

The Scientific Method

Question or Problem

How does temperature affect the heart rate of Daphnia?

Graphic Organizer for Science Experiments

Hypothesis

I predict... that high temperature will cause the HR of the Daphnia to increase. If... then...

(Your Prediction)

Experiment

Daphnia placed in the chamber of a depression slide + sealed.
Slide placed in 3 small dishes, one after another: ice, r.m., T, warm

(What did you do?)

water temperature

(IV, What did you change?)

Heart rate beats per minute

(DV, What data did you collect?)

Results

HR: bpm counted
T 15°C | 23°C | 50°C
HR bpm 65 | 90 | 125

(What Happened?)

same organism
same depression slide

(Constant, What is kept the same?)

Conclusion

As the temperature increases, the heart rate of the Daphnia increases.

(Hypothesis supported or not? What did you learn? What about next time?)

The Scientific Method

Question or Problem

How will coffee or tea (nicotine, alcohol) affect the heart rate of daphnia?

Graphic Organizer for Science Experiments

Hypothesis

I predict...
If... then...

(Your Prediction)

Experiment

(What did you do?)

(DV, What data did you collect?)

Results

(What Happened?)

(Constant, What is kept the same?)

Conclusion

(Hypothesis supported or not? What did you learn? What about next time?)

