## **JUNE 2018**

LEARNING ACTIVITY:

# **Earth: This Is Home**

### **Grade Level: 4-12**

#### **Materials**

• Computer or device with internet access



Changes over three decades in Dalian, Liaoning, China



Source: Google.
Adapted with permission.

If you have ever used Google Earth, what was the first place you tried to find? For many people the answer is "my home." Where humans choose to live is one of the forces shaping on the surface of our planet.

People influence and change Earth's systems (atmosphere, biosphere, geosphere, hydrosphere) as we shape and impact the landscape around us to fit our needs. We build dams and aqueducts that change the course of rivers, create roads and tunnels through mountains, remove forests and prairies to allow the expansion of agriculture and settlements. People have also learned to adapt to the different and unique landscapes on Earth, adjusting to the conditions found there.

#### **Procedure**

- 1. Open a web browser and navigate to earth.google.com/web. Click on the "ship's wheel" icon on the left side to open up the Voyager layer. Select the "Culture" tab (you may need to scroll down a bit).
- 2. Look for the feature called "This is Home." Click on that story to select, then click "Explore Now." Several examples of human homes from various regions will appear.
- 3. Choose one of the homes shown. Observe the home and the location. How have the people in the example adapted their home to the unique challenges and requirements of the landscape, climate, and other conditions where they live?
- 4. Click on the "Spyglass" icon on the left side. Search for the place you call home. This may be a region, a city, or a specific location.
- 5. Explore your home in Google Earth using the navigation controls:
  - Use your computer's trackpad, mouse and/or arrow keys to pan around.
  - Use the 2D/3D button to switch between overhead and titled views.
  - Use "pegman" to enter Street View where available. Click



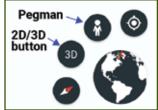
"This is Home" voyager story in Google Earth

on the icon to show blue lines indicating where Street View is available. Click on the blue line to enter Street View.

- 6. How has your "home" been adapted by people in response to the location and its conditions? What features of the place you call home are there naturally? Which are made by people?
- 7. To explore more about the changes to your hometown, state or country open Earth Engine Timelapse in a web browser: https://earthengine.google.com/timelapse/.
- 8. Search for the place you call home. Watch as the images change over time. Click on the "Pause" button at the left to stop Timelapse. Move forward through the years by clicking on

the different year bars. Observe the changes.

9. What changes do you notice in the image over time? In what ways are people adapting the place to their needs? How might Earth's systems affect or be affected by those changes?



Google Earth navigation controls

#### **NGSS 3-D Learning**

- Science and Engineering Practices Obtaining, Evaluating, and Communicating Information
- Disciplinary Core Ideas Earth and Human Activity
- Crosscutting Concepts Stability and Change