

Create a web map

Now that you have learned about the types of layers and where to find them, you will use layers to create a web map.

Imagine that you are the author of an adventure blog. In this exercise, you will create a map that describes snow and ice climbing routes in the Sierra Nevada Mountains.

Estimated completion time in minutes: 5

To complete exercises, you need the following:

- ArcGIS Online Organizational Account
 - User role or [equivalent](#)

If you do not have an ArcGIS Online organizational account, you can create a public account [here](#).

① Sign in to ArcGIS Online

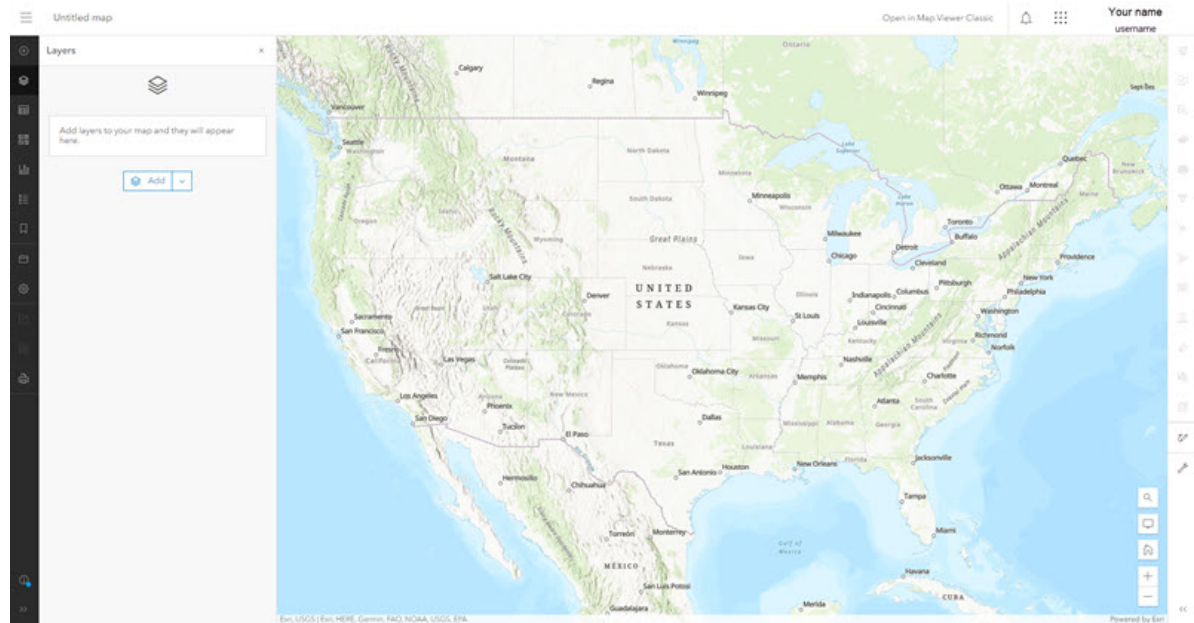
To begin, you will sign in to ArcGIS Online and open a blank map.

- ① In a web browser, go to [ArcGIS Online](#) and click Sign In.
- ② Enter your ArcGIS Online username and password, and then click Sign In.

You will create a map by using existing layers.

- ③ At the top of the page, click Map.

[View result →](#)



Step 1c: Sign in to ArcGIS Online.

A new, blank map should open in Map Viewer.



Note: Whether the map opens in Map Viewer or Map Viewer Classic will depend on your settings. In this exercise, you want to work in Map Viewer. So, if your map opened in Map Viewer Classic, at the top right, click Open In Map Viewer.

To change your primary map viewer, click your username and choose My Settings.


② Search for layers

You will now add a layer to your map.

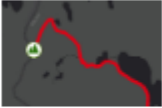
- a On the left, in the Layers pane, click Add.
- b Near the top of the pane, click the My Content down arrow and choose ArcGIS Online to change the source.
- c In the Search field, type **Sierra Nevada snow and ice climbs AND owner:EsriTrainingSvc** and press Enter.


[View result →](#)

Sierra Nevada Snow and Ice Climbs

 Feature Layer

Mar 2, 2023



 [Training Services](#)

+ Add

Step 2c: Search for layers.

- d Click Add to add the layer to the map.
- e At the top of the Add Layer pane, click the Back arrow < to return to the Layers pane.
- f To expand the layer, click the arrow to the left of Sierra Nevada Snow And Ice Climbs.

Which layers are added to the map?

[Show answer](#)

The following layers are added:

- Peaks
- Routes


Which layer types were added?

[Show answer](#)

These operational layers are feature layers with points and lines.

- g At the top of the Layers pane, click the X to close the pane.

You will now search for a location on the map.

- h Near the bottom right of the map, click the Search button .

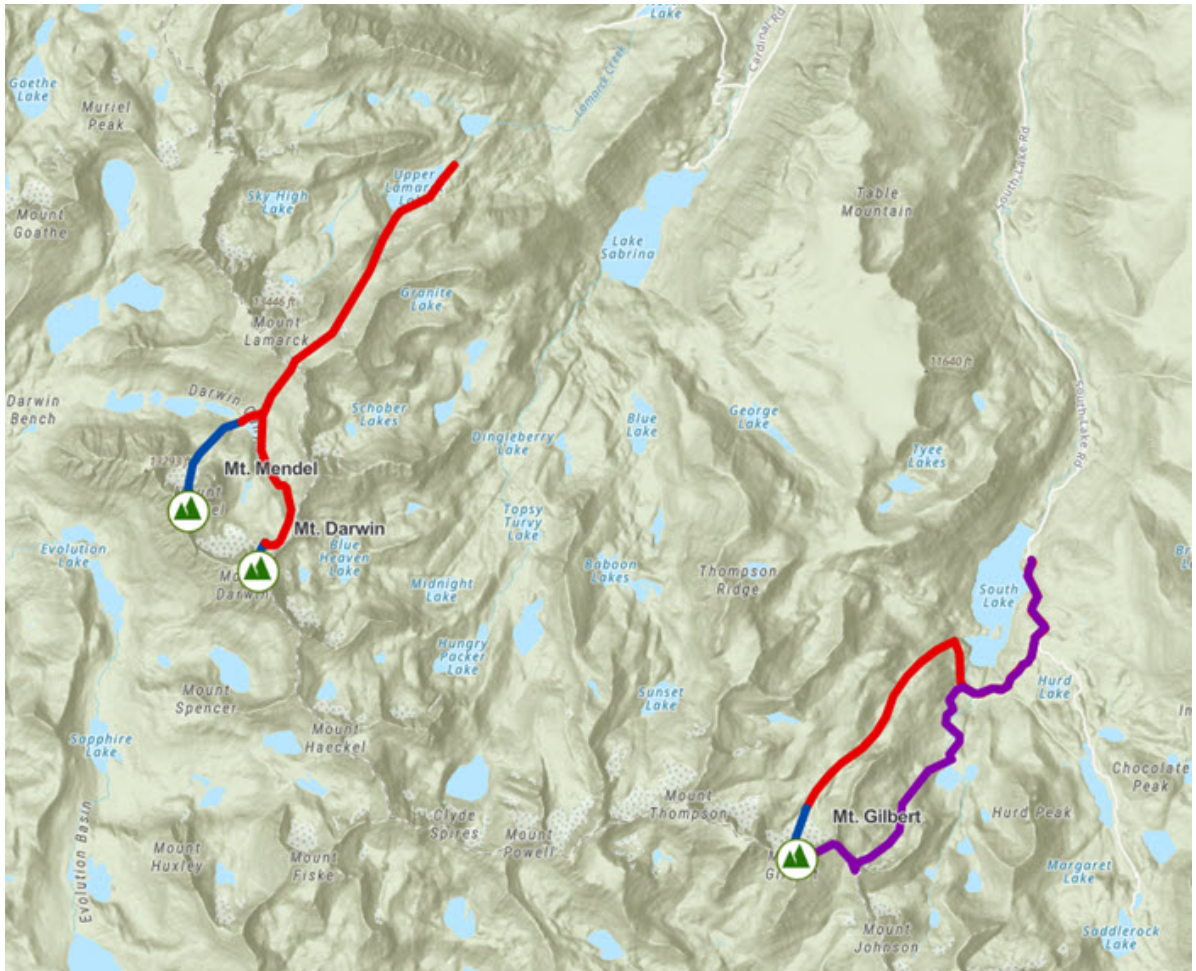
The Find Address Or Place field displays at the top left of the map.

i In the search field, type **Mount Mendel, CA, USA** and press Enter.

The map zooms to a region with several climbing routes.

j Close the pop-up window.

k Zoom and pan as necessary to get a better view of the routes.



Step 2k: Search for layers.


[View result →](#)

Hint: To zoom, you can use the Zoom In button **+** or Zoom Out button **-**, or you can rotate your mouse wheel. To pan, drag the map in any direction.

③ Select a basemap

You want to better understand the terrain and elevation changes that the climbers will experience as they climb the mountains. You will experiment with

different basemaps.

- a On the left, from the Contents toolbar, click the Basemap button .

Which basemaps in the gallery seem like good choices for showing terrain and elevation?

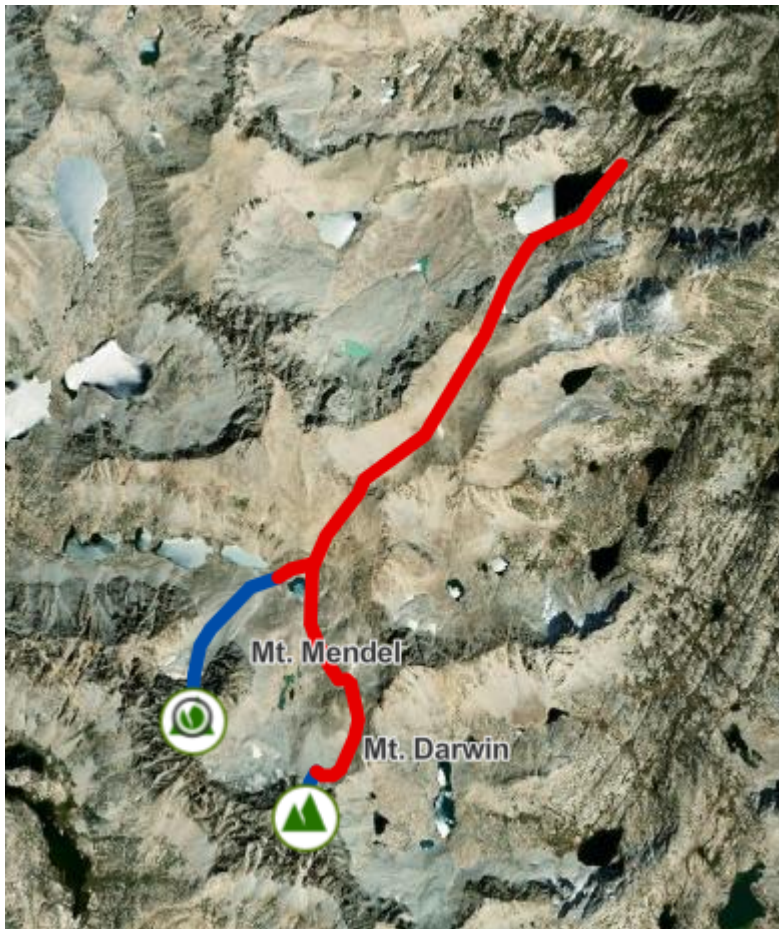
Hint: The current basemap is Topographic.

[Show answer](#)

The Imagery, Imagery Hybrid, and Terrain With Labels basemaps are all viable options.

- b Select the Imagery basemap.

[View result —](#)



Step 3b: Select a basemap.


Does this layer effectively communicate topographic variations in the terrain?




[Show answer](#)

No; this basemap shows land cover but not topography.

- c Select the Topographic basemap.
- d At the top of the Basemap pane, click the X to close the pane.

④ Save the web map

A blue dot next to the Save And Open button  indicates that you have made changes that are unsaved.

- a From the Contents toolbar, click the Save And Open button  and choose Save As .
- b In the Save Map dialog box, enter the following information:
 - For Title, type **Sierra Nevada Alpine Climbing Routes**.
 - For Folder, leave the default folder location.
 - For Categories, leave the default.
 - For Tags, type **California, mountaineering**.
 - For Summary, type **Alpine climbs up the Sierra Nevada mountains of California**.
- c Click Save.
- d At the top left, click the Menu button  and choose Content.
- e If you are continuing to the next exercise, leave ArcGIS Online open; otherwise, close your browser.