid?
- 2. What is the purpose of the experiment?
- 3. Why is the scientist careful not to disturb the cells?
- 4. What was the original ratio of the bacterium to cells?
- 5. How has the new liquid affected the cells?
- 6. What will the scientist do next?

Answers

1. The tiny organism in the liquid is a bacterium.

2. The purpose of the experiment is to determine the effects of a new liquid on cells.

3. The scientist is careful not to disturb the cells because they are trying to determine how the new liquid is affecting the cells.

4. The original ratio of the bacterium to cells was 10:1.

5. The new liquid has affected the cells by causing them to grow at a different rate.

6. The scientist will next take more measurements of the cells to determine how the new liquid is affecting the cells. (many answers are possible)