ECO SAMPLING

Please complete the following worksheet based on the activity you performed at or around the creek.

/1 **Purpose:**

The purpose of performing an eco sampling is to ____________________________________________

____________________________________________________________________________________

/2 **Equipment:**

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Figure 1: Setup of Equipment

/6 **Procedure:**

1. Use a ___________________ and ___________________ to mark off a 1 m² area near the creek.
   a. Insert the pegs into the pre-tied loops in the ropes.
   b. Insert one peg into the ground, using the mallet if it is difficult.
   c. Stretch the rope out until tight and put the next peg into the ground.
   d. Repeat until you have all four pegs in the ground, making a square.
2. Count the number of each type of ________________, plant and animal, found in the area you have created, both on the surface and to a maximum depth of _________.
3. Record all data in a chart.
4. Document observations of other organisms you see around the creek and additional observations (other things you notice with your _____________) about the creek area.
5. After digging in one area for a while choose a new area.

Note: Consider the following safety concerns:

- The surface under the water is difficult to see, as such you need to wear _______________ to protect your feet.
- The ground in and around the creek is wet, and therefore it can be slippery. Caution should be taken as you are walking, so you do not slip.
**Observations:**

Record any relevant observations you made while at the creek, things that you feel relate to your findings. Be sure to mention other organisms you saw outside of your square and observations obtained by using your senses.

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**Data:**

Determine the three organisms you found to be most common in your test areas and complete the data table.

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<tr>
<th>Organism</th>
<th>Number</th>
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Discussion:

If you choose to do so, you may type these answers, print them, and staple them to this worksheet.

1. Explain why a scientist would use this specific technique, as opposed to surveying the whole area (2 marks).

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

2. Name three different situations for which a scientist would perform an ecological sampling, i.e., situations for which they would want to know the number of organisms (3 marks).

   1. 
   2. 
   3. 

3. List two other organisms you assume are in the creek area that you did not see? Provide details as to why you think so. Note: stating “I have seen them before.” or “Someone told me they are there.” will not get you marks (4 marks).

   1. 
   2. 

   ________________________________________________________________________
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4. Although we performed the activity in the same manner as a scientist would, I do not feel this exercise allowed us to obtain a very good understanding of the kinds of organisms found at Tuck Creek. Explain, with multiple reasons, why this would be. What could we change so that we could obtain a more solid understanding (5 marks)?