What is GIS?

What does GIS stand for?

GIS stands for a **Geographic Information System**. This is a method of capturing, storing and representing information in something called a layer. Each layer contains its own geographic dataset. Maps are made in GIS by assembling different types of layers. Each map needs a basemap, something for all of the other layers to be projected on.
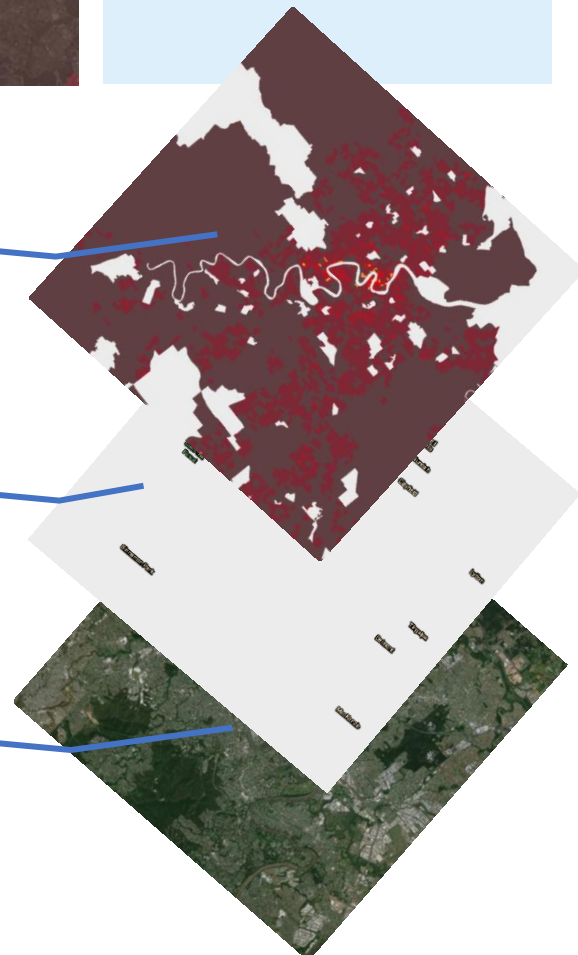

This map shows population density in Brisbane. It uses three different types of layers to create this map.

Take a look below at the layer break down.

This layer shows population density

This layer shows place names

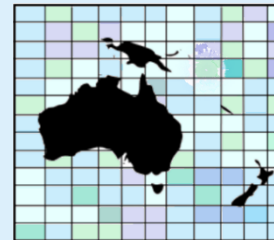This layer shows satellite imagery

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What kind of information can you put on a map?

You can have <u>vector</u> data, which might be points, lines or polygons.

You can have <u>raster</u> data, which is made up of thousands of tiny grids which create a picture of the data.

What is the difference between GPS and GIS?

GPS, or Global Positioning System, is a system made up of satellites which rotate around our earth. Things like our phones act as receivers, which talk to the satellites and figure out where we are in the world.

GPS figures out where we are, while GIS uses that information to make a map.

Who uses GIS?

- A meteorologist might study the path of hurricanes to predict where and when they might occur in the future

- A city planner might choose the best location for a new park or hospital

- A water company might stop tap leaks to save more water by tracking their locations

- A conservation organisation might put tracking devices on animals to understand their routes of travel

- A fire brigade may map out a whole state to understand which houses are at the highest risk of bushfire