

There are two primary map display panels in ArcMap: the data view and the layout view. In data view you can display and work with geographic information as a series of map layers. A single map document can contain several data frames, which are separate arrangements of map layers. Only one data frame can be displayed in data view at a time, but more than one data frame can be viewed in layout view.

When you're preparing your map's layout, you'll want to work with it in layout view. In layout view, you will see a virtual page on which you can place and arrange map elements such as maps [the data frame you see in the data view], a scale bar, a legend and a map title. You can do almost the same things in Layout view that you can in Data view, plus design your map.

When you save a map you have created in ArcMap you save it as a document. You should name your map with a name that describes its contents. ArcMap automatically appends a file extension - *.mxd*. You can work with an existing *.mxd* by opening it in Windows Explorer. This will start an ArcMap session for that *.mxd*. Be aware that the data displayed on a map is not saved with it. If you want to copy and open *the .mxd* file on another computer you must also copy the map data files with it.

### **Changing layer names in the Table of Contents:**

For map layers to display with meaningful labels in your map layout, change the layer name in the Table of Contents.

1. In the Table of Contents, double click on the name of the layer that you want to change.
2. In the Properties Window click the **General** tab.
3. Change the layer name to your desired name and click **Close**.

### **Opening the Layout View and arranging the data frame:**

1. In the **View** menu click **Layout View**.
2. The layout displays the data frame. It is a selected element – you can tell by the hatched blue outline and the blue square anchors.
3. Use the anchors to click and drag the data frame to a smaller or larger size.
4. With your mouse in the centre of the map, click and drag to position the data frame on the page.

### **Adding Other Map Elements**

#### **Adding a North Arrow**

1. Click the **Insert** menu > **North Arrow**.
2. Select a north arrow and click OK. The north arrow will be added to a random location on the map, usually somewhere in the centre.
3. Click and drag the north arrow into place on your map. Resize the north arrow by clicking and dragging a selection handle.

## Adding a Scale Bar

1. Click the **Insert** menu > **Scale Bar**.
2. Select a scale bar.
3. Click Properties to modify the scale bar's properties.
4. Click the **Scale and Units** tab.
5. Click the arrow buttons to set the number of divisions.
6. Click the arrow buttons to set the number of subdivisions.
7. Click the **When resizing** drop-down arrow and click how you want the scale bar to respond when the map scale changes:
  - **Adjust width** – the width of the scale bar will vary with the map scale. The division value and number of divisions remain constant.
  - **Adjust division value** – the division value will vary with the map scale. The number of divisions and the width of the scale bar remain constant.
  - **Adjust number of divisions** – the number of divisions will vary with the map scale.
8. Choose the units for the scale bar.
9. Click **Symbol** and choose a test style for the scale bar labels.
10. Click **OK** and **OK** again to close the dialog box.
11. Click and drag the scale bar into place on your map.

## Adding a Legend

1. Click the **Insert** menu > **Legend**. The **Legend** wizard appears.
2. By default, all the layers on the map will appear as legend items in the legend. To remove a legend item, select it, and click the left arrow button.
3. Use the Up and Down arrow buttons to order the legend items.
4. Click **Next**.
5. Type a title for the legend.
6. Set the text color, font, and size as desired, and click **Next**.
7. Select a border, background and/or drop shadow as desired by clicking their respective drop-down boxes.
8. Click **Next**.
9. Select a legend item in the list to modify the symbol patch.
10. Set the patch properties as desired and click **Next**.
11. Set the spacing between legend elements by typing a value in the appropriate box.
12. Click **Finish**.
13. Click and drag the legend into place on your map.

## Adding a Title to a Map

1. Click the **Insert** menu and click **Title**.
2. A box bearing the name of the map document (i.e. \_\_\_\_\_.mxd) will appear on your map layout, enclosed in a blue box. Double-click the box to open the **Properties** dialog box.
3. Delete the existing text in the large **Text** box and type in the desired title. Format the text as desired using the settings in the dialog box. Click **OK**.
4. Click and drag the title into place on your map.
5. The title can also be formatted using the **Draw** toolbar.