



## RESEARCH EXPEDITION:

### PARAMETER & EQUIPMENT IDENTIFICATION

*Parameter: One of a set of measurable factors, such as temperature and pressure that define a system and determine its behavior, and are varied in an **experiment**.*

I. Decide what parameter you're most interested in studying. Circle one of the parameters below:

Dissolved Oxygen	Phytoplankton
Nitrates	Zooplankton
Phosphates	Turbidity
Surfactants	pH
Silica	Temperature
Salinity	Copper

II. Brainstorm and discuss what factors can change this parameter. What does it change in the ecosystem? What changes it? (ex: Turbidity might be changed by proximity/distance to rivers, amount of plankton, currents, etc.) (Parameter: a numerical or other measurable factor forming one of a set that defines a system or sets the conditions of its operation.)

III. Based on your brainstorming and discussion, what relationship do you want to study? Select **ONE** other parameter from the list below

**We want to study the relationship between**

\_\_\_\_\_ and \_\_\_\_\_!  
 (parameter from Section I above) (parameter from below)

Dissolved Oxygen	pH
Nitrates	Temperature
Phosphates	Copper
Surfactants	Different depths
Silica	Proximity to Freshwater
Salinity	Nearshore/Offshore
Phytoplankton	Developed/ Undeveloped areas
Zooplankton	Currents
Turbidity	

IV. How do you think your parameters will affect one another? Continue your explanation on the back of this sheet.

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# RESEARCH EQUIPMENT MATCH UP

*Match the name of the equipment with its function*

## Name of Equipment

**Niskin Bottle**

**Phytoplankton Net**

**Zooplankton Net**

**DO Probe/Temp**

**Refractometer**

**Secchi Disk**

**Colorimeter**

**Sieves**

**Flow Meter**

## Function

- Measures water samples for various chemical parameters (pH, surfactants, nitrates, phosphates, silica, copper, etc.)
  
- Collects animal plankton from the water column.
  
- Fine mesh material collects plant plankton.
  
- Separate sediment by size
  
- Collects water at different depths
  
- Records the rate of water flow over a period of time
  
- Measure the clarity of the water.
  
- Measures the amount of salt in the water.
  
- Measures the temperature and dissolved oxygen in the water.

