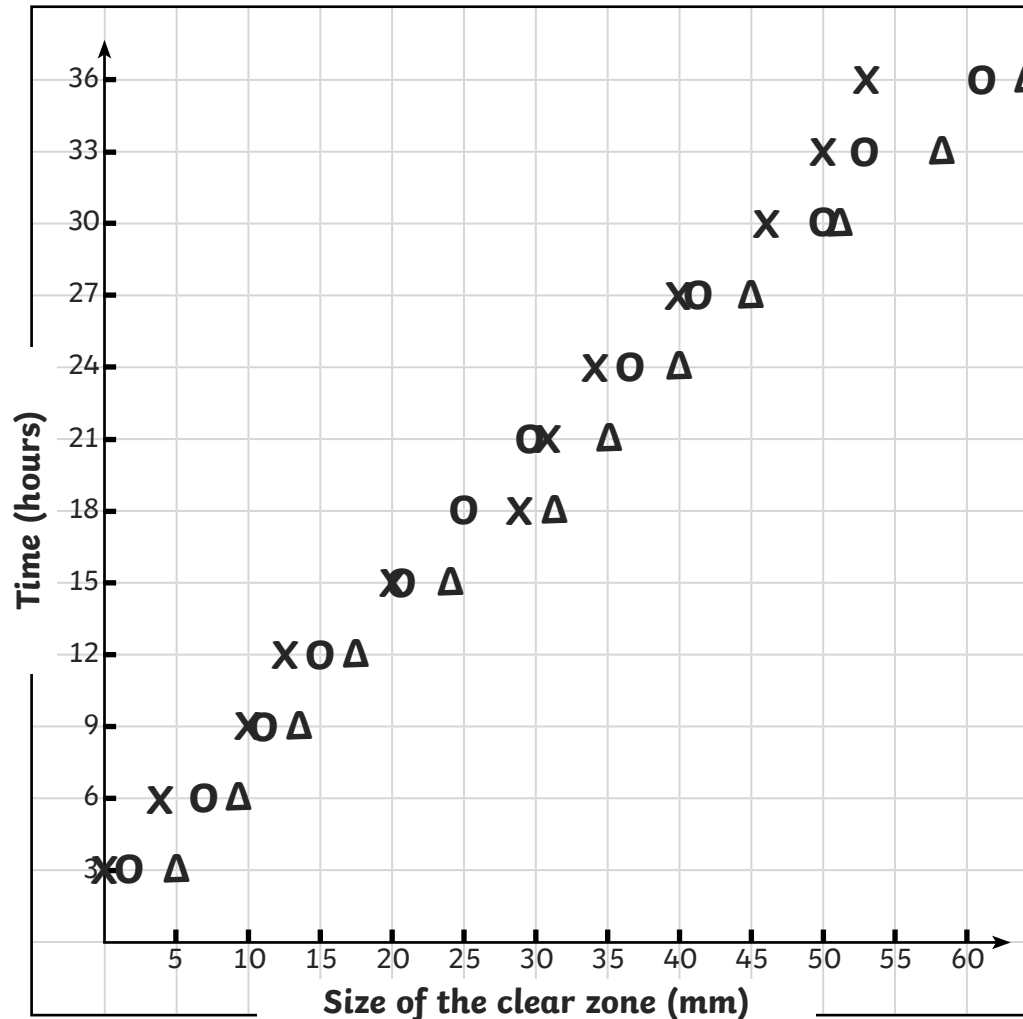


Penicillin Effects Answers

To record and interpret data on the effects of penicillin using a scatter graph.



Key:

X = Colony 1

O = Colony 2

Δ = Colony 3

Penicillin Effects Answers

To record and interpret data on the effects of penicillin using a scatter graph.



Answer these questions about your graph.

1. Which of these conclusions is supported by the graph?

Penicillin kills all bacteria.

The longer bacteria is exposed to penicillin, the more of it dies off.

Penicillin kills most bacteria in the first 12 hours.

It takes 36 hours for penicillin to kill bacteria.

2. How long do you predict it would take for the penicillin to kill all the bacteria in the colony? Remember, the original bacteria colony measured 100mm.

Pupil's own answers referring to the trend in the graph, such as 'I predict that it would take around 60 hours for the penicillin to kill off all of the bacteria. I think this because it took around 30 hours for it to kill 50mm of bacteria and the bacteria appears to be being killed off at a regular rate. I know this because the line in the scatter graph is at 45°.'

3. Describe the effect of penicillin on bacteria using the results shown in your graph.

Penicillin kills more bacteria the longer that it is exposed to it.