

ArcGIS Online Five by Five

Five Activities You Can Do in Five Minutes Each (no login required)

(requires computers with Internet access able to support simultaneous web-based mapping by all)

ACTIVITY ONE: See Your World

1. Go to <http://www.arcgis.com>, and click "Map"
2. Grab, hold, and move the map to pan the map (= "click and drag")
3. Test out zooming in and out, using the map's zoom bar, the mouse's scroll-wheel, double-clicking the map, and holding down Shift key while dragging.
4. Zoom all the way out to the world, and all the way in to your home. Notice what happens when you zoom in and out.
5. Use the Search box in the top right to find the address of a friend, a relative, or a placename like your state's capital city.
6. Click the Basemap button and look at each of the different basemaps, at different scales (zoom out, zoom in). Notice what happens in each as you zoom in and out.

ACTIVITY TWO: Measure and Mark Your World

7. Zoom out to the world. Click "Measure" and choose "distance" (the ruler). Measure (click to start, double-click to stop) roughly the distance from western USA to Europe, and from western USA to central Asia, and from the northern tip of Alaska to the southern tip of Africa. (Extra credit: What's a "great circle"?)
8. Change the Measure tool from ruler to the Location tool (looks like a map + crosshair). Click it, wander the world, then zoom in and click on your home to see the coordinates. Which coordinates are positive, and which are negative? Close the Measure window.
9. In the search box atop the map, type "Mount Everest, Nepal." In the "popup" window that appears, click "Add to Map Notes." See the new layer in the "Contents" to the left of the map. Find "White House," add it to Map Notes. Above the map (top right), click "Modify Map." Click the White House symbol you had added to the map, and click "Edit", then click "Change Symbol." Note the options for icon and size, and the drop-down list for different icon sets. Click "OK," click "Close," then click "Details" (atop the left pane) to stop editing.
10. Zoom back home. Above the map, click the "Add" button, choose "Add Map Notes," and use the "Map Notes" template by clicking "Create." Drop a pushpin on your home, then add an area for the school grounds and a line for your route to and from school. Click Details (top left) when done creating data. How many layers are in the map?

ACTIVITY THREE: Explore Your World

11. At the top of the map, click "New Map", then "Create New Map" and "Yes, Open the Map." This will give you a new clean map space, with the Topo basemap, and no additional layers. Zoom to see most of North America.

12. Click Modify Map, then "Add/Search for Layers." On the "Search for layers" line, type "usa population density owner:esri". Scroll to "USA 2012 Population Density (Mature Support)" (*not* the 2016 layer). Click the name, see a quick thumbnail, and click "Add to map." Then, click Details (atop the left pane) to close the sub-panes.
13. Zoom/Pan so you can see all 50 states, then zoom in to your home, one click at a time, using the map's zoom bar. As you zoom in, click on the state, the county, the Census Tract, and the Block Group, and read the text that shows up with each zoom.
14. It sure would be nice to know what the colors mean! At the top of the left pane, click the "Legend" button to see what the colors mean and if the colors and meanings change as you zoom in and out.
15. Pan around your state and see if all places look alike. Wouldn't it help to see through the population layer to the landmarks below? Atop the left pane, click the "Show Contents" button. Point to the name "USA Population Density" and click the three dots for more options. Click "Transparency," and move the slider. If you set the basemap to a solid color (light/dark gray), is the map easier to read?

ACTIVITY FOUR: Expand Your World: Open a Saved Map

16. Use a shortcut URL to go directly: <http://esriurl.com/recentquakesmap>. Explore briefly, turning the layers' check boxes off and on (Contents section). Click a dot in the map.
17. Use a long URL to go directly:
<http://www.arcgis.com/home/webmap/viewer.html?webmap=79151205f3124c13bc814fda3170e901>. Go to the Contents and try turning on the "old map" layers.
18. Search ArcGIS Online. Go to <http://www.arcgis.com/>. In the Search box at the top-right of the ArcGIS Online page (NOT your browser bar's Search box), type "usa demographics for schools v2" and click the magnifying glass {or just click [here](#)}, then in the results click the topmost thumbnail. The map should open with 10 layers in it (click Contents). Zoom to your location, turn off population density, and try the other layers. (Extra credit: If more than one layer is checked, which one is visible in the map?)
19. Recent browsers in computers, laptops, tablets, and smartphones can also show the world as a sphere that you can rotate along three axes. Try displaying this "web scene" showing [world population](#). Rotate, tilt, and wiggle the map. Click a dot. Try the tools.

ACTIVITY FIVE: App the World: Try a Focused App:

20. Terrain profile = <http://esriurl.com/elevation>
21. Urban Observatory app = <http://www.urbanobservatory.org/compare/>
22. Story Map: visit to DC's National Mall = <http://storymaps.esri.com/stories/malltour/>
23. Story Maps Gallery: Choose a topic = <http://storymaps.arcgis.com/en/gallery/>

Now, what is something about which you would like to make a map?

For more experiences using ArcGIS Online in education, see <http://k12.maps.arcgis.com>.