TABLE 2.10
Aquatic Invertebrate Tally

A	Invertebrate Group	Number of Different Types	Number of Individuals of Each Type (Use As You Have Types)					Total Individuals
	Examplefly (Example)	*4*	*3*	*1*	*5*	*1*		*10*
Group One Taxa	Stonefly nymph							
	Mayfly nymph							
	Dobsonfly larva							
	Water penny larva							
	Riffle beetle larva or adult							
	Caddisfly larva							
Group Two Taxa	Other beetle larva							
	Cranefly larva							
	Scuds							
	Clams and mussels							
	Crayfish							
	Dragonfly nymph							
	Damselfly nymph							
	Blackfly larva							
	Alderfly larva							
	Watersnipe larva							
Group Three Taxa	Midge larva							
	Snail							
	Sowbug							
	Leech							
	Aquatic worm							
	Unknown organisms *(describe or sketch each on separate page)*							
	Totals							

INDEX OF BIOTIC INTEGRITY DATA FORM

Name _____ Sampling Date _____

Other Students in Your Group _____

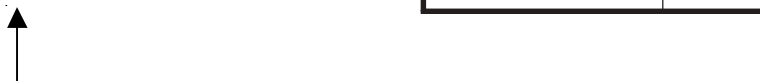Study Site Location _____ Teacher's Name _____

Weather Conditions on Sampling Date _____

_____

1. Did you pool your data with another group? If so, why?

TABLE 2.11
Species Richness Subscore

Number of Species	Species Richness Subscore

Reference Table	
If your "Number of Species" is	Then use this subscore
>26	12
19–26	9
11–18	6
<11	3

TABLE 2.12
Dominance Index Subscore

(A) Most abundant species	(B) # of individuals of most abundant species	(C) # of individuals of all species	(D) Proportion dominant (B÷C)	(E) Dominance subscore

Reference Table	
If (D) is	Then use this subscore
>.30	12
.30–.50	8
>.50	4

TABLE 2.13
Indicator Species

(F) Number of mayfly species	**(G)** Number of stonefly species	**(H)** Number of caddisfly species	**(I)** Sum of F+G+H	Indicator Species Subscore

Reference Table	
If (I) is	Then use this subscore
>10	12
6–10	9
2–5	6
0–1	3

2. Calculate the Biotic Index Score using the following formula:

$$\underset{\substack{\text{Species Richness}\\\text{Subscore}}}{\underline{\hspace{3cm}}} + \underset{\substack{\text{Dominance}\\\text{Subscore}}}{\underline{\hspace{2cm}}} + \underset{\substack{\text{Indicator Species}\\\text{Subscore}}}{\underline{\hspace{2.5cm}}} = \underset{\text{Index of Biotic Integrity}}{\underline{\hspace{3.5cm}}}$$

TABLE 2.14
Index of Biotic Integrity and Water Quality

Index of Biotic Integrity	Water Quality(circle one)
32–36	Excellent
23–31	Good
15–22	Fair
< 15	Poor

3. What is the water quality of your stream segment, as determined by the Index of Biotic Integrity? What local conditions do you think may be affecting water quality here?