A transect is a line following a route along which a survey or observations are made. The transect is an important geographic tool for studying changes in human and/or physical characteristics from one place to another. An urban transect, usually following a street or several streets, may show changes in land use, the nature of buildings such as houses and shops, or features such as schools, churches, community centres, and parks. A rural transect might follow a road, section line, or stream, and show the kinds of crops in adjoining fields, farm buildings, vegetation, or changing features along a riverbank.

Transects may show features that are along the actual line selected (line transect) or, more commonly, may show what is on either side of the line (belt transect). Depending on the kinds of features being observed, transects can be a single straight line, straight line segments, or curved lines.

Suggestions for Students:

Planning: Select the transect route carefully and identify the start and end points. It is important to be familiar with the transect route to ensure that it passes through a variety of zones so that the completed transect will provide meaningful information.

Mapping: Once the route has been selected, it should be drawn carefully on an appropriate map of the area of interest. Then, follow the route and, on the field copy of the map, note the features that you see as you progress along the selected line. This will be the first draft of your transect. It’s a good idea to write brief notes on what you see along the way to ensure that you have all the information you will need to complete the transect.

Creating: Now it’s time to prepare the final presentation of the transect. Once back in the classroom, copy the route onto a new map and, using appropriate symbols and shading, show the features and changes along the route. Brief notes can be written in appropriate spaces on either side of the features and symbols along your transect route. Make sure that the transect presentation has a title and legend.

Analyzing: The completed transect can be used to analyze the changes and the possible relationships between physical and human features along the route. If another student has selected the same route or segment of a route, the two transects can be analyzed in terms of the similarities and differences and the varying perceptions that different people may have of the same area.