# Education

**Testing the Waters** 

## **Dynamic Design: The Clean Room**

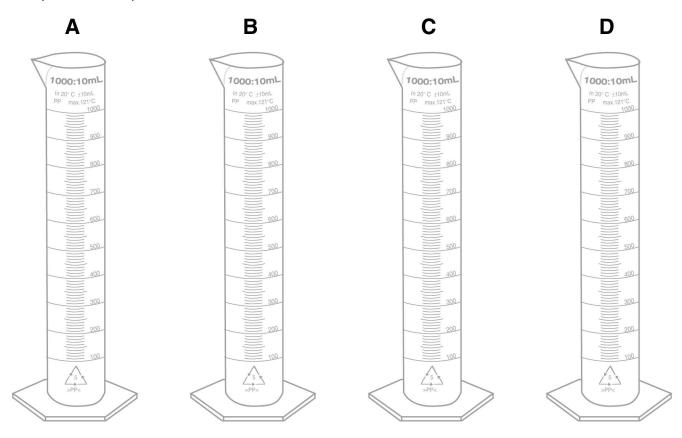
GENESIS

SEARCH FOR ORIGINS

### STUDENT DATA/RECORDING SHEET

#### Part I Observations and ideas

Make observations of the liquids in the graduated cylinder. You may use colored pencils to sketch the cylinders below to make qualitative and quantitative observations.



Observations:

Question: How can we measure the water clarity of the three samples?



#### Part II

- 1. List some ways below that you might measure the clarity of the liquids:
- 2. List the criteria that the class and your group think are important in determining the effectiveness of determining water clarity.

#### Part III

3. Describe how the Secchi disk is constructed and used in your own words.

#### Secchi Disk Results:

Liquid	Trial	Distance When Pattern Disappears (longer distance)	Distance When the Pattern Reappears (shorter distance)	Average Secchi Distance
Α	Control			
В	1			
В	2			
В	3			
Average	Liquid B			
С	1			
С	2			
С	3			
Average	Liquid C			
D	1			
D	2			
D	3			
Average	Liquid D			

#### Part IV Comparison

4. In the space below write down the method from Part III, number "3" that you will use to "test the waters." Write a detailed procedure.



- 5. Determine the clarity of the liquids using the method described in Part III of the student activity.
- 6. Create a data table and record your results here.

7. Compare the two methods for determining water clarity. What are the benefits of each? What are the drawbacks? What would you do differently next time?

