ArcGIS Online Five By Five

Five Activities You Can Do In 5 Minutes Each (No login required)

(requires computers with internet speed 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 (="clickdrag")
- 3. Test out zooming in and out, using the map's zoom bar, the mouse's scroll-wheel, double-clicking the map, and doing a "two-handed shift+clickdrag".
- 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 place, like your state's capital city.
- 6. Click the Basemap button and look at each of the different basemaps, from all the way out to all the way in. Notice what happens in each as you zoom in and out.

ACTIVITY TWO: Measure and Mark Your World

- 1. 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 western USA to central Asia, and the northern tip of Alaska to the southern tip of Africa. (Extra credit: What's a "great circle"?)
- 2. Change the measure tool from the ruler to the location tool (looks like a little globe). Click it, wander the map, then zoom in and find the coordinates for your home, and the White House. Close the Measure window.
- 3. Use the search window atop the map to find "Mount Everest, Nepal." In the window that pops up, 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, size, and pull-down for different icon sets. Click "OK," "Close," and "Details" (upper left) to stop editing.
- 4. 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, 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

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

- 2. Click "Modify Map," and "Add/Search for Layers." In the "Find" window, type "usa population". Near the top, you should find "USA Population Density (Mature Support)". Click on the name, see a quick thumbnail, and click on "Add to map." Then, at the bottom of the left-hand window, click "Done Adding Layers."
- 3. Zoom/pan so you can see all 50 states as states, and then zoom in to your home, one click at a time on the map's zoom bar. As you zoom in, click on the state, and then the county/ Census Tract/ Block Group, and read the text that shows up with each zoom.
- 4. It sure would be nice to know what the colors mean! At the top of the left-hand window, click the "Legend" button, and see what the colors mean, and see if the colors and meanings change as you zoom in and out.
- 5. Pan around your state and see if every place looks alike. Wouldn't it help to see thru the population layer to the landmarks below? At the top of the left-hand window, click the "Content" button. Click the three dots after the name "USA Population Density" and see a menu of options, including "Transparency." Click it, and play with the little slider. Does the light grey basemap make it look better?

ACTIVITY FOUR: Expand Your World: Open a saved map

- 1. Use a shortcut URL to go directly: http://esriurl.com/recentquakesmap. Explore briefly, turning the layers' checkmarks off and on ("Content" section). Click a dot in the map.
- Use a long URL to go directly: http://www.arcgis.com/home/webmap/viewer.html?webmap=79151205f3124c13bc814fda3170e901.
 Go to the "Content" and try turning on the "old map" layers.
- 3. Use ArcGIS Online search. Go to http://www.arcgis.com/features, then click "Gallery" at the top. In the search box at the top-right of the page (NOT your browser bar's search box), type "usa demographics for schools v2" and click the magnifying glass {or just click here}, and in the results click on the topmost thumbnail. The map should open with 10 layers in it. 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?)
- 4. Recent browsers in laptops and computers (not yet on tablets or smartphones) may include the ability to show the world as a sphere that you can rotate along three axes. Try displaying this saved "web scene" showing world population.

ACTIVITY FIVE: App the World: Try out a focused app:

- 1. Story Map: visit to DC's National Mall = http://storymaps.esri.com/stories/malltour/
- 2. Urban Observatory app = http://www.urbanobservatory.org/compare/
- 3. Terrain profile = http://esriurl.com/elevation

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

For more about using ArcGIS Online in education, see http://k12statelicense.maps.arcgis.com, choose "01.InstructionDocs", and try #04.AGOSkillBuilder.