

# Weekend Science Project – Examining Local Water Quality

To be signed prior to the investigation:

As parent/guardian of \_\_\_\_\_, I agree to assist my child in the collection of this data to the best of my ability. Further, I accept full responsibility for the safety of my child and will not hold the school, district or staff responsible for any accidents or injuries incurred as a result of this experience.

\_\_\_\_\_ Parent signature

\_\_\_\_\_ date



## DATA SHEET

Make a best guess estimate to pinpoint location on the map.

Location: \_\_\_\_\_

Date: \_\_\_\_\_ Time of day: \_\_\_\_\_ Air Temperature: \_\_\_\_\_ Cloud cover: \_\_\_\_\_

See individual Procedures sheets for details on testing/observations. Record all data on this sheet. Make careful measures and use metric units whenever possible. Have fun!

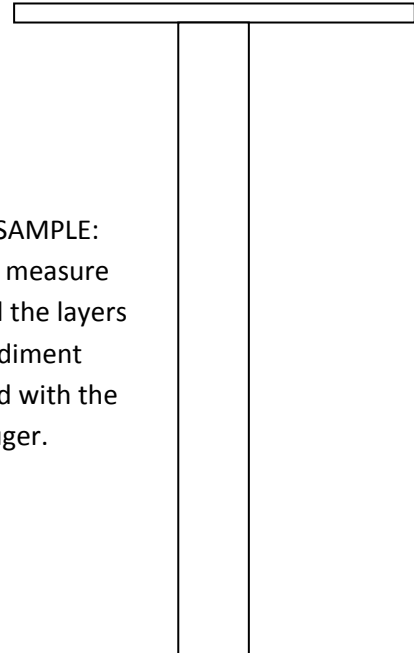
### INORGANIC FACTORS:

**BED COMPOSITION:** Circle the response that best describes the underwater floor.

BEDROCK      GRAVEL      SAND      MUD/SILT

TURBIDITY	
1 <sup>st</sup> measure	
2 <sup>nd</sup> measure	
Total	
Divide by 2 for Average	

WATER TEMPERATURE	
1 <sup>st</sup> measure	
2 <sup>nd</sup> measure	
Total	
Divide by 2 for Average	



CORE SAMPLE:  
Sketch, measure  
and label the layers  
of sediment  
collected with the  
auger.

**DISSOLVED OXYGEN (D.O.):** Single measure: \_\_\_\_\_ ppm  
Using the nomograph, connect the points that show water temperature and D.O. The point where this line segment intersects the saturation line will give you the percentage.

D.O. SATURATION \_\_\_\_\_%

**FLOW:** Circle the response that best describes the movement of the surface water.

LOTIC (moving water - 1 meter/\_\_\_\_\_ seconds)

LENTIC (still, no current)

pH: single measure \_\_\_\_\_

**ORGANIC FACTORS:** Refer to field identification references and pond guide and record observations in the correct category of the water column. Be gentle and return all living things to their habitat.

Surface (living near or on the surface of the water)

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Free-living (found throughout the depth of the water)

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Benthic (living near or on the underwater floor)

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RIPARIAN ZONE: (These floodplain regions border aquatic systems and are occasionally flooded.)

Describe the **vegetation**. Look for evidence of wetland adaptations such as buttressing and water marks on tree trunks.

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List the **animals** that make their homes in the riparian zone. Look for evidence such as tracks, scat, feathers, etc.

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Although your investigation site may not be evident on this map, use landmarks to estimate about where you collected data. Mark this spot with a star on the map. Based on your spot, can you determine in which major watershed region you are located?



SC Map source - <http://www.sciway.net/map/s/south-carolina-lakes-rivers.html>