

ArcMap is the application you use to view and edit geographic data and create professional-quality maps, graphs, and reports. A map is the fundamental component that you will work with in ArcMap. Maps help you visualize geographic data by showing you where things are and what they look like. ArcMap makes it easy to design maps for printing, embedding in other documents, or publishing electronically. For some data, other presentation methods are more effective than a map. Graphs and reports can show at a glance the information of interest. ArcMap provides many options for creating sophisticated graphs and reports

Terms to become familiar with:

Geographic Features: Objects in the real world are called features when they are represented on a map.

ArcGIS Features: Features have a shape, location and symbol that represent some of their characteristics. In ArcGIS there are three kinds of features:

- **Points:** An object that is too small to be shown as an area. E.g. Stop signs, crime locations.
- **Lines:** An object that has length but is too narrow to depict as an area. Eg. Roads, rivers.
- **Polygons:** An object that has visible extent in both length and width. Eg. Provinces, parks.

The same geographic feature may be represented as a different type of ArcGIS feature depending on the scale of the map (i.e. how large or small an area it represents.) For example, a map of Ontario might show roads as lines, but a map of one block of downtown Guelph might show roads as polygons.

Attributes In ArcGIS, features are stored in a database along with the information describing them. The descriptive characteristics of a feature are called attributes. Attributes are stored in a table.

Layers Geographic information is displayed on a map as layers, where each layer represents a particular type of feature. A layer is a collection of thematically similar geographic features (such as rivers, lakes, counties, or cities) that share the same geographic extent, coordinate system, and attributes. In ArcMap, the Table of Contents lists all the layers shown on the map.

The table of contents: Lists all the layers on the map and shows what the features in each layer represent. The check box next to each layer indicates whether or not the layer is currently drawn on the map. By default, the table of contents is located on the left side of the ArcMap window. The order of layers within the table of contents is also important; the layers at the top draw on top of those below them. Thus, you'll put the layers that form the background of your map, such as the ocean, at the bottom of the table of contents.

Data Frame Layers in the table of contents can be further organized into data frames. A data frame groups, in a separate frame, the layers you want to display together.

MOVING AROUND IN ARCMAP 10.1

The ArcMap Workspace

Use the various menus, buttons and toolbars to move around, add, edit and query data in ArcMap.

