

Name: \_\_\_\_\_

## ***ArcGIS Online Basics – Exploring Severe Weather***

In this activity, you'll open a web map and learn how to navigate and work with it, using map tools as you explore the current Severe Weather in the United States.

### **Open the map**

1. Sign in to your ArcGIS Online account.
2. Go to Content, **Living Atlas** and search for the **Severe Weather** Web Map, click on the thumbnail to open it.



The map opens to show the current severe weather in the United States. Right now, the default view shows where most of the severe weather is happening in the US.

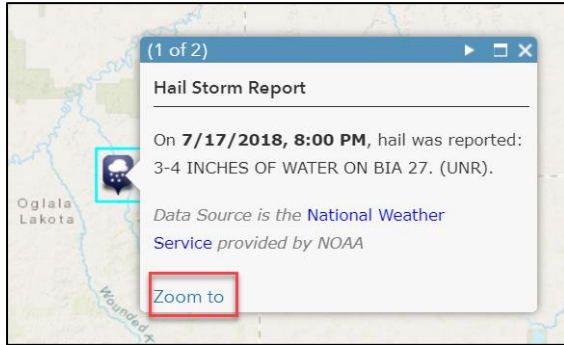
### **Explore the map**

The map you just opened contains **layers**, and those layers contain **features**. For example, each report of a tornado occurrence is a feature. You can view the layers and features in the legend shown in the pane on the left-hand side of the map. If the legend is not currently visible, you will need to click on the Legend button in order for it to display:



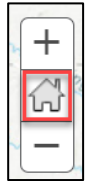
1. Click on a weather report on the map, such as a tornado, wind storm, or hail storm report.
2. At the bottom of the pop-up, click **Zoom to**. The map will zoom in on the feature.

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3. Close the pop-up by clicking the X in its title bar.

4. Click the **Default extent button** in the upper left corner of the map (it looks like a house) to return to the default map view.



5. On the weather map, click on a shaded region that represents a weather warning, watch, advisory, or statement (if one exists). Another pop-up will open with information about the warning, watch, or advisory.

6. Click on **'More Info'** on the pop-up to view the NWS alert that was issued for that region. You may also click on any text highlighted in blue.

7. Close the browser tab with the alert information, and close the pop-up on the map.

8. On your own, learn more about the severe weather currently happening in our country. Use the map navigation tools or your mouse wheel to zoom in and out.

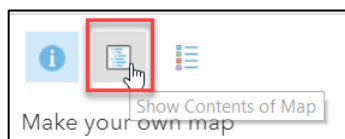
**Tip: Press the Shift key and draw a box on the map to zoom in on a particular area.**

9. When you're finished, zoom out so that you can see the entire United States.

## Map Layers

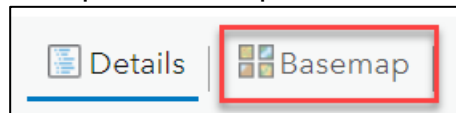
To work directly with the map layers, you need to switch to the Contents view of the map.

1. At the top of the left-side pane, click the **Content button**.



The order of layers in the Contents pane represents the order in which they are drawn on the map. At the bottom, every map has a basemap layer that covers the entire world. Every layer, except the basemap, can be turned on or off.

2. In the Contents pane, click the box next to all of the layers that currently have a checkmark except NOAA Storm Reports to turn them off.
3. Expand the NOAA Storm Reports menu. Turn the Tornado Reports (past week) layer on. There should now only be three layers visible on your map.
4. You can change the basemap. On the ribbon bar that runs along the top of the map, click the Basemap button to open the Basemap Gallery.

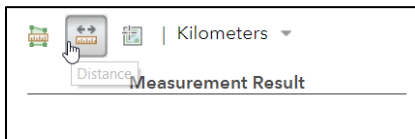


By default, it is set to display the Topographic basemap. Click on another basemap to change it.

## Measure Distance

You can also work with the map using the tools located on the ribbon bar.

1. On the ribbon bar, click **Measure** and then click the **Distance tool**.



2. On the map, click on a location to start a measurement.
3. Move the mouse pointer to another location, and double-click to end the measurement. The distance will display in the box.



The default measurement displays in miles, but you can change it using the drop-down box.

4. Make a few more measurements. When you're finished, click the X in the upper right corner of the box. **Tip: During a measurement, click once to change the direction of the line.**

**Use this map to answer the following question:**

**Approximately how many miles and kilometers from Rochester was the nearest tornado report in the past week?** (if there haven't been any tornadoes in the past week, measure to the nearest hail or wind storm)

Miles: \_\_\_\_\_

Kilometers: \_\_\_\_\_

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*Activity modified from: Getting Started with ArcGIS Online [ <http://learn.arcgis.com/en/projects/get-started-with-arcgis-online/#> ]*