SCENARIO ASSESSMENT

Students tested three different temperatures of water to determine if temperature had an effect on the development and hatching of zebrafish embryos from their chorions. Three separate groups of zebrafish embryos were allowed to develop for three days. Each group consisted of 100 embryos and was placed in a constant temperature for the three-day development. The students recorded the number of hatched larvae on Day 3. The students had a null hypothesis: **Different temperatures will not affect the hatching of zebrafish embryos.**

Temperature	Number of Embryos Hatched
50 °	45
65 °	62
90 °	98

What conclusion(s) can best be drawn from the data?

A. A temperature of 50° F is the most effective for hatching zebrafish embryos by day three.

B. A temperature of 65° F is more effective than 50° F for hatching zebrafish embryos by day three.

C. A temperature of 65° F is more effective than 50° F and less effective than 90° F for hatching zebrafish embryos by day three.

D. Different temperatures have no effect on zebrafish development.

A group of students want to do an investigation that involves watching the zebrafish embryos develop. Which question is testable?

A. Do these embryos really develop in India?

B. Why are the hatched embryos swimming?

C. Do the embryos like the water used in the tank where they developed?

D. How many embryos does a zebrafish lay within a two-week period?