ArcGIS Online Five By Five (20180827)
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)

Original is available from http://k12.maps.arcgis.com/home/index.html.
Teacher Note: Consider, laminating, and handing one activity to your students at a time.

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 "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, 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

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 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"?)

2. 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.

3. Use the search window atop the map to find "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, 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", then "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.

2. Click "Modify Map," and then "Add/Search for Layers." In the "Find" window, type "usa population density owner:esri". You should see "USA 2012 Population Density

    (Mature Support)". Click on the name, see a quick thumbnail, and click on "Add to map." Then, at the very top of the left-hand pane, click "Details" to close the sub-panels.

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 pane, 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 "Show Contents" button. Hover the name "USA Population Density" and click the three dots for more options, including "Transparency." Click it, and play with the little slider. If you set the basemap to a solid color (light/dark grey), is the map easier to read?

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 ("Contents" section). Click a dot in the map.

2. 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/. 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}, and in the results click on the topmost thumbnail. The map should open with 10 layers in it ("Show 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?)

4. 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. Wiggle the map. Click a dot. Try the tools. (It won't break.)

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

1. Terrain profile = http://esriurl.com/elevation
2. Urban Observatory app = http://www.urbanobservatory.org/compare/
3. Story Map: visit to DC's National Mall = http://storymaps.esri.com/stories/malltour/
4. Story Maps Gallery: Choose a topic = http://storymaps.arcgis.com/en/gallery/

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