1. Conceptual landscapes:
   1. Landscape figures (like fragstat)
   2. Landscape metrics (relate back to networks?)
2. GIS-style vis:
   1. Spatial data format – sf, ggplot, ggspatial - √
   2. Polygons (vs lines, points) - √
   3. Projection and extent - √
   4. Scale bar and north arrow - √
   5. Layers - ??
   6. Adding points using coordinates - √
   7. Annotating - √
   8. Aesthetic elements - ??
   9. Colouring whole polygons by quantitative data (e.g. - √

ggplot(data = world) +

geom\_sf(aes(fill = pop\_est)) +

scale\_fill\_viridis\_c(option = "plasma", trans = "sqrt")

Most of the content in point 2 is at these two fantastic example workshops. Can we change from using the US to using Australia? All text needs to be re-written.

<https://www.r-spatial.org/r/2018/10/25/ggplot2-sf.html>

<https://www.r-spatial.org/r/2018/10/25/ggplot2-sf-2.html>

This might be good for assessment questions?

<https://cran.r-project.org/web/packages/ggspatial/vignettes/ggspatial.html>

Intro to ggspatial, with points polygons, layers, points, annotating (ignore the depth data this week) – uses ggspatial vignette, not super clear on data structures. DOES THIS ALL WORK?