

Populations and Ecosystems Inquiry Assessment

Read the investigation and write a conclusion for the investigation.

David and Anna wondered about the effect of salt on the brine shrimp population growth. They did the following investigation.

Question:

How does the amount of salt affect the number of hatched brine shrimp eggs?

Prediction (hypothesis):

As the amount of salt increases the number of hatched brine shrimp eggs will increase because brine shrimp need salt in their environment to come out of dormancy.

Materials:

Brine shrimp
Salt
Water
3 beakers

Procedure:

1. Carefully set up three beakers filled with 200 mL of water. Beaker 1 should have no salt, beaker 2 should have 10 g of salt added and dissolved, and beaker 3 should have 25 g of salt added and dissolved.
2. Add 50 brine shrimp eggs into each beaker.
3. After 3 days, count the number of brine shrimp present in each beaker. Record this in a data table.
4. Repeat step 3 two times for a total of three trials.
5. Calculate and record the average for the trials.

Data:

Salt Concentration	Number of Brine Shrimp			Average
	Trial 1	Trial 2	Trial 3	
No salt (0 g)	0	0	0	0
Low Salt (10 g)	10	12	11	11
High Salt (25 g)	34	33	35	34

