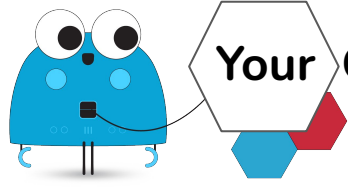


Name _____ Date _____ Period _____



Why are we studying this? To understand how changes in ecosystems affect the cycling of matter and the flow of energy in a food web.

Research Question:

How does _____ affect _____?

What evidence will you collect?

Prediction

What do you think you will observe?

Investigation: Plan

How will you answer your research question? Will you use descriptive science or an experiment to plan and conduct your investigation? Complete the section for the type of investigation you will complete.

<input type="checkbox"/> I will do a descriptive investigation.	<input type="checkbox"/> I will do an experimental investigation.
A hypothesis is not needed. Observable Variables: What will be observed, measured, and recorded Conclusion: How the research question will be answered	Hypothesis: Independent Variable: What is changed in an investigation to test Dependent Variable: What changes as a result of the independent variable Control, Controlled Variable(s): What is unchanged or separate to verify a fair test is completed Conclusion: How the research question will be answered

Name _____ Date _____ Period _____

Investigation: Plan, continued

Data

How will data will be collected, recorded, and organized?

Trials - How many trials will your investigation include?**Materials List**

Which materials and tools will you need and how will you use them to make observations, measure variables, and test predictions, if applicable?

SafetyWhat safety practices will you need to follow?
What safety equipment will you need to use and how do use each one?

Investigation: Procedure

What steps will you follow in this investigation?

Name _____ Date _____ Period _____

Investigation: Collect Data

Collect observations and measurements as evidence to complete a data table.

Investigation: Analyze Data

Choose one or more ways to analyze the data and results of the investigation. Identify any significant features, patterns, or sources of error.

Name _____ Date _____ Period _____

Investigation: Interpret Data

How does the evidence answer your research question? Identify limitations and advantages to any models used in the investigation.

Investigation: Conclusion

Was there enough data to support or refute the hypothesis, if applicable? Evaluate the design of the investigation.

Investigation: Explanation

Return to the *Digital Student Journal* to complete the Investigation: Explanation and your claim with evidence.