1 Maps, scale and spatial thinking – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	**Write it 3 times** (English)		
reference map			
thematic map			
choropleth			
dot			
graduated symbol			
isoline			
cartogram			
Density			
Concentration			
Pattern			
scale of analysis			
Distance decay			
Time-space compression			

Recall

You have used maps and geography before:

- A map is a flat picture of a place, and it always leaves things out.
- Places are near or far from each other, and distance affects how they interact.
- Some things are spread evenly across an area; others cluster together.

This sheet turns those everyday ideas into the vocabulary AP Human Geography grades you on.

New ideas

1 Two kinds of map

A **reference map** shows where things are – countries, roads, rivers. A **thematic map** shows a variable: how much of something is where.

The thematic types you must name are: **choropleth** (areas shaded by value), **dot** (one dot equals a number of things), **graduated symbol** (bigger symbol, bigger value), **isoline** (lines joining equal values), and **cartogram** (area size distorted to show the value).

2 Every projection lies

A globe is curved; paper is flat. Flattening always distorts **shape**, **area**, **distance** or **direction** – you can preserve some, never all. Mercator keeps direction, which is why sailors used it, but it inflates land near the poles: Greenland looks the size of Africa and is fourteen times smaller.

3 Density, concentration, pattern

These three are graded as separate terms and students routinely swap them.

Density is how many per unit area. **Concentration** is how tightly they are packed – clustered or dispersed. **Pattern** is the arrangement – linear, centralised, random.

4 Scale of analysis

The **scale of analysis** is the level you look at: global, regional, national, or local. The same data can show opposite patterns at different scales – a country can be growing while half its provinces shrink. Naming your scale is a mark.

5 Distance decay and time-space compression

Distance decay says interaction between two places weakens as the distance between them grows. **Time-space compression** says improvements in transport and communication have weakened that effect – the friction of distance is falling.

Practice

Try these in order. The methods are all above.

1.1 Name the type of thematic map that shades whole areas according to a value. [1]

1.2 Explain one way the Mercator projection distorts the world map. [2]

1.3 Distinguish between the density and the concentration of a phenomenon. [2]

1.4 Explain how the scale of analysis can change the conclusion drawn from the same data. [2]

1.5 Define distance decay, and explain how time-space compression affects it. [3]