Year 11 Science: Microbes and their environment: gut, food and soil

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. Name the four phases of a growth curve in order, and give one reason for the stationary phase.

2. Room 9 measured the pH of a kombucha brew: day 0, pH 5.0; day 4, pH 3.8; day 8, pH 3.2; day 12, pH 2.9. Describe the change and explain it with a life process.

3. Bread dough was left for an hour at 5 °C, 30 °C and 70 °C, and rose 2 mm, 25 mm and 0 mm. Explain how changing the temperature changed the rate of respiration in the yeast.

4. For kauri dieback, sort these factors into abiotic or biotic, in order: soil moisture, the kauri tree, feral pigs, temperature.

5. A student writes: 'Phytophthora makes kauri leaves turn yellow, so it changes the forest.' Explain why this does not reach Excellence.

Fix the mistake

6. Correct this statement: "The bacteria respired faster at 43 °C because it was warmer."

7. Correct this statement: "In the stationary phase the yeast has stopped reproducing."

8. Correct this statement: "For Excellence I explained how E. coli gives people diarrhoea."

9. Correct this statement: "My graph shows the yeast grew best at 35 °C, so I don't need numbers in my writing."