

Introduction to GIS for Teachers – Second Celebration of Learning (25 Marks)

Please complete the three tasks below.

TASKS

1. Create a “Paper GIS” based on the South Africa map. (8 marks)

- a. Materials required:
 - Paper GIS worksheet
 - Map of South Africa handout
 - Three sheets of tracing paper
 - Map pencil(s)
- b. Study the South Africa map handout. Think about the data and how it is displayed on the map.
- c. Based on the map and using tracing paper and a colored pencil(s), create three layers of data for your paper GIS. (6 marks)
- d. On each layer of data (tracing paper), please include:
 - Descriptive Title for each layer
 - Scale Bar
 - Feature labels as available
- e. Complete the “Paper GIS” Worksheet (2 marks)
- f. When you are finished, staple your Task 1 documents in the following order:
 - Your Paper GIS Worksheet
 - Your three layers of data
 - Your South Africa Map

2. Use [ArcGIS Online](#) to **create, save, and share a web map** on the topic of the [Human Footprint](#) and the [WWF Africa Ecological Footprint Report](#). (10 marks)

Include the following elements in your web map:

- a. “Global Human Footprint Index” layer of data from the Living Atlas (an Imagery Layer by Columbia) (1 mark)
- b. “Home” map scale is global – the entire world is visible as the default (1 mark)
- c. Basemap = “Terrain with Labels” (1 mark)
- b. Descriptive Title (1 mark)
- c. Two Bookmarks (1 mark)
 - i. Houston, Texas, United States of America
 - ii. Johannesburg, Gauteng, South Africa
- d. A properly named Map Notes Layer that includes the following elements in the popup:
 - i. A 32px, blue point marker  on the continent of Africa (1 mark)
 - ii. Use “Africa Ecological Footprint Report” as the title (1 mark)
 - iii. A description (2-3 sentences) of the Africa Ecological Footprint Report (1 mark)
 - iv. Hyperlinks to the report website *AND* to the report PDF (1 mark)
 - v. An “Africa Ecological Footprint Report” Image (1 mark)
- e. **Save** and **share** your web map.

3. **Create a Story Map** using the [ESRI Story Map Builder](#) on the topic of the Great Barrier Reef. Use *ONLY* information from this recent [BBC Story](#) and other BBC linked news reports. **(7 marks)**

Please include the following elements in your Story Map:

- Descriptive title and subtitle with background image **(1 mark)**
- Informative text (no more than 200 words) summarizing the BBC news stories **(1 mark)**
- One sentence connecting the Great Barrier Reef to the idea of “Human Footprint” with a hyperlink to the web map you created in Task 2. **(1 mark)**
- Two pictures with captions and source information **(2 marks)**
- An “Express Map” containing two map points both complete with image, name, and description **(2 marks)**
- Save** and **share** your Story Map.

When you have finished Tasks 2 and 3, please **SUBMIT** your Web Map and Story Map URLs via the 2nd Celebration Google Form [HERE](#).

