

**Appending:** Adding features from multiple data sources of the same data type into an existing dataset.


**Attribute Table:** Stores non-spatial information in columns and rows about geographic data – similar to spreadsheets

**ArcGIS:** *[software]* ArcGIS is a GIS software package produced by the Environmental Systems Research Institute (Esri) which allows you to collect, store, manage, visualize, export, analyze and map geographic

**ArcGIS Pro:** *[software]* ArcGIS Pro is Esri's latest GIS software with a ribbon-based user interface, project files and 64-bit processing. (Free Trial for 28 days)

**Data Source:** Any data. Data sources may include coverages, shapefiles, rasters, or feature classes.

**Digitize:** The process of converting the geographic features on a hardcopy (paper) map into digital format using a digitizing tablet, or digitizer, which is connected to a computer.

**Features:** A representation of a real-world objects on a map E.G. Roads, Rivers, City, Hydro Lines, Cut blocks etc. Anything you can see from an airplane. 

**Feature Classes:** a collection of geographic features with the same geometry type (such as point, line, or polygon), the same attributes, and the same spatial reference.

**Geo-Referenced:** Aligning geographic data to a known coordinate system so it can be viewed, queried, and analyzed with other geographic data. Georeferencing may involve shifting, rotating, scaling, skewing, and in some cases warping, rubber sheeting, or orthorectifying the data into a geographic dataset.

**Heads-up Digitizing:** Manual digitization by tracing a mouse over features displayed on a computer monitor, used as a method of vectorizing raster data.

**Join:** Appending the fields of one table to those of another through an attribute or field common to both tables. A join is usually used to attach more attributes to the attribute table of a geographic layer using a Link ID.

**Layers:** Visual representation of a geographic dataset in any digital map environment. Conceptually, a layer is a geographic reality in a particular area and is more or less equivalent to a legend item on a paper map. On a road map, for example, roads, national parks, political boundaries, and rivers might be considered different layers.

**Line Feature:** A map feature that represents a place or thing that has length but not area at a given scale, such as a creek or road.



**Link:** An operation that relates two tables using a common field, without altering either table.

**Link ID:** The common field in a table (spreadsheet or database) that has the same attributes in a georeferenced table.

**Merge:** Combining features from multiple data sources of the same data type into a single, new dataset.

**Point Feature:** A map feature that has neither length nor area at a given scale, such as a city on a world map or a building on a city map.

**Polygon Feature:** A map feature that bounds an area at a given scale, such as a country on a world map or a district on a city map or a lake on a community map.

**QGIS:** *[software]* QGIS (Quantum GIS) is an Open Source Geographic Information System (GIS) licensed under the GNU General Public License. QGIS is an official project of the Open Source Geospatial Foundation (OSGeo). It runs on Linux, Unix, Mac OSX, Windows and Android and supports numerous vector, raster, and database formats and functionalities. This program is free, but there are always major changes occurring to this software, BUG Fixes. It has limited tools and the bugs bog it down and you are limited to really utilize it as a truly complete free GIS software package.

**Radius** The distance from the center to a point on the outer edge of a circle, circular curve, or sphere.

**Symbology:** A graphic used to represent a geographic feature or class of features. Symbols can look like what they represent (trees, railroads, houses), or they can be abstract shapes (points, lines, polygons) or characters. Symbols are usually explained in a map legend.

**Transformation:** The process of converting the coordinates of a map or an image from one system to another, typically by shifting, rotating, scaling, skewing, or projecting them.

**Union:** A topological overlay of two or more polygon spatial datasets that preserves the features that fall within the spatial extent of either input dataset; that is, all features from both datasets are retained and extracted into a new polygon layer.

