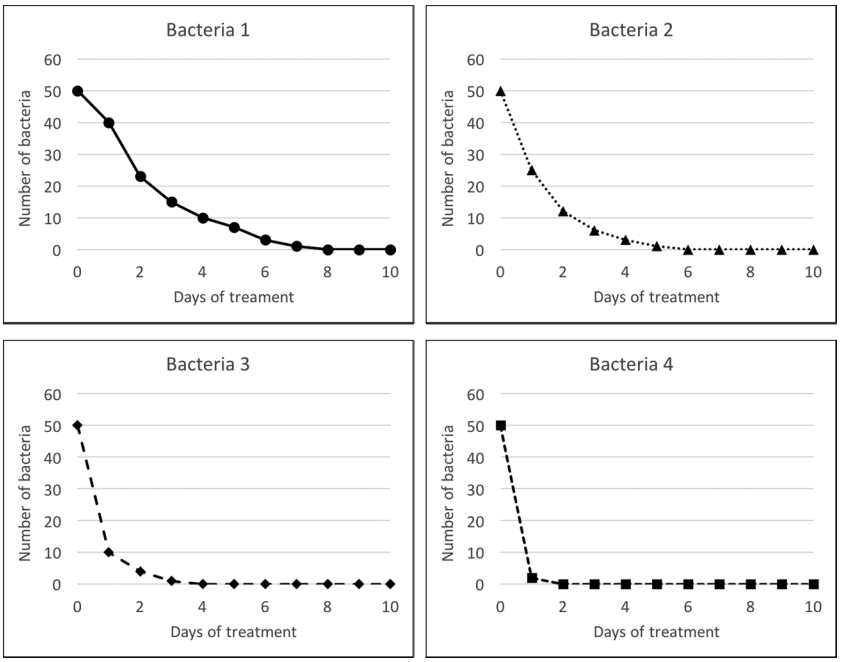
Stopping Superbugs!

Student quiz — Answer key

Directions: Circle the best answer for each question below.

1. What is so dangerous about "superbugs"?
   a. They cannot be killed by antibiotics
   b. They can kill within 24 hours if you get infected
   c. They can survive above 100°C (212°F)
   d. They are found everywhere in the world

2. You need to test whether different types of bacteria are resistant to a newly developed drug. In your experiment, you treat the same number of bacteria for each group with one dose of the drug for 10 days. Counting the number of bacteria surviving after each dose, you get the results shown below. Which type of bacteria is most resistant to the tested drug?



   a. Bacteria 1
   b. Bacteria 2
   c. Bacteria 3
   d. Bacteria 4

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Directions: Circle the best answer for each question below.

3. In your antibiotic treatment model, bacteria survive when a six-sided die shows the numbers 1, 2 or 3. What is the probability that this bacteria is killed after one dose of antibiotics?
   a. 25%
   b. 50%
   c. 100%
   d. 0%

4. You have a mixture of three types of bacteria with different genetic traits: bacteria 1 grows at low temperatures, bacteria 2 at medium temperatures, and bacteria 3 prefers high temperatures. How can you ensure that more of bacteria 3 survive?
   a. Decrease the growth temperature
   b. Treat the bacteria with antibiotics
   c. Increase the growth temperature
   d. You cannot select for a specific type of bacteria

5. What can you do to reduce the spreading of antibiotic resistance in bacteria?
   a. Only use antibiotics when really necessary
   b. Never stop taking antibiotics too early
   c. Keep proper hygiene to minimize the risk of bacterial infections
   d. All of the above