

Tide pool Transect Activity

Materials: tide pool transect activity boxes, activity sheet

Transect boxes can be made with any materials you have at home. Use up to 5 boxes, fill with dirt, sand or other material then place items within the box to be your species. Items can be things like buttons, shells, marbles, pens, etc.

Activity: This is a great activity to learn about biodiversity and how scientists measure biodiversity in a given area. Each ecosystem (box) has a unique set of animals (items) and thus unique biodiversity. In this activity, we will be isolating the tide pool ecosystem while explaining how scientists study different habitats and ecosystems! If you use your own box, be sure to use the blank lab sheet and fill in what you expect to find in your boxes.

Discussion:

Scientists like to study the biodiversity of given areas. *Bio* – means life. *Diversity* – means difference. Biodiversity is the measure of “different life forms.” Do you think an ecosystem is healthy if everything were the same or different? If everything was the same and a disease came and wiped everything out, there would be nothing left! Having lots of species is important.

Activity: We will be using what is called a *Transect* in order to show how scientists track biodiversity in an ecosystem. We will be: collecting, sorting, and counting the species (just like scientists!) Scenario: We just went to the beach and collected 5 samples of tide pool transects. One at -2', -1', 0', +1', and +2'. These are the corresponding tide heights to collection time. The students will use their Transect Lab Sheet and Species Identification cards to sort and count the species along the 5 Transects.

How to fill in your chart:

1. Determine what Transect Location you are at.
2. Find that column on your chart.
3. Sort your species using the Species Identification Card.
4. Determine which species you want to count.
5. Insert the total number collected into the matching box.
6. Complete this for all species observed. If the species is not present, leave the box blank.
7. At the end, you can sum up the number of total animals found, to the Right of the Table.
8. At the end, you can sum up the number of different species found by counting how many boxes are filled in going down the column. Enter this number at the Bottom of the Table.

Tide Pool Transect Lab

Scientist: _____

Species	-2.0 Feet	-1.0 Feet	Sea Level	1.0 Feet	2.0 Feet
Abalone					
Bean Clam					
Chestnut Cowrie					
Horn Snail					
Keyhole Limpet					
Oyster					
Sand Dollar					
Sea Star					
Whelk					
Etc.					

Animal
Totals:

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Species Totals: