

Map your school with map notes

Context for activity

Your school is currently attempting to record student amenities and services throughout the school. An important part of this process is to map the location of these services. As you are the students using these amenities and services, you will be responsible for recording the location of relevant amenities and services on a map.

Check with your teacher for any special instructions before beginning this activity sheet.

Step 1: Brainstorm and planning

It is important to consider the types of student amenities and services you are required to include before creating and populating your map. Brainstorm (individually, in pairs, or as class) the types of features you will need to map. Record these as a list and keep it handy. Here are a few student amenities and services frequently found in schools to help you get started:

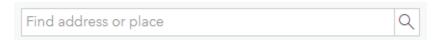
- Rubbish bins (general waste, recycling)
- Picnic tables for eating lunch
- Canteen
- Basketball court
- Etc.

When brainstorming, it may be useful to use categories to help ensure you don't miss anything. For example, you might use the following categories to assist you in creating a comprehensive list of amenities and services:

- Recreational / Social
- Academic
- Extra-curricular (e.g. sports, the arts, etc.)
- Miscellaneous
- Break times

Step 2: Create and save your map

- 1. Login to ArcGIS Online using your ArcGIS username and password.
- 2. Once you've logged in, click on Map, which is located on the ribbon at the top of the webpage.
- 3. A new map will display. Use the search bar to find your school. Type your school name into the search bar and select the appropriate address.



4. The map will refocus on your school. Change the basemap to **satellite imagery** so you can clearly see your school and its features. You may wish to zoom in a little closer to get a better view of your school.

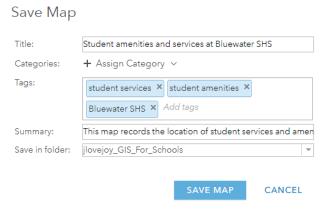




5. At this point in time, you will save your map. Click on **Save** and select **Save as**.



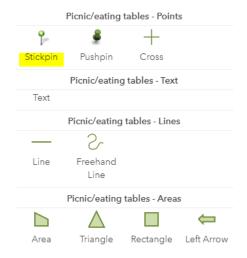
6. In the process of saving, you will be asked to add a title, some tags and a short summary. An example is included below:



As you will be working on this map online, it is recommended that you regularly click on the **Save** button to save your work as you go so that you do not lose your work.

Step 3: Record amenities and services on the map

- 1. Press the Add wap Notes.
- 2. Give your map note an appropriate name. For example, name the first map note 'picnic/eating tables.'
- 3. You can select a point, free-hand line, or area to note on the map. In this case, picnic or eating tables would best be represented by a single point so you will select 'stickpin' or 'pushpin.'





- 4. Place the 'stick pin' in a location at your school where there is a picnic or eating table.
- 5. You can give your map note a title and description. You may also edit the symbol by selecting **CHANGE SYMBOL**. Click on **Change symbol** now. Search under the **Government** category and find the picnic icon pictured below. Press **OK** to save this change.



6. Repeat this process by clicking the **Stickpin** again and mapping another picnic or eating table until you have mapped all the picnic tables in the school.

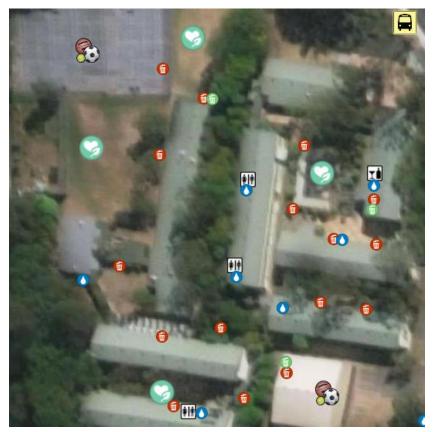
Now that you know how to map point data, continue this process to map the other student services and amenities in your school. However, remember that you need to select the button and begin a new map notes class for each type of service or amenity as they should each have a suitable symbol.

You may also need to look in other symbol categories to find an appropriate symbol for each service or amenity. **National Park** and **Recreation** are also useful categories.

GIS For Schools



Visit on the **Details** tab. Each map note will now appear in the **Content** window, alongside other map layers. You can tick the checkbox to turn certain layers on and off depending on what you want visible.



Save your map.

Step four: Map the safest route from your classroom to the fire evacuation point

You have used points (stickpins) to map your school's student services. Now you will use map notes to map the safest route from your classroom to your school's fire evacuation point.

- 1. Before you map your routes, brainstorm (individually, in pairs, or as a class depending on teacher instruction) what factors you will need to consider before mapping the safest route.
- 2. Once you have considered all factors, add a new map note. This time, title the map note **Fire** evacuation route.
- 3. Select a line option and map the route from your classroom to the evacuation point. The freehand line will follow your mouse.
- 4. In the pop-up window that appears, justify why the route you mapped is the safest route. Justify this in a couple of sentences in the 'Description' section.
- 5. **Save** your map.



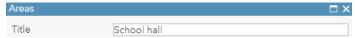
Step five: Map land use in your school

Now that you have used map notes to map point and line features, you will now use map notes to map areas.

- 1. Add a new map note and title it **School land use**.
- 2. Select the Area tool.



- 3. Trace the shape of your school hall, clicking on each corner of the hall to map an area. Double-click when you have finished mapping the area.
- 4. Title the area appropriately when the pop-up window appears e.g. 'School hall'



- 5. Change the symbol colour to red (fill and line).
- 6. Repeatedly select the area tool and map the following features:
 - Administration building = purple
 - Academic buildings = yellow
 - Indoor sports courts = orange
 - Outdoor sports courts = dark blue
 - Oval/s = dark green
 - Green spaces = light green
 - Carparks = grey
 - Any other land use features at your school (e.g. pool) = choose a suitable colour

When you have completed mapping land use, your map will look like the image to the right. You may wish to use different shapes depending on the land use you are mapping. For example, it may be more suitable to use an 'Ellipse' tool to map the school oval.

Save your map.



GIS For Schools



Congratulations! You have now mapped point, line and polygon (area) data for your school. Remember to save your map before logging off.

Next Steps:

Request a free ArcGIS Online Account for your school:

Australian schools can request a free ArcGIS Online account as part of Esri Australia's Classroom GIS Initiative. A school subscription provides additional map layers, content, features and privacy. Learn more about ArcGIS Online, and apply for your ArcGIS Online School subscription at http://esriaustralia.com.au/education

Speak to Esri Australia's Education Program Manager:

Australian schools can seek additional support or speak to our Education Program Manager by emailing education@esriaustralia.com.au.