## Project Activity: Dot Matrix Method

Activity Time: 20 mins


## Instructions

In this activity we will practice how to apply the Dot Matrix method to two sequences. This method involves connecting dots along center diagonal of matrix using horizontal or vertical edges where gaps are encountered.

Objective: Generate a matrix for the two sequences provided below using the pair-wise sequence alignment method called Dot Matrix. The matrix to be used for the activity is depicted below and is available on the Project Activity sheet.

Activity: First fills in dots wherever a match is encountered for the two sequences referenced on the matrix. Once completed review your results in the next page.

## Consider two sequences:

Sequence \#1 = CURRENTTOPICS
Sequence \#2 = CURRENTLYTROPICAL

|  | C | U | R | R | E | N | T | L | Y | T | R | O | P | I | C | A | I |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C | $\bullet$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\bullet$ |  |  |
| R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| E |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| N |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| O |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

