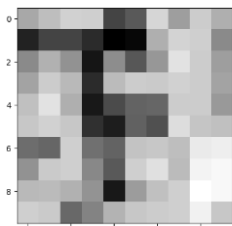


## Ri Off the Shelf Masterclass: Satellite Vision

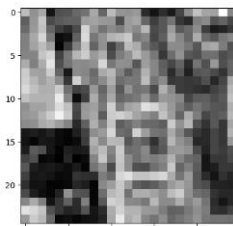
### Worksheet 2 Solutions – A Message from Space

The pictures below show images of Earth taken by a satellite. Each image shows a natural or human-made feature that resembles a letter of the alphabet. The first thing you must do is match the low-resolution images to their high-resolution image counterparts, to find the letter that matches each location. There are more high-resolution images than low-resolution, so not every letter will match a location.

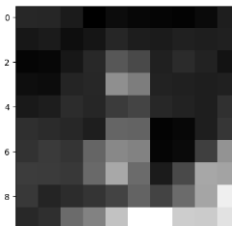
#### Low-resolution Images



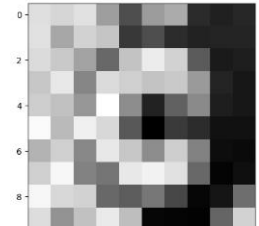
*Cape Town,  
South Africa*  
Letter: F



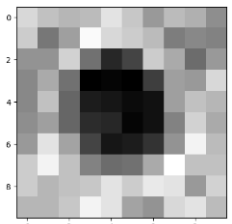
*Pennsylvania,  
USA*  
Letter: B



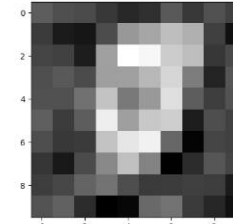
*Abu Dhabi,  
UAE*  
Letter: J



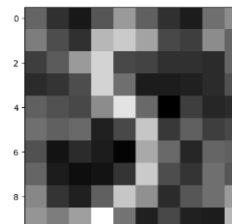
*New South Wales,  
Australia*  
Letter: C



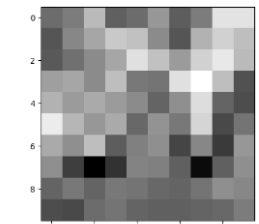
*Lake Kuttara,  
Japan*  
Letter: O



*Rio de Janeiro,  
Brazil*  
Letter: T



*Tawbya,  
Myanmar*  
Letter: S



*Dumfries,  
Scotland*  
Letter: W

#### High-resolution Images

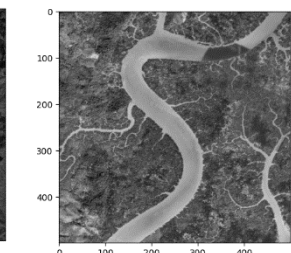
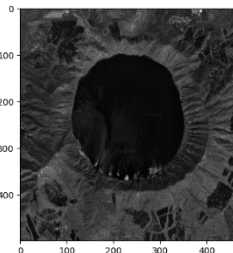
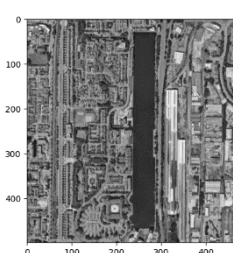
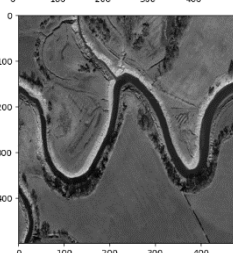
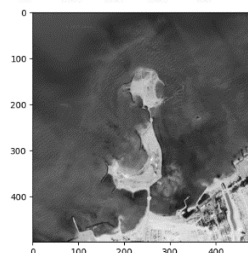
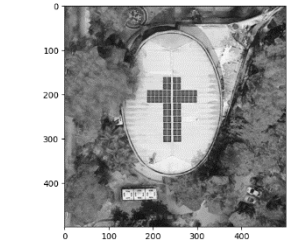
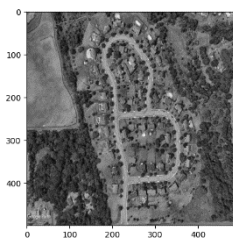
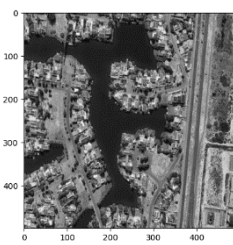
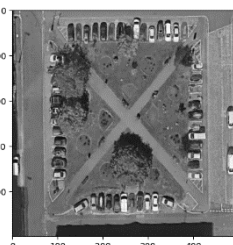
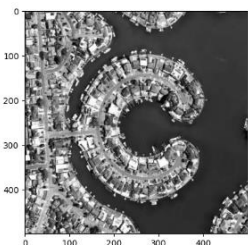


Image Credits: **C, F** – © 2025 Google, Airbus, Maxar Technologies, Vexcel Imaging US, Inc., **X, T** – © 2025 Google, Airbus, Maxar Technologies, **B** – © 2025 Google, Data SIO, NOAA, U.S. Navy, NGA, GEBCOLandsat / Copernicus, **J** – © 2025 Google, Airbus, CNES / Airbus, Maxar Technologies, **W** – © 2025 Google, Airbus, CNES / Airbus, Infoterra Ltd & Bluesky, Maxar Technologies, **I** – © 2025 Google, Airbus, Bluesky, Infoterra Ltd & COWI A/S, Maxar Technologies, **O, S** – © 2025 Google, Airbus, CNES / Airbus, Landsat / Copernicus, Maxar Technologies.

### What is the message?

Now that you have a location associated with some of the letters, using the travel guides given below, figure out which location the description is referencing in order to spell a four-letter space themed word.

**1.** *Looking from above, this sandy Middle Eastern coastline reveals a letter taking shape in the sea. A human-made island curves to form a letter, linked to the mainland by a narrow strip of land. From space, we can see how coastlines change over time, and understand how to protect coastal communities from rising sea levels and erosion.*

**First location:** Abu Dhabi, UAE **Letter in image:** J

**2.** *In the rolling green landscapes of this British nation, a winding river carves a path through fields, forming a letter in the countryside. These twisting rivers shift slowly over time, changing the landscape around them. Satellite images help scientists monitor how rivers evolve, how floods reshape the land, and even how wildlife and plants depend on these waterways.*

**Second Location:** Dumfries, Scotland **Letter in image:** W

**3.** *Deep in southeast Asia, a vast river system twists through thick forests. From space, its curving shape looks just like a familiar letter. The surrounding green is not just any forest – it's a mangrove ecosystem, home to rare species and vital for protecting coastlines from natural disasters such as tsunamis. Satellites track these areas to see the impact that climate change and deforestation can have on them.*

**Third Location:** Tawbya, Myanmar **Letter in image:** S

**4.** *High above the busy streets of this South American city, a church's rooftop forms a perfect letter. With solar panels neatly arranged in this shape, the building generates its own power from sunlight! Satellites also use the sun's energy to operate, and many have solar panels just like this.*

**Fourth Location:** Rio de Janeiro, Brazil **Letter in image:** T

**What word do the images spell?** (Hint: it's a famous space telescope!) JWST

### Extension

Following the example travel guides above, write your own short description of one of the images, so that another person could guess the letter in the image you are describing. You may not know the location, so use what detail you can see in the image.

---

---

---

---

---